

This publication was rescinded by National Health and Medical Research Council on 24/3/2005 and is available on the Internet ONLY for historical purposes.

### **Important Notice**

**This notice is not to be erased and must be included on any printed version of this publication.**

- This publication was rescinded by the National Health and Medical Research Council on 24/3/2005. The National Health and Medical Research Council has made this publication available on its Internet Archives site as a service to the public for historical and research purposes ONLY.
- Rescinded publications are publications that no longer represent the Council's position on the matters contained therein. This means that the Council no longer endorses, supports or approves these rescinded publications.
- The National Health and Medical Research Council gives no assurance as to the accuracy or relevance of any of the information contained in this rescinded publication. The National Health and Medical Research Council assumes no legal liability or responsibility for errors or omissions contained within this rescinded publication for any loss or damage incurred as a result of reliance on this publication.
- Every user of this rescinded publication acknowledges that the information contained in it may not be accurate, complete or of relevance to the user's purposes. The user undertakes the responsibility for assessing the accuracy, completeness and relevance of the contents of this rescinded publication, including seeking independent verification of information sought to be relied upon for the user's purposes.
- Every user of this rescinded publication is responsible for ensuring that each printed version contains this disclaimer notice, including the date of rescision and the date of downloading the archived Internet version.

# Men and mental health

Edited by  
A. F. Jorm

National Health and Medical Research Council

**NHMRC**

© Commonwealth of Australia 1996

ISBN No 0 644 45525 X

First printed August 1995

Reprinted December 1995

This print February 1996

This work is copyright. It may be reproduced in whole or in part for study or training purposes subject to the inclusion of an acknowledgement of the source and no commercial usage or sale. Reproduction for purposes other than those indicated above, requires the written permission of the Australian Government Publishing Service, GPO Box 84, Canberra ACT 2601.

The strategic intent of the NHMRC is to work with others for the health of all Australians, by promoting informed debate on ethics and policy, providing knowledge based advice, fostering a high quality and internationally recognised research base, and applying research rigour to health issues.

This document is sold through the Australian Government Publishing Service at a price which covers the cost of printing and distribution only.

National Health and Medical Research Council documents are prepared by panels of experts drawn from appropriate Australian academic, professional, community and government organisations. NHMRC is grateful to these people for the excellent work they do on its behalf. This work is usually performed on an honorary basis and in addition to their usual work commitments.

Publication and Design (Public Affairs and International Branch)  
Commonwealth Department of Human Services and Health

Produced by the Australian Government Publishing Service

# Men and mental health

Reference document

National Health and Medical Research Council

# NHMRC

# Contents

---

<b>List of contributors</b>	<b>v</b>
<b>Executive summary</b>	<b>vi</b>
<b>Section 1. Background</b>	<b>1</b>
Mental disorders in males: the size of the problem	2
<i>A. F. Jorm</i>	
Society, culture and male mental health	6
<i>J. M. Najman</i>	
<b>Section 2. Mental health problems particularly affecting males</b>	<b>20</b>
Childhood mental health problems	21
<i>M. G. Sawyer</i>	
Suicide in men	29
<i>R. D. Goldney</i>	
Substance abuse	36
<i>W. Hall</i>	
Antisocial behaviour	45
<i>R. Finlay-Jones</i>	
<b>Section 3. Factors affecting male mental health</b>	<b>57</b>
War and mental health	58
<i>B. I. O'Toole, R. P. Marshall, D. A. Grayson and R. J. Schureck</i>	
Unemployment and mental health	70
<i>A. H. Winefield</i>	
Hazardous occupations and mental health	78
<i>L. Meldrum and B. Raphael</i>	
Homelessness and mental health	92
<i>by H. Herrman</i>	
Separation, divorce and mental health	105
<i>by B. Rodgers</i>	
Male sexuality and mental health	116
<i>by R. Over and G. Phillips</i>	
Mental health of men of non-English-speaking background	129
<i>by I. H. Minas, S. Klimidis and G. W. Stuart</i>	
The mental health of Aboriginal communities	139
<i>by J. H. McKendrick and M. Thorpe</i>	
<b>Section 4. Effects of men on the mental health of others</b>	<b>146</b>
Effects of fathers on the mental health of their children	147
<i>by A. F. Jorm</i>	
Effects of husbands on the mental health of their wives	153
<i>by K. Wilhelm</i>	

# List of contributors

---

- Professor R. Finlay-Jones*, School of Psychiatry, University of New South Wales
- Professor R. D. Goldney*, Department of Psychiatry, University of Adelaide
- Dr D. A. Grayson*, Department of Geriatric Medicine, University of Sydney, Concord Hospital, Sydney
- Professor W. Hall*, National Drug and Alcohol Research Centre, University of New South Wales
- Professor H. Herrman*, Department of Psychiatry, St. Vincent's Hospital, Melbourne
- Dr A. F. Jorm*, NH&MRC Social Psychiatry Research Unit, Australian National University
- Dr S. Klimidis*, Victorian Transcultural Psychiatry Unit, St. Vincent's Hospital, Melbourne
- Dr J. H. McKendrick*, Department of Psychiatry, University of Melbourne
- Mr R. P. Marshall*, Commonwealth Department of Human Services and Health, Canberra
- Ms. L. Meldrum*, Department of Psychiatry, University of Queensland
- Associate Professor I. H. Minas*, Victorian Transcultural Psychiatry Unit, St. Vincent's Hospital, Melbourne
- Professor J. M. Najman*, Department of Anthropology and Sociology, University of Queensland
- Dr B. I. O'Toole*, Department of Psychiatry, University of Queensland
- Professor R. Over*, School of Behavioural and Social Sciences and Humanities, University of Ballarat
- Mr G. Phillips*, School of Behavioural and Social Sciences and Humanities, University of Ballarat
- Professor B. Raphael*, Department of Psychiatry, University of Queensland
- Dr B. Rodgers*, NH&MRC Social Psychiatry Research Unit, Australian National University
- Dr M. G. Sawyer*, Research and Evaluation Unit, Women's and Children's Hospital, Adelaide
- Dr R. J. Schureck*, Faculty of Medicine, University of Sydney
- Dr G. W. Stuart*, Victorian Transcultural Psychiatry Unit, St. Vincent's Hospital, Melbourne
- Ms. M. Thorpe*, The Victorian Aboriginal Health Service, Melbourne
- Dr K. Wilhelm*, School of Psychiatry, University of New South Wales
- Associate Professor A. H. Winefield*, Department of Psychology, University of Adelaide

# Executive summary

---

## Section 1. Background

### Mental disorders in males: the size of the problem

There does not appear to be much gender difference in the overall prevalence of mental disorders, but the pattern of disorders differs between males and females. In adulthood, men experience more alcohol and drug abuse and antisocial behaviour, while women experience more anxiety, depression and eating disorders. In childhood, boys have a higher overall prevalence of mental disorders than girls, but again this hides a different pattern of disorders.

There is also a marked gender difference in receipt of mental health services. In childhood, boys are more likely to receive services than girls, but in adulthood women are more likely to receive services. The factors behind these gender differences are not yet understood.

### Society, culture and male mental health

While it is often claimed that women have a higher rate of mental disorder than men, this may reflect a process of selective measurement. When men and women are exposed to the same stressful events they tend to respond differently, with women showing more anxiety and depression and men more substance abuse. Some conceptualisations of mental disorder favour symptoms seen more often in women and so produce a misleading impression about gender differences.

Women receive more services for mental disorder in primary care settings, but the gender difference diminishes for specialist mental health services and particularly for hospital-based services. This pattern of differences may imply that women experience minor impairment more often than men, but there is less of a gender difference for serious mental disorders. However, it may also be that men come to the attention of health services less often than their numbers require.

Some social groups within Australian society are at higher risk of mental disorder than others. The relative size of these higher risk groups varies over time, affecting the overall rate of mental disorder in the population. Three social characteristics associated with mental disorder are age, employment/unemployment and type of family circumstances. The distribution of these social characteristics in the population has changed and these changes have sometimes had a disproportionate effect on males. These changes include: increasing rates of long-term unemployment; changes within the family requiring men to give up some of their power; changes in family life such that marriage is a more flexible institution, with increasing proportions of the population experiencing marital changes; and an increase in the rate at which children are separated from a parent.

Many of the changes in social structure are a consequence of economic and technological change and there is no real prospect of health concerns influencing the pace or direction of this change. It remains then for health care providers to understand this process and to develop programs and policies which anticipate and ameliorate the consequences of these changes.

## Section 2. Mental health problems particularly affecting males

### Childhood mental health problems

Most studies show a higher prevalence of mental health problems in boys than girls, with a ratio of about 2:1. Younger boys have a higher prevalence of mental health problems than girls because they experience more behavioural or 'externalising' problems. These problems are associated with aggressive, antisocial or undercontrolled behaviour. During adolescence, however, the gender difference in mental health problems is smaller because girls experience more emotional or 'internalising' problems. These involve fearful, anxious or overcontrolled behaviour.

There are factors in the family, social background and the school which increase a boy's risk for externalising problems. These include family discord, ineffective approaches to managing the boy's behaviour, criminal behaviour or alcoholism in the parents, and a poor social climate at the school they attend. Externalising problems are also found more commonly in economically disadvantaged families, but this is probably not due to economic disadvantage *per se*, but to associated factors such as family discord or criminal behaviour in the parents.

Currently, only a small proportion of children with mental health problems receive specialised help. This situation is unlikely to improve because of the small number of clinicians trained in this area. It is therefore necessary to develop interventions which can be widely applied in the community, perhaps via general practitioners and schools. Too little is known about effective interventions for childhood mental health problems and research in this area is greatly needed.

### Suicide in men

Suicide is a major public health problem in Australia. Each year more than 2000 suicides are recorded in official statistics. However, there is likely to be considerable under-reporting. Males are more likely to commit suicide than females, with the ratio varying over the past 100 years between 2.2 and 5.4 males to one female. The male suicide rate peaked at the height of the Great Depression and was at its lowest in 1945. There have also been historical fluctuations in different age groups. There has been an increase in suicide rate in young men, but a reduction in the elderly.

There is no single cause of suicide. However, more than 90 per cent of those who commit suicide have a mental disorder. People suffering from depression, schizophrenia, alcohol or other drug dependence are at greater risk. Social factors are also important, as shown in the historical fluctuations in the suicide rate. Unemployment and the blurring of traditional roles may be factors in the increased rate in young men. A small proportion of suicides are copy cat. Availability of firearms is a factor in male suicide.

It is difficult to predict suicide in individual cases because of its infrequent nature. Although there are no doubt cases where an individual has been saved by intervention, there is no evidence that broadly applied suicide prevention programs have a long-term effect on national suicide rates. Too little is known at this stage to expect national interventions to be effective. However, good community services may be of assistance and young men could be targeted in particular. Also, the availability of effective treatments for mental disorders needs to be generally recognised in the community. Legislation restricting means of suicide (e.g., firearms) could also have an impact.

### Substance abuse

Alcoholism is a major mental and public health issue among Australian men, who are at higher risk than women of developing the disorder and experiencing its adverse health consequences because of their greater exposure to heavy drinking. At some point in their

life, around 33 per cent of men have experienced symptoms of alcoholism, compared with around 5 per cent of women. Alcoholism is most common in young men.

The prevalence of alcohol-related problems in the community can be reduced by attempting to decrease alcohol consumption of the whole population, not just the minority of alcoholics. Among the measures proposed for decreasing population alcohol consumption are: laws and regulations which aim to reduce the availability of alcohol, measures which increase the price of alcohol to reduce consumption, and regulations to control the promotion of alcohol.

Few alcoholics receive specialist mental health treatment. However, the prospects for the amelioration and prevention of alcohol-related problems are much better than is often believed. The majority of men who become alcoholics recover, and evidence suggests that levels of hazardous and harmful alcohol consumption can be reduced by screening and brief advice in medical settings. The health professions have an important role to play in reducing the harm caused by alcohol, by routinely inquiring about alcohol use, and giving simple advice about safe levels of drinking, and the hazards of intoxication and chronic harmful use.

Abuse of illicit drugs is much less common than alcoholism, but one Australian survey found that it still affects around 6 per cent of men and 1 per cent of women. It shows similar patterns to alcoholism, with young men over-represented because of their higher exposure to illicit drug use than young women or older people. Drug users are also likely to be alcoholics.

The illegality of illicit drug use prevents the use of control policies that have been recommended to reduce alcohol-related health problems. This has led some to advocate the relaxation of existing prohibitions on drug use to increase opportunities for regulatory control.

There is probably a reasonably high rate of remission of drug abuse in the absence of formal treatment, although as with alcoholism this needs to be better understood in the Australian community. Efforts to prevent drug abuse may benefit from the adaptation of the screening and brief intervention strategies developed for the prevention of alcohol problems.

## **Antisocial behaviour**

Antisocial behaviour can be defined in terms of crimes. Males are much more likely to commit crimes, as indicated by their higher imprisonment and arrest rates. Men make up 95 per cent of the prison population in Australia and their higher rate of imprisonment is seen across all crimes. Men who are imprisoned also tend to commit more serious crimes than women and have longer sentences. There is also a large gender difference in arrest rates, although it is not as large as for imprisonment. Similar gender differences in imprisonment and arrest rates are found worldwide.

The large gender difference in antisocial behaviour is not fully explained by existing theories. However, the gender difference in antisocial behaviour probably begins in early childhood, with gender differences in parental control of the expression of aggression. It proceeds with gender differences in the development of self-control, of conscience, and of shame and guilt. Young men are then more likely than young women to commit violent crimes. These are more likely to attract a prison sentence. Even when the crimes are matched for level of violence, the man may receive a longer sentence than the woman because he has not developed the skills necessary to express his guilt. A prison sentence, particularly a longer one, encourages the formation of a criminal subculture and a personal sense of being an outcast or scapegoat, rather than a sense of reintegration with the society that is doing the shaming. This personal and social idea of being excluded encourages recidivism, increasing the gender difference in antisocial behaviour.

A promising approach to reducing antisocial behaviour has been developed in Australia around the idea of 'reintegrative shaming'. This involves community conferences in

which the offender and the victim meet, together with their respective supporters. These conferences involve the people who most respect and care about the offender, which encourages reintegration into the community, and the victim confronts the offender, which encourages shaming. These community conferences confront and try to reverse some of the factors which are likely explanations of men's greater tendency to antisocial behaviour.

## Section 3. Factors affecting male mental health

### War and mental health

It has taken a long time for society to recognise that war has mental health impacts on soldiers, their families and their communities. The initial post-war impact on soldiers has been seen as an increased suicide rate in the first few years after the war. The ongoing impact is seen as an increased rate of post-traumatic stress disorder (PTSD). PTSD was undoubtedly seen after earlier wars, but was given other labels such as 'shell shock' or 'character disorder'. It was not until 1980, after clinical experience with the problems of Vietnam veterans, that PTSD was formally recognised by American psychiatrists in their diagnostic manual. PTSD can be found in anyone who experiences a distressing event outside the range of usual human experience. It can begin shortly after the event or can arise months or years later. PTSD is not easily recognised because of the sufferer's avoidance of speaking about the distressing event.

After the Second World War, little Australian research was done on the health of veterans. The major exception was a study which compared former POWs with a control group of veterans. This study was not carried out until 40 years after the war. It was found that the former POWs had increased rates of anxiety and depression, in the immediate aftermath of the war and decades later.

Research on the physical and mental health effects of the Vietnam war began as a response to the Agent Orange controversy. In the USA two large scale studies on mental health effects were carried out in the 1980s, and a similar Australian study was completed in the 1990s. These studies confirm the high rate of PTSD in veterans, even 20 years after the war. Veterans also have high rates of alcohol related problems, but these seem to be related to military life rather than war stress *per se*. A surprising finding of the Australian study was a high level of phobic disorders.

Although the mental health effects of war on veterans are beginning to receive attention, the effects on other Australians have been ignored. Many Australians have immigrated from war-torn countries and there has been a lack of research on their problems and they have no support service like the Vietnam Veterans Counselling Service.

### Unemployment and mental health

In Western societies, work has traditionally been recognised as an integral feature of men's lives and young boys have been encouraged to aspire to the role of a successful breadwinner able to support a wife and family. This role has been threatened in recent years by increasing levels of unemployment.

While it is clear that the unemployed tend to have worse mental health, this could be due to the effects of job loss or a tendency for men with poorer mental health to become unemployed. To sort out these possibilities requires longitudinal studies which compare people before and after they become unemployed. For example, some studies have followed school leavers from the time they are at school through to when they join the workforce or become unemployed. Such studies show that unemployment does lead to poorer mental health and this effect is not solely due to financial hardship in the unemployed. These studies have also found that young people who are dissatisfied with their employment are as badly off in terms of mental health as the unemployed.

Unemployment does not affect men's mental health uniformly. Some are more affected

than others. Men cope better if they have money, if the job they lost was stressful, if they have good social support, if they are younger, if they have weaker commitment to work, if they have certain personality characteristics (e.g., good self-esteem), and if they use their time in constructive activities involving other people.

Some recent research has evaluated counselling programs for the unemployed. Such programs seek to alleviate the psychological distress associated with job loss and to aid the unemployed to regain employment. These programs assume the future availability of jobs. However, where people have virtually no chance of reemployment, a more humane and effective approach might be to encourage them to redefine their attitudes to work and perhaps seek alternative activities. What is an effective strategy for coping with job loss must depend, *inter alia*, on whether the job loser has a realistic prospect of reemployment, and this in turn will depend on whether national governments and those who elect them are committed to ensuring that all citizens who are willing and able to work are given the opportunity. There is increasing evidence that, for many men, mental health depends on satisfactory employment.

## **Hazardous occupations and mental health**

It has been traditional in terms of gender role prescriptions that men have been the main workers in any occupations that would be readily identified as hazardous. This includes police, fire services, emergency service work, security industry, military, heavy industry and many other occupations. All work in these spheres has been heavily dominated by male gender values, including beliefs in men's physical strength, invincibility, power and capacity to deal with and master threat. Other occupations that do not specifically deal with hazards but may encounter them have, for the most part, seen men as the ones who should face any threat if this is anticipated.

One of the major mental health problems in hazardous occupations is the development of post traumatic stress disorder. This condition can arise after an event outside the range of usual human experience, which would be markedly distressing to almost anyone and is usually experienced with intense fear, terror and helplessness. The symptoms involve reexperiencing the event, avoidance, numbing of responsiveness, and increased arousal. Other mental disorders which can be associated with hazardous occupations are major depression and substance abuse. Exposure to hazardous events may also contribute to a significant decline in a person's physical health. As well as those directly exposed to risk in hazardous occupations, a significant number of 'vicarious' victims may experience similar reactions.

Shift work, organisational stressors and workplace violence also contribute to the development of mental health problems. The implementation of preventive programs, which provide workers with the information and skills to look after their mental health and to reduce unnecessary stress in the workplace, will contribute to lessening such problems.

With the changes in work practices and equal opportunity provisions, many occupations that have been traditionally considered hazardous are now shared by women, so that the effects on mental health described for hazardous occupations will also apply to women who work in similar fields.

## **Homelessness and mental health**

Most homeless people in Australia are men, although women and homeless families are growing subgroups. Between a quarter and a half of single homeless men are suffering from severe and perhaps chronic mental disorder. It is not uncommon for these men to have two or more mental disorders or a physical and a mental disorder. It appears that having one or more severe mental disorders is a risk factor for homelessness. Over the past 20 years there has been an increase in the number and proportion of mental disorders among homeless men. There has also been a trend for the homeless to be younger. The change in organisation of mental health care in Australia has so far

exacerbated the problems of homeless people with mental disorders. Furthermore, the availability of cheap accommodation is decreasing.

Good management of mental disorders is likely to contribute to the prevention of homelessness. The provision of a decent place to live is a primary need, complemented by access to appropriate levels of treatment and support. Mental health services need to adapt to suit homeless people with multiple problems and staff in welfare and accommodation services need to be trained to recognise and deal with some of the manifestations of mental disorders. In some places, outreach services involving mobile community teams have been developed and appear to be successful in reaching the homeless population. However, there is a need for greater links between specialist mental health services and GPs and with support workers in generic services. There is also a lack of supported accommodation for people who might otherwise end up in an institution or living in marginal accommodation or on the streets.

The 1992 National Mental Health Policy could have a profound effect on reducing the vulnerability of people with mental disorders to homelessness. This policy advocates a community-oriented approach, the placing of mental health services within the mainstream of health care, an increase in the range and amount of supported accommodation, and decentralisation of the mainstreamed mental health services so that removal of people from their support networks is minimised. However, there is also a danger that implementation of the policy without adequate resources for community-based mental health and disability support services could have unintended consequences which are detrimental for people with mental disorders who are at risk of homelessness. An increased investment in research and service evaluation in this area is required.

## **Separation, divorce and mental health**

Separation and divorce are much more common than in the past but are still perceived as extremely distressing experiences. Men and women show a strong emotional response in the period after separation and often seek the support of others, including the help of professionals concerned with mental health.

As a group, men have a poorer short-term reaction to separation than women which is linked to their unpreparedness and to the feeling of being the rejected partner. Women, however, are more likely to seek interpersonal (including professional) help than men.

Most men and women show a recovery in the one to two years after separation, but for some the distress is persistent. In other cases, the escape from a stressful marriage brings an improvement in mental health.

Epidemiological studies show that divorce and separation are strongly linked to a broad spectrum of mental health problems. In Australian studies, depression and alcohol abuse have been found to be much more common in the divorced and separated than in the married. Some mental health problems predate marital breakdown and may even have been present before marriage. The high risk of mental health problems persists long after divorce and is evident in the remarried.

Counselling services for those going through marital separation are available through the Family Court and voluntary organisations, and individuals often choose to use regular health services, GPs being the most likely point of contact. Some people are reluctant to use such services and this seems more so for men than women. The help available from these sources has an important part to play not only in crisis support, but also in assisting those with long-term mental health problems or at risk of such problems.

Single parents, most of whom are divorced or separated, constitute a particularly vulnerable group. Policies concerning their financial status should be guided by the part they can play in the prevention of mental health problems. There is no indication as yet that lone fathers will become a larger proportion of the single parent population.

The substantial increase in numbers of remarriages is a cause for concern in that it may reflect a greater opportunity for introducing long-term mental health problems into new

families and step-families, which could contribute in turn to the instability of second marriages.

## **Male sexuality and mental health**

There has been only limited investigation of the development of sexuality in children. However, an Australian study found that Australian children were two years behind their Swedish counterparts in sexual knowledge, presumably because of less sex education. During their development, children have to address the question 'who am I?', both in terms of gender identity (male/female) and sexual orientation (homo/heterosexual), as well as in other spheres. Many factors influence psychosexual development, including consistency of information received about gender identity, childhood masturbation, sex-typing of childhood behaviours and acceptance of orientation by society.

In the past, homosexuality was defined as a mental disorder and there was pressure on homosexual men to undergo treatment. However, studies show no difference in mental health between homosexual and heterosexual men. In Western societies, there has been a substantial shift in the past 20 years in attitudes to homosexuality. In the 1990s, difficulties experienced by gay men are more likely to be viewed as stemming from concealment than disclosure of sexual orientation. The AIDS crisis has led to increased attention to HIV-risk behaviours, in particular to the sexual practices of homosexual and bisexual men.

Although the Australian population is ageing, the issue of ageing and sexuality has received little attention. Comparing young men with old men is of limited value because they come from generations with different sexual values and histories. Any differences could be due to generation as much as to ageing. Surveys of different age groups have led to the belief that older men are asexual, but a different picture emerges if sexuality is seen to encompass more than genitally based activity.

Changing attitudes have also affected disability and sexuality, particularly for the intellectually disabled. Physical disability can have major consequences for sexual functioning and a disability that primarily affects men is spinal cord injury. Rehabilitation needs to extend beyond management of physical functioning to ensure a satisfying life, including the area of sexual satisfaction.

Male sexual dysfunctions include hypoactive sexual desire, erectile dysfunction and premature ejaculation. The prevalence of these disorders in Australian men is unknown, nor are there Australian data on treatment of sexual problems. There is debate about whether sexual problems are best seen as problems of the individual or relationship problems. For example, low sexual desire is only a problem if the man's partner desires a higher level of sexual activity.

Males are by far the major perpetrators of sexual offences such as sexual abuse of children and rape, whereas females are more often victims. Less is known about male victims of sexual offences than about female victims. Treatment programs for rapists have seen them as a uniform group, but there is evidence of great diversity. Recognition of this diversity could help in designing better programs.

Although there has been considerable research into HIV-risk behaviours in Australia, other areas of sexuality have been relatively neglected. Much of our knowledge is imported from the US on the assumption that cultural differences between the two countries are minimal. This assumption, however, is open to question.

## **Mental health of men of non-English-speaking background**

There is a dearth of information about factors leading to poor mental health in immigrant men. The limited data on mental health available from the National Health Survey and a survey of GP consultants indicate that the prevalence of mental disorder in non-English speaking background (NESB) men varies between cultural groups. There is evidence of higher rates of mental disorders in males of Italian, Greek and Eastern European origin

compared with their English-speaking counterparts. Conversely, there are very low rates of diagnosis and treatment of mental disorders among Asian men. The low prevalence in Asian groups could be due to a reluctance of people from these cultures to accept and report mental health problems because these carry a severe social stigma. In some NESB groups, mental health problems may present as physical complaints.

Little is known about the pre-migration, migration and post-migration experiences which influence the risk of mental health problems in immigrant groups.

NESB people have lower rates of use of mental health services. They also have low rates of use of treatments which rely upon language (e.g., psychotherapy). The consequences of this are that substantial numbers of NESB people have unrecognised and untreated mental disorders and there are poorer outcomes for those who do receive treatment. This situation constitutes a serious failure of the health system in meeting its responsibilities to all Australians.

A major gap in the research literature on NESB groups is in evaluation of the effectiveness of mental health treatment modalities and models of service organisation. The lack of research on NESB groups reflects their marginal place and lack of socio-economic power in Australian society.

## **The mental health of Aboriginal communities**

Evidence from research studies supports the views of Aboriginal community leaders and health workers that mental disorders are major public health issues for Aboriginal communities, and that psychological distress, usually depression, is common and often runs a chronic or remitting/relapsing course. Aboriginal men have high rates of mental disorder, often associated with a substance use disorder. The changed status of many Aboriginal men since European colonisation with exclusion, loss of cultural roles and resultant low self-esteem probably contributes to this picture. However, most of the factors found to be associated with mental disorders in Aboriginal communities affect both Aboriginal men and women, including ongoing losses, removal of children and disruption of families.

Aboriginal people do not use mainstream mental health services. Aboriginal men are less likely to use mental health services than women, often presenting late with severe illness. It is clear that a major priority in public health policy must be the development of good quality, culturally appropriate, accessible, mental health programs in Aboriginal communities. Prevention and early detection of mental disorders are necessary to avoid chronicity. The ways in which Aboriginal people view and explain the problems need to be understood and accepted as valid. Furthermore, Aboriginal community mental health programs must operate beside programs having a focus directed toward wider social and environmental improvements.

## **Section 4. Effects of men on the mental health of others**

### **Effects of fathers on the mental health of their children**

The influence of the mother on the mental health of her child has long been a popular theme among mental health professionals and has spawned a vast body of research. By contrast, the influence of the father has been relatively neglected and the available knowledge base is limited. However, there is evidence that fathers have the potential to enhance or harm the mental health of their children and these effects extend into adult life. Some evidence suggests that fathers may be particularly important to the mental health of their sons, but there is still dispute about this issue.

Children are more likely to have good mental health when their fathers are actively involved in their care, treat them affectionately, are not overly controlling, where the

father and mother have a harmonious relationship, and where the father himself has good mental health. Conversely, children are likely to have poorer mental health when their fathers are absent, are uncaring and overcontrolling, use harsh discipline or abuse the child, where there is conflict between the father and mother, and where the father suffers from a mental disorder.

Because of their important role, fathers are a potential point of intervention for improving the mental health of children as well as the long-term mental health of the adult population.

## **Effects of husbands on the mental health of their wives**

Marriage seems to confer greater psychological benefits on husbands than on wives. This finding indicates the potential effect that husbands can have on the mental health of their wives.

Various role factors influence the mental health of wives. In the traditional marriage, being a housewife has a negative impact on health only when the marriage is dysfunctional. Where both partners are employed, the husband's attitude towards his working wife is a factor in her well-being. The situation is worst where the family is dependent on the wife's income but the husband is uneasy about accepting this economic reality. Long-term employment helps women to cope better if they have the stress of unstable marriage.

Mental health problems in the husband can have various effects on the wife. Depressed husbands tend to demonstrate less affection and have less involvement with household chores and child care. They may also try to exert more dominance and allow less cooperative decision-making. Caring for a spouse with dementia can cause more distress for wives than husbands, partly because women tend to handle the care-giving role differently. Physically abusive husbands cause poor self-esteem and other mental health problems in their wives.

The mental health of women is better where their husbands are caring and supportive. A good marital relationship can even help wives repair the effects of childhood adversity. Conversely, husbands can have adverse effects on their wives if they fail to provide a supportive relationship or they provide negative interactions (ranging from constant criticism to physical abuse). The mental health impact on women of a bad marital relationship can be aggravated by women's tendency to take on nurturant roles but blame themselves for any untoward consequences.

Various interventions may be useful in preventing mental health problems arising in marital relationships. Furthermore, greater attention to the mental health needs of men may lead to indirect benefits to their wives and children.

# **Section 1**

## **Background**

# Mental disorders in males: the size of the problem

---

A. F. Jorm

NH&MRC Social Psychiatry Research Unit  
The Australian National University, Canberra

---

It has traditionally been believed that mental disorders are more common in females than males. This belief was based on early mental health surveys which consistently found a higher prevalence of mental disorders in females<sup>1,2</sup>. However, more recent evidence has shown that the picture is not so simple. During the mid-1980s a landmark mental health survey, known as the Epidemiologic Catchment Area study, was carried out in the United States<sup>3</sup>. This survey found that 20 per cent of both men and women (aged 18 or over) had a mental disorder in the previous year. The difference in results from earlier studies was due to the much broader range of mental disorders assessed. The earlier surveys had found a higher prevalence in women because they had concentrated on disorders which most affect females. Although there was no overall difference between males and females in the Epidemiologic Catchment Area study, the pattern of disorders was quite different. Men had a much higher prevalence of alcohol abuse and antisocial personality, while women had a higher prevalence of depression, obsessive-compulsive disorder and somatisation. More recently, the Americans have carried out a national mental health survey using a representative sample of the United States' population aged 15-54<sup>4</sup>. This study found that 28 per cent of men and 31 per cent of women had a mental disorder in the previous year, but again the pattern of disorders was different, with men having a higher prevalence of alcohol abuse, drug abuse and antisocial personality and women a higher prevalence of depressive and anxiety disorders.

In Australia, the evidence is much more limited. In 1991, a mental health survey was carried out in the Riverland region of South Australia using similar methods to the Epidemiologic Catchment Area study in the United States<sup>5</sup>. A similar survey was also done in Christchurch, New Zealand, in 1986<sup>6</sup>. The results of this survey are relevant to Australia because of the cultural similarity between the two countries. The results of these two studies are shown in Tables 1 and 2. The findings of both surveys were similar. In Riverland, 26 per cent of both men and women (aged 15 or over) had a mental disorder in the previous six months. In Christchurch, 28 per cent of both men and women (aged 18-64) had a mental disorder in the previous six months. In both surveys, males had a higher prevalence of alcohol and drug abuse and antisocial behaviour, while females had more depression, anxiety and eating disorders.

**Table 1. Prevalence of mental disorders in the previous six months in the Riverland, South Australia**

<b>Mental disorder</b>	<b>Males (%)</b>	<b>Females (%)</b>
Somatisation	2.9	7.3
Panic disorder	1.0	3.0
Anxiety	8.2	10.9
Phobic disorder	5.2	9.8
Obsessive-compulsive	1.0	1.1
Depression	6.7	14.1
Mania	0.6	0.9
Schizophrenia	0.2	1.3
Anorexia nervosa	0.2	0.2
Bulimia	0.4	2.8
Alcohol abuse	13.0	1.5
Drug abuse	2.3	0.4
Antisocial behaviour	1.5	0.0
Any mental disorder	25.8	26.1

**Table 2. Prevalence of mental disorders in the previous six months in Christchurch, New Zealand**

<b>Mental disorder</b>	<b>Males (%)</b>	<b>Females (%)</b>
Mania	0.0	0.2
Major depression	3.4	7.1
Dysthymia	3.8	9.0
Drug abuse	2.3	0.7
Alcohol abuse	14.1	2.6
Schizophrenia	0.0	0.4
Phobia	4.4	10.4
Panic	0.5	1.7
Obsessive-compulsive	0.6	1.4
Somatisation	0.0	0.1
Generalised anxiety	7.7	11.6
Antisocial personality	1.3	0.5
Cognitive impairment	0.8	1.4
Eating disorder	0.2	1.3
Pathological gambling	0.1	0.1
Any mental disorder	28.0	27.8

The figures from these studies do not cover the childhood years. In childhood we get a different picture, with boys having a higher overall prevalence than girls. For example, in a study of New Zealand 11-year-olds, boys were 80 per cent more likely to have a mental disorder than girls<sup>7</sup>. However, this overall difference in prevalence masks a different pattern of disorders in boys and girls. Boys were found to have more depression, attention deficit, oppositional and conduct disorders, while girls had more phobias and separation anxiety. Similar results have been found in other surveys of mental health in children<sup>8</sup>.

Although there is little overall gender difference in the prevalence of mental disorders, males and females differ in their use of mental health services. With private psychiatric services funded by Medicare, females receive 73 per cent more services than males<sup>9</sup>. However, the pattern of services varies by age, with boys receiving more services than girls, but females receiving more services from adolescence onwards. A similar gender difference has been found for health services provided by psychologists. In the age group 0-19 years, males receive more psychological services, but females receive more services than males from age 20 onwards<sup>10</sup>. With hospital treatment for mental disorders, the gender difference is much smaller. Women are only 11 per cent more likely than men to be admitted with a mental disorder and have an average length of stay 20 per cent longer<sup>11</sup>. Hospital admissions would involve the more severe cases of mental disorder, so it appears that the gender difference in use of services is associated with the less severe mental health problems. Whereas in childhood the pattern of service use appears to match the gender difference in prevalence of mental disorders, in adulthood there is a discrepancy between the prevalence data (which show little gender difference) and service use (which is higher in women). The causes of this discrepancy are unknown, but possibilities include the under-servicing of men, the over-servicing of women, or the diversion of male mental health problems to the criminal justice system.

In conclusion, there does not appear to be much gender difference in the overall prevalence of mental disorders, but the pattern of disorders differs between males and females. In adulthood, men experience more alcohol and drug abuse and antisocial behaviour, while women experience more anxiety, depression and eating disorders. In childhood, boys have a higher overall prevalence than girls, but again this hides a different pattern of disorders. There is also a marked gender difference in receipt of mental health services. In childhood, boys are more likely to receive services than girls, but in adulthood it is women who are more likely to receive services.

## References

1. Henderson S, Duncan-Jones P, Byrne DG, Scott R, Adcock S. Psychiatric disorder in Canberra. A standardised study of prevalence. *Acta Psychiatr Scand* 1979;60:355-74.
2. Krupinski J, Stoller A. The health of a metropolis: Health and social survey of a Melbourne metropolitan area. Melbourne: Heinemann Educational, 1971.
3. Robins LN, Locke BZ, Regier DA. An overview of psychiatric disorders in America. In: Robins LN, Regier DA, eds. *Psychiatric disorders in America*. New York: Free Press, 1991:328-366.
4. Kessler RC et al. Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States. *Arch Gen Psychiatry* 1994;51:8-19.
5. Clayer JR, McFarlane AC, Czechowicz AS, Wright G. *Mental health in the Riverland*. Adelaide: South Australian Health Commission, Mental Health Research and Evaluation Centre, 1991.
6. Oakley-Browne MA, Joyce PR, Wells JE, Bushnell JA, Hornblow AR. Christchurch psychiatric epidemiology study, part II: Six month and other period prevalences of specific psychiatric disorders. *Aust N Z J Psychiat* 1989;23:327-40.

7. Anderson JC, Williams S, McGee R, Silva PA. DSM-III disorders in preadolescent children. *Arch Gen Psychiatry* 1987;44:69-76.
8. Sawyer M. Childhood mental health problems. This volume.
9. Jorm AF, Henderson, AS. Use of private psychiatric services in Australia: An analysis of Medicare data. *Aust N Z J Psychiat* 1989;23:461-468.
10. Jorm AF. Characteristics of Australians who reported consulting a psychologist for a health problem: An analysis of data from the 1989-90 National Health Survey. *Aust Psychol* 1994;29:212-215.
11. Australian Institute of Health and Welfare. *Australia's health 1992: The third biennial report of the Australian Institute of Health and Welfare*. Canberra: Australian Government Publishing Service, 1992.

RESERVED

# Society, culture and male mental health

---

J. M. Najman

Department of Anthropology and Sociology  
University of Queensland

---

## Introduction

Much has been written about the different health needs of men and women. It has been consistently suggested that women have higher rates of mental and much physical illness, while men have higher rates of mortality. Women, it is suggested, become ill, men die. Certainly there can be no doubt that the latter is true. Thus for almost every known animal species, the female outlives the male<sup>1</sup>. Data for humans from the United States show not only a female advantage in life expectancy, but that this gap in life expectancy has been increasing. The gap in life expectancy (at birth) between men and women increased from about 2.8 years in 1900-2 to 7.8 years in 1977<sup>2</sup>. Australian data show a similar pattern with a recent plateau and modest decline in the female life expectancy advantage<sup>3</sup>. These differences are particularly noticeable in the 15-24, 25-44 and 45-64 year old age groups, where male death rates are more than twice the female death rate<sup>3</sup>. It is also notable that, for the cause of death most clearly linked with mental disorder — suicide — male death rates are four times the female death rate<sup>4</sup>.

The behaviours and situations which cause death, disease and mental disorder may sometimes be similar and/or related. Despite these similarities, social groups differ in their death rates, patterns of morbidity and mental health. A high rate of female mental disorder is believed to be one such difference. However, we will argue that the high rates of mental disorder reported for women may reflect a process of selective measurement. Such an argument requires a reconsideration of the criteria for determining the existence of a mental disorder. After this, we review male/female differences for the less and more serious forms of mental disorder and then what is known about the causes and natural history of mental disorder. Here it will be suggested that many societally and culturally driven social changes can lead to mental disorders. The final sections of the paper consider current and projected changes in the age structure, patterns of employment and family life in Australia, as these can be seen to impact on rates of mental disorder in general and rates of male mental disorder in particular. We will argue that societal change is one of the major factors contributing to what are high levels of mental disorders experienced by men (and women) in the community.

## Gender and the nature of mental disorder

It has long been believed that mental disorders are more common in females than males. This belief was based on early mental health surveys which consistently found a higher prevalence of mental disorders in females<sup>5,6</sup>.

However, more recent population surveys (reviewed by Jorm in this monograph) suggest that, while males and females may differ in the types of mental disorder they manifest,

the proportion experiencing a mental disorder is remarkably similar. Little has been written about the different ways men and women may respond to what appear to be the same stressful events. Table 1 is based on data from the Family and Child Health Study (FACHS), a longitudinal study of bereaved parents and their matched non-bereaved controls<sup>7</sup>. The study was concerned with the impact of one stressful event, the death of a child, on the mental health of the parents. The presence of a mental disorder was determined by a questionnaire assessing anxiety and depression<sup>8</sup>, and two questions relating to the quantity and frequency of alcohol consumption. While it is clear that the bereaved group consistently manifest higher rates of mental disorder, the differences between fathers and mothers differ greatly depending upon whether excessive alcohol consumption is included as a criterion for mental disorder. When alcohol consumption levels are excluded, mothers have higher rates of mental disorder for almost all comparison groups, regardless of whether they were bereaved. With high levels of alcohol use included as an indicator of mental disorder, these previous differences diminish or are eliminated in all groups except those most recently bereaved. The implication of this study is that men and women respond differently to the same events and that the way this response is measured determines which group is perceived to have the highest rate of mental disorders.

**Table 1. Per cent of bereaved and control parents with a mental disorder in a 30-month longitudinal study**

	Anxiety, depression		Anxiety, depression + alcohol use high	
	Father	Mother	Father	Mother
<b>2 months</b>				
Bereaved	14.2% (141)	35.0% (194)	24.1% (141)	35.0% (194)
Control	2.7% (150)	7.5% (200)	7.3% (150)	7.5% (200)
<b>15 months</b>				
Bereaved	8.2% (134)	17.5% (189)	12.7% (134)	18.0% (189)
Control	5.3% (150)	5.6% (196)	10.0% (150)	6.1% (196)
<b>30 months</b>				
Bereaved	6.3% (143)	13.8% (189)	17.5% (143)	14.8% (189)
Control	3.8% (157)	6.9% (203)	9.6% (157)	7.4% (203)

Further, disturbances of mood often co-exist with a range of other unhealthy behaviours. People who are heavy smokers also tend to be heavy drinkers<sup>9,10</sup>. It is perhaps less well known that people who manifest a variety of mental disorders are also more likely to be heavy smokers and drinkers. Thus, data from the 1991 US National Health Interview Survey of 43,732 adults show that men who score high on a negative mood index are much more likely to smoke cigarettes and more than three times more likely to have heavier patterns of alcohol consumption<sup>11</sup>. If cigarette and alcohol consumption are aggregated into a combined index, men with the most negative moods are about four times more often represented in the combined smoking/alcohol use group. While women manifest similar patterns, and have high levels of cigarette use associated with evidence of mental disorder, they have a much lower rate of alcohol use when manifesting symptoms of mental disorder.

Of course, negative mood may follow rather than precede the use of cigarettes and alcohol. While it seems more likely that negative mood precedes substance use or abuse,

in a practical sense the more important issue is that these are likely to coexist and all three — negative mood, nicotine dependence and alcohol abuse — frequently coexist and are all indicators of mental disorder<sup>11</sup>.

The identification and explanation of gender differences in mental disorder in the community depends, then, in part, on how mental disorder is characterised. Some conceptualisations may favour symptoms which are manifested by one gender more often than the other, thus producing a perhaps misleading impression that one gender has higher rates of mental disorder than the other.

## Nature of mental disorder

What, then, are the essential features of a mental disorder? Mirowsky and Ross<sup>12</sup>, in their survey of mental disorder in an American community sample, provided respondents with a list of 91 symptoms. Only instances in which the symptoms were experienced for two weeks or more were sought. The most common symptoms experienced were depression (feeling sad, lonely, hopeless, having trouble sleeping) and anxiety (feeling tense, restless and/or worried). Mirowsky and Ross factor analysed the 91 symptoms and found it was possible to distinguish these disturbances of mood and emotion from mental disorders which involve disturbances of thought and cognition (hearing voices, seeing things others do not). These latter mental health problems were relatively rare. In all, five groups of symptoms could be identified; depression, anxiety, schizophrenia, paranoia and alcoholism. However, Mirowsky and Ross note that these were not distinct groups, but rather that many persons had symptoms of more than one of these conditions. People who, for example, drank alcohol in large quantities might also be more depressed. The overall conclusion of this analysis of 91 symptoms was that there were few, if any, clear distinctions between types of mental disorder<sup>12</sup>.

This view of mental disorder appears to be shared by Foulds and Bedford<sup>8</sup> and Goldberg and Huxley<sup>13</sup>, who see few meaningful distinctions between categories of mental disorder, particularly those which are more common. Further, symptoms of mental disorder, it is argued, are continuously distributed in a population. That is, people seem to differ in their level of impairment or in the number of symptoms they manifest. There is little evidence of an absolute difference between those who are mentally well and those who are mentally disturbed. Where there is evidence of a genetic influence on mental disorder, the impact of the genes appears to be non-specific and to influence manifestations of both depression and anxiety<sup>13</sup>.

Thus it seems appropriate to think of a hierarchy of mental disorders, with the ability to maintain normal functioning and personal relationships as the factor determining the severity of the underlying condition. Labels such as depression and anxiety are convenient and they enable comparisons which may serve some useful purposes (distinctions between the less severe and the more severe conditions may be important for aetiological, epidemiological and therapeutic reasons) but generally the coexistence of symptoms and the difficulty of making unambiguous distinctions between them renders the labels of limited value.

## Rates of mental disorder in the community

Studies of the incidence, prevalence and causes of mental disorder can be undertaken at many levels and with, sometimes, quite different results. For example, community surveys of mental disorder in ostensibly 'healthy' persons suggest that anywhere from 5 per cent to about 25 per cent of people experience mental disorder symptoms over a relatively short recall period. By contrast, relatively few people are admitted to hospital for psychiatric care in the same time period. What then are we to make of these varying estimates and of the different types of mental disorder they identify?

Goldberg and Huxley<sup>13</sup> provide an extensive and insightful review of the literature which

documents the differing estimates of the rates of mental disorder and use standard periods within which to estimate prevalence (a one-year period). They point to what can be thought of as five levels of increasing severity of mental disorder and find the following rates characteristic of each level.

- Level 1 Community (population) surveys of symptoms of mental disorder in previous year, 26.0 per cent to 31.5 per cent of persons have been found to be impaired for two weeks or longer.
- Level 2 Attending primary care, 23.0 per cent of persons in the community who attend primary care have been found to be impaired for a period of two weeks or longer.
- Level 3 Diagnosed by medical practitioners as having a mental disorder, 10.1 per cent of persons in the community in previous year.
- Level 4 Contact in previous year with specialised psychiatric services, 2.3 per cent of persons in the community.
- Level 5 Psychiatric in-patient admissions in previous year, 0.6 per cent of persons in the community.

It is not surprising that the mental disorders identified in community surveys differ from those which have contact with specialist psychiatrists or which result in in-patient admissions, the former constituting a lesser threat to normal day-to-day functioning<sup>13</sup>. It is, however, interesting to note that, for the less serious levels of mental disorder, there is a sex ratio of 2.5 females for every male, but for the cases coming in contact with specialist, psychiatric services (levels 4 and 5), the female ratio is only a little higher than the male ratio<sup>13</sup>. While the implication of these figures is that women experience minor impairment much more often than men, but serious mental disorder only somewhat more often than men, it must be cautioned that men may come to the attention of specialist psychiatric services less often than their numbers may require. This is because men with more serious states of mental disorder may be dealt with by other than health agencies, for example the criminal justice system rather than psychiatric services.

## **Gender and use of services for mental disorder**

Once a mental disorder is experienced, do men and women differ in the extent to which they receive medical and other services? There has been a prevalent belief that men may less frequently receive medications and other treatments for their mental disorders. This belief is based on the supposition that men are less (or perhaps women more) willing to seek help for their disorders or alternatively clinicians are more sensitive to the mental health problems or treatment needs of their women patients.

There is no simple answer to the question of whether men and women differ in their use of health services once they experience a mental disorder. First, we have noted that men and women may experience similar rates of mental disorder, but the types of disorder they experience are very different. Table 2 is taken from the 1989-90 Australian Health Survey<sup>14,15</sup>. If we examine the projected population figures, we note that females are twice as likely to experience a nervous or depressive recent condition and between 1.5 and 1.8 times more likely to have a chronic disorder of the above types.

**Table 2. Mental disorders and use of specific health services by sex (Australian Health Survey 1989-90)**

	Male ('000)	Female ('000)	Ratio F/M
<i>Persons who experienced a recent mental illness</i>			
Nerves, tension, nervousness and emotional problems	146.9	300.7	2.0
Depression	32.7	66.2	2.0
High alcohol consumption	434.5	101.5	0.2
<i>Persons who experienced a long-term mental illness</i>			
Nerves, tension, nervousness and emotional problems	65.1	96.1	1.5
Depression	16.9	30.0	1.8
<i>Persons using specific medications for mental disorder in two weeks prior to interview</i>			
Pain reliever	12.6	16.5	1.3
Sleeping medication	42.6	121.4	2.8
Tranquilliser/sedatives	107.0	180.2	1.7
<i>Type of health action taken in two weeks prior to interview for mental disorder</i>			
Doctor consultation	34.7	58.1	1.7
Hospital admission	6.1	19.4	1.2

If we include recent high alcohol consumption as an acute mental disorder, not only is this more than four times more common in men, but it is more common in men than the other mental disorders are in women. If we examine levels of medication use or doctor or hospital contacts for mental disorders, we note that women have the higher rates of service usage, but only at a level which is proportional to their higher levels of nervous and depressive conditions. The exception to this is in the use of sleeping medications, which are 2.8 times more commonly reported by women than men. While it is not possible to make an unequivocal judgment of the above data, it does appear that women use services at rates broadly proportional to their level of mental disorder (ignoring excessive alcohol consumption). With respect to medication use, men may have fewer sleeping disorders, or may have their sleeping disorders less frequently treated. It is likely that alcohol problems are relatively infrequently treated and male alcohol abuse is relatively ignored by community and public health services. It would appear here that existing mental health treatment services address female needs, and that male mental needs (e.g., for alcohol abuse treatment) are poorly developed and rarely used.

## Men and HIV/AIDS

HIV/AIDS represents a recent condition which in Australia, is largely experienced by men. At the end of 1993, there were 4753 diagnosed cases of AIDS, of which 3212 persons died. Ninety-six per cent of these cases occurred in males. Of the 15669 HIV-infected persons in Australia (December 31, 1993), 95 per cent occurred in males<sup>16</sup>. While the female proportion of cases is increasing and is predicted to further increase, at the present time HIV/AIDS is largely a male condition.

Three mental health issues arise in the context of HIV / AIDS. First there has been a recognition that oppressive social attitudes towards homosexual men have been an impediment to the treatment and prevention of HIV / AIDS. The term homophobia has been coined to refer to the discriminatory attitudes and practices which exist towards those who have sex with their own gender. This discrimination has been observed in the community, at the workplace and in the delivery of health care services<sup>17,18</sup>. In the above instance, one might argue that the 'well' community needs to be treated for its hostile and oppressive attitude towards homosexuality and AIDS.

Second, there are major mental health consequences for those who have AIDS. These include, on the one hand, significant central nervous system deterioration leading to a wide variety of physical and emotional consequences<sup>19</sup>, and on the other to the mental health consequences which may accompany any serious, chronic and life-threatening condition.

Finally, AIDS raises a series of ethical and moral concerns related to the termination of life. In some instances, people with AIDS may require information about how to end their lives, or when they are no longer able to commit suicide by their own hand they may seek assistance. In some instances this assistance will require medical intervention — perhaps after a request previously issued by the patient. While it would be incorrect to suggest that HIV / AIDS is a major mental health problem, it must nevertheless be noted that the cases in Australia are largely restricted to men and that these cases have high rates of mental health problems.

## Causes and natural history of mental disorders

Broadly, it is helpful to think of two types of causes of mental disorder. The first is physical and biological. This may include an inherited genetic component or birth trauma or, it has been suggested, a maternal infection at a particular point in a pregnancy. It seems appropriate to interpret the physical and/or biological causes of mental disorder as rendering the infant more vulnerable to mental disorder as it develops and reaches adulthood.

The second type of cause involves a variety of social, situational and interactional factors. These factors may be either stressful and unpleasant (e.g., marital break-up, poverty) or act as buffers to diminish the impact of stressful events (having a strong, emotionally supportive group of friends).

It is not possible to be precise about the relative importance of biological/physical and social/cultural factors as these contribute to levels of mental disorder in the community. From a community perspective, there is a distribution of physical/biological vulnerability and that, as social/cultural factors change, a greater or lesser proportion of the population manifest symptoms of mental disorder. It is also important to recognise that little can be done to decrease the proportion of the population which is vulnerable to mental disorder and that treatment and prevention programs must consequently include attention to the social and cultural environment.

It also seems likely that the less severe forms of mental disorder may have a lesser biological/physical contribution than the more severe forms of mental disorder. However in both types of mental disorder, the social and cultural environment appears to have the effect of precipitating the mental health problems.

Further, while for some purposes it is useful to make various types of distinctions, for example between different types of mental disorders or different types of precipitating events, such distinctions may distract from what is more correctly characterised as a continuous process with few natural divisions. Thus a life event such as the birth of a child may impose demands on the mother which may influence the quality of her relationship with her partner<sup>20</sup>, the latter change leading to symptoms of a mental disorder. Marital conflict, poverty and unemployment may all have a similar type (but

different magnitude) of effect on the person involved. Mental disorder is then a consequence of the varying levels of biological vulnerability and differing combinations of stressful events/situations moderated by the existence of social supports.

It is helpful to illustrate the way social and cultural circumstances and mental disorder are interrelated by considering one particular example. The one chosen is a study published in 1933 of people living in a town in Austria from 1928-30. This study is important first because the whole town was monitored over an extended period of time, second because the economic depression led to almost everyone becoming unemployed, and third because the study was concerned with how the lives of the inhabitants were adversely effected in a wide range of ways<sup>21</sup>.

These effects included:

- social and family relationships were often transformed; male workers who previously had worked during the day now stayed home with the wife and children, patterns of social activity and family interaction thus changed in a major way;
- nutrition levels changed with the family's inability to afford many foods and in many instances food running out before the next social security benefit became available (if such a benefit was available at all);
- recreation patterns changed with people generally cutting down on physical activity, reading, dancing, etc; and
- a sense of misery and apathy became widespread as the impact of the economic depression continued.

One way of interpreting these findings is that people were responding to the loss of control over their lives, to changes which were not of their making and left them with little hope in the future. However, the primary issue is the extent to which such an event as becoming unemployed can have an impact on every aspect of one's life. It is somewhat less important whether the resulting mental disorder is a direct consequence of the unemployment, or an indirect consequence of the many other changes which have occurred. It is also pertinent to emphasise that mental disorder may be only one of the many health consequences of unemployment.

Thus, unemployed men are generally less healthy than employed men and have been found to have higher mortality rates. For example, one recent prospective longitudinal study of men aged 40-59 who had previously been employed for at least the past five years found that those who experienced unemployment were twice as likely to die in the following five and a half years compared with those who remained in employment. Interestingly the risk of cancer and heart disease were similarly elevated<sup>22</sup>.

## **Types of change and mental disorder**

It is clear that social groups differ in either their rates and/or types of mental disorder. Whatever the biological basis of these differences, they can be, in large part, attributed to the social and environmental context within which people live. Unlike the biological basis of mental disorder, the social context may be subject to various forces some within but most coming from outside the individual involved.

Thus changes in the age composition of the population, in patterns of work and in the structure and processes associated with family life have all been linked to levels of mental disorder. These population changes reflect broad social trends. They are a consequence of many different factors including economic and industrial development and changing community standards of what constitutes appropriate behaviour. Many of the changes involved reflect flow-on effects from other changes. For example, increasing life expectancy leads to a demand for work or recreation facilities for the many active and

healthy elderly. With increased life expectancy, couples have the opportunity to have a marital dissolution for a longer period of time (e.g., through the death of one or after marital disharmony).

In examining the characteristics of many social groups which manifest higher rates of mental disorder, it can be seen that the major social changes which typify societies like Australia are associated with an increase in the relative size of these 'high risk' groups. Simply put, society is changing in such a way that the groups with the highest rates of mental disorder constitute an increasing proportion of the population. In this sense, as well as a number of others, mental disorder can be seen to be created by the society in which we live.

Without being exhaustive, it is possible to identify three social characteristics which are associated with types and rates of mental disorder. These are the age of the respondent, his/her pattern of employment/unemployment and type of family circumstances.

The association between the age of the respondent and the presence of a mental disorder varies depending upon the type of mental disorder and age group being considered. Data from the Illinois Survey of Well-Being<sup>12</sup> suggest that anxiety decreases with increasing age, while depression decreases until middle-age (40-60 years) and then increases dramatically once the respondent reaches his/her 70s and 80s. This latter finding may, of course, reflect the death of the spouse of the respondents.

It is also important to acknowledge evidence of mental disorder in young children, sometimes described as the 'new morbidity' of childhood. Population surveys of young children (from 5 to 16 years of age) indicate the existence of mental disorder with between 5 and 10 per cent of children categorised as impaired<sup>23</sup>. Boys appear to have higher rates of externalising (aggressive) behaviour problems. Such behaviour problems appear to reflect patterns, among other things, of mental disorder and marital disruption reported by the parents<sup>24,25</sup>. Boys are also more likely to experience physical abuse than girls, until the age of about 12. By contrast, girls experience much higher rates of sexual abuse for all age groups, and more physical abuse once they become teenagers<sup>26</sup>.

For many people, work (paid or unpaid) constitutes a major aspect of self-definition and identifies the individual within the context of the wider social structure. The loss of paid employment can, as we have noted, have a range of effects extending over every aspect of the individual's life. It is then not surprising to find reviews which are consistent in suggesting that unemployment has a substantial effect on mental health<sup>13</sup>. Recent data from the Australian Longitudinal Survey of more than 10,000 people in the 15-24 age group show that rates of mental disorder increase by an average of about 50 per cent for those who become unemployed, and that over time, reemployment reverses this effect<sup>27</sup>. Of course, not all people who become unemployed subsequently gain employment and, for some older age groups, reemployment appears to be an unlikely event.

The most powerful predictor of an individual's quality of life is that person's reported quality of relationship with his/her partner<sup>28</sup>. Conversely, rates of mental disorder have been consistently observed to be higher for those whose marital relationship has ceased or where there is evidence that the quality of the relationship is poor. For example, data from the Eastern Baltimore Mental Health Survey show that married persons have the lowest rate of mental disorders while those widowed, separated/divorced or never married have higher rates of mental disorder<sup>29</sup>.

In sum, age, employment status and marital circumstances are all factors associated with particular types of rates of mental disorder. To the extent that Australian society is changing in its demographic and social composition, we can expect that these changes will have an impact on patterns of mental disorder in the community. Our concern here is not only with the extent to which 'society' and the social changes it manifests leads to mental disorder, but also the extent to which men and women will differentially manifest the consequent health problems.

# Changes in the age distribution of the population

Western industrial societies are, to a greater or lesser extent, experiencing a number of population changes. These changes in population, size and age structure have a direct impact on patterns of employment and unemployment and the composition and functioning of families.

It has, in the past, been appropriate to think of the age structure of the population as in the form of a pyramid, with a large base and with a relatively small proportion of population reaching the apex of the older age categories. Today it is more correct to think of the population pyramid having a smaller base, with large proportions reaching the middle and older age categories. In the future the age structure will move from a pyramid shape to that of a rectangle, with similar proportions of the population in all the age categories<sup>30</sup>.

In the context of these population changes, it is useful, even if the characterisation is not totally accurate, to think of the future human life cycle as being in four (approximately) equal parts of about 20 years each. In the first part, the child is socialised into the culture by one or more parents and, increasingly, by the education system. In the second part, the young adult joins the work force and forms an intimate relationship with one (or over time more than one) person. It is at this time that children of this union are born, though increasingly parents are delaying these births and limiting their number. In the third phase, the adult is in middle age, the children are growing (or have grown) up. For many there is now an 'empty nest', with all its attendant changes. This is also the time when careers of the couple are reaching their peak and when work commitments may be emphasised. In the final 20 years, the adult has ceased or is planning to cease employment. At this time, issues of family life, recreation and health become important as work life, for most, has ceased.

While the above population changes point to a future somewhat different from the one most people currently experience, we are nevertheless presently experiencing the transition to this society. These changes are perhaps most evident in the areas of work, leisure and family life. Changes in work and family life, in turn, have profound consequences for the mental problems and the mental health needs of the population.

## Changes in patterns of work and employment

There are three key features of the way employment patterns have changed which have particular significance for the mental health of older workers. First, the type of work available has changed. Automation and restructuring have led to a decline in the number of jobs in manufacturing and other industries. Employment increases are evident only in certain areas (e.g., computing and computing equipment and sales). Where there are employment opportunities, they tend to be for more skilled workers typically different from those who have been displaced.

Second, there has been a consistent trend for women to enter the work force sometimes before, as well as shortly after, giving birth. Women's employment participation rates have been increasing while male participation rates, particularly in the older worker age categories (56 yrs+), have been decreasing. Associated with the increase in work participation rates evident for women, there has been an increase in part-time employment, presumably at the expense of full-time positions. Employers are here aiming to control costs by hiring less expensive and less permanent employees.

Third, the two most recent economic recessions (1982-3 and 1991-2) have had a disproportionate impact on the long-term unemployment rates (those unemployed for 52 weeks or longer). After the 1982-3 recession, about 100,000 people were added to the long-term unemployed lists and it took about six years before the long-term

unemployment rate returned to previous levels<sup>31</sup>. However, there has been, since 1989, a continuing increase in long-term unemployment which shows no sign of diminishing. By August 1993, we note 337,700 Australians are long-term unemployed, comprising more than one third of all unemployed people<sup>32</sup>. This compares with fewer than 100,000 people in 1981, and a few more than 100,000 in 1988-9<sup>31</sup>. If we take 1973 as the base year, then by 1993, while the overall number of unemployed had increased by almost nine times, the number of long-term unemployed had increased by almost 90 times<sup>32</sup>.

Long-term unemployment has disproportionately impacted upon males. In August 1993, 66.7 per cent of the long-term unemployed were male, compared with their 58.1 per cent of the labour force<sup>31</sup>. Since 1990, males have comprised both a larger component of the unemployed and the long-term unemployed. A major feature of the male-female comparison in long-term unemployment has been the high male long-term unemployment rate after 55 years of age and the decline in male employment participation once this age is reached (substantial declines in female participation rates from this age are also evident). Summarising the key changes, it appears that the 1991-2 recession has driven many men into long-term unemployment and for those over 45 years of age, once unemployed, the majority become long-term unemployed. By contrast, there is no age category in which the majority of unemployed women become categorised as long-term unemployed<sup>32</sup>.

## Changes in family structure and functioning

Durkheim, long ago, noted the critical influence on the family of the mental health of its members<sup>33</sup>. Durkheim pointed to the higher suicide rates of single people compared with married people, and those families without children compared with those with children. He argued that the common factor to these findings was the extent to which a person was enmeshed in a social network.

Whatever reservations one might have about the detailed analysis presented by Durkheim, it is clear that his data (now some 90 years later) and his analyses continue to at least partly account for not only suicide rates but also for some types of mental disorder. It has become clear the emotional (and associated) support associated with successful marriages is an important factor in understanding the physical and emotional health of men and women. Stronger social bonds are associated with reduced morbidity, fewer symptoms of mental disorder and a reduced mortality rate. Such 'successful' marriages are also more likely to produce offspring with fewer behavioural and psychiatric problems.

It is consequently of some importance that we are living in a period when the character of families has been changing and when there have been extensive changes in the duration and likely depth of bonds which characterise families. While men and women have both experienced these changes, their impact on men is of particular concern in this instance.

Marriage has been a popular institution for women for as long as Australian statistics have been available, but it has steadily increased in popularity for men. This increasing marriage rate for men is partly attributable to a 19th century excess of males over females and to the poor economic circumstances which prevailed earlier this century (Table 3)<sup>34</sup>.

**Table 3. Per cent of persons aged 45-59 who never married**

Year	Males	Females
1881	24	5
1901	22	9
1921	19	15
1947	13	13
1961	10	9
1971	9	6
1981	8	4

Despite the fact that first-time marriage for men is much more common now than previously, the divorce rate has increased far more rapidly than has the marriage rate. In the late 1960s, around 1 in 13 marriages and in the mid 1980s about 1 in 5 marriages ended in divorce<sup>35</sup>. If we look to the United States and some European countries to identify the likely trend for Australia, about half of marriages are likely to end in divorce by the end of this century<sup>36</sup>.

Increasingly, and perhaps with some understanding of the above pattern of marital dissolution, couples are choosing to live together before a formal marriage. In Sweden, more than 90 per cent of women cohabit before marriage, in the United States about 50 per cent<sup>36</sup> and in Australia, data for 1992 indicate that well over 50 per cent of marriages involve a prior period of cohabitation<sup>37</sup>.

Interestingly, people who cohabit before marriage or who have been married before their current marriage are more, rather than less, likely to experience a marital break-up<sup>35</sup>. It appears that marriage is increasingly perceived as an institution which continues only as long as it meets the needs of its participants. Experience living with another previous partner may increase the desire to find a more congenial partner if the present marital circumstances are perceived as less than ideal. Further, whatever the emotional and other costs associated with a breakdown of one's marital relationship, those who have paid this price appear more rather than less willing to do so again if their current relationship fails to meet their perceived needs.

## Changes within the family

It appears clear that people's expectations of their partners are different from, and in many respects greater than, previously. Much of the popularity and stability of the family has been attributed to the view that it served key functions in society, including:

- regulation and legitimisation of sex and reproduction;
- organisation and provision of housing, food and clothing;
- education and socialisation, i.e., initiation of children into society; and
- support for young, sick and aged.

These functions have, in contemporary society, been partly taken over by the health, education and welfare systems. The women's movement has also been part of the change process. Increasingly, women have demanded the right of equal access to employment and to careers and have sought greater male participation in home activities and child care. While such participation has been limited, it nevertheless has led to changes in the kinds of relationships which characterise marriage.

Little has been written about how the above changes have been experienced by men and the consequences of such changes for male mental health. While the impact of some of

these changes remains a matter of informed speculation, the male experience of changes in marriage and family formation warrants some consideration.

First, it could be argued that males now have less access to a loyal and caring servant (the wife); someone who has, at earlier times, been available to provide a wide variety of physical and emotional services. Second, there has been a loss of companionship, particularly when both partners are employed. Third, men have had to increasingly accept that their career aspirations may need to be modified to accommodate a fairer sharing of household and child-care duties. Fourth, there has been increasing pressure on men to meet not only their own sexual needs, but those of their partners as well. With increasing discussion of the rights of women to sexual fulfilment, there is pressure on men to meet what, in corporate context, might be described as minimum quality standards. Finally, there is the growing recognition that men no longer control their marriages and that women have the capacity to leave them with a high likelihood that courts will award child custody to the mother if the issue arises.

The recognition that men have had to accept a decrease in their power and control in marriage, should not be taken to suggest that such a decrease is other than appropriate and just. Rather it is to acknowledge that such a decrease is likely to create demands on men which are likely to have a negative impact on their mental health.

In any event, the impact of changes in the durability of marriage, as well as the increasing demands upon men and marriage, allied with changing expectations of marriage as an institution, has led to major consequences not only for parents but also for children. Parents may not only be less willing to invest time in child rearing, but appear more willing to abandon their children together.

## Conclusion

Many of the distinctions which are made in relation to mental disorders, on the one hand distinguishing them from physical illness, on the other making clear distinctions between types of mental disorder, fail to recognise the connections between the phenomena involved. Indeed, it appears that the generally used definitions of mental disorder have been selective and failed to acknowledge what appear to be similar rates of mental disorder experienced by both men and women. Of course the way males give expression to their mental disorders, by using addictive substances and through aggressive behaviours is one difference between them and females. It is salutary to note that male expression of mental disorder more often lead to fatal consequences as, for example, shown by their higher rates of suicide and rates of heart disease and cancer death, the latter associated with higher levels of cigarette consumption.

While biology may render some vulnerable to mental disorder, it is a range of events and experiences (e.g., unemployment, marital problems) which precipitate particular forms of mental disorder. Further, it appears that there are a number of ongoing economic, social and demographic changes which are precipitating mental disorders within the community generally. We have limited ourselves to considering those changes which appear to disproportionately impact on men.

These include:

- increasing rates of unemployment and particularly long-term unemployment, disproportionately impacting on men. There are many mental and physical health consequences of these patterns of unemployment;
- changes within the family leading to the erosion of male patriarchy and requiring men to give up some of their power and dominance;
- changes in family life such that marriage is a more flexible institution, with increasing proportions of the population experiencing marital changes. Such changes are associated with a wide range of marital and physical health problems; and

- an apparent increase in the rate at which children are abandoned by parents, with a disproportionate number of these being boys.

It makes considerable sense, then, to think of mental disorder as created by the prevalent social structures. Many of the changes in social structure are a consequence of economic and technological change and there is no real prospect of health concerns influencing the pace or direction of this change. It remains then for health care providers to understand this process and to develop programs and policies which anticipate and ameliorate the consequences of these changes. Such programs will need to go beyond clinical therapy to the development of new structural forms of care and social organisation.

## References

1. Retherford RD. The changing sex differential in mortality, Westport, Con: Greenwood, 1975.
2. Metropolitan Life Insurance Company. Mortality differentials favor women. Metropolitan Life Statistical Bulletin 1980.
3. Fletcher R. Australian men and boys ... a picture of health? Newcastle: University of Newcastle, Department of Health Studies, 1993.
4. Australian Institute of Health and Welfare. Australia's health 1992: The third biennial report of the Australian Institute of Health and Welfare. Canberra: AGPS, 1992.
5. Henderson S, Duncan-Jones P, Byrne DG, Scott R, Adcock S. Psychiatric disorder in Canberra. A standardised study of prevalence. *Acta Psychiatr Scand* 1979;60:355-74.
6. Gove WR. Sex differences in mental illness among adult men and women: an evaluation of four questions raised regarding the evidence on the higher rates of women. *Soc Sci Med* 1978;12:187-198.
7. Boyle FM. The mental health impact of stillbirth, neonatal death or SIDS: prevalence and patterns of distress among mothers. PhD Thesis, University of Queensland, 1994.
8. Foulds GA, Bedford A. Hierarchy of classes of personal illness. *Psychol Med* 1975;5(2):181-192.
9. Bien TH, Burge R. Smoking and drinking: a review of the literature. *Int J Addict* 1990;25(12):1429-54.
10. Zacny JP. Behavioral aspects of alcohol-tobacco interactions. *Recent Dev Alcohol* 1990;8:205-19.
11. Schoenborn CA, Horm J. Negative moods as correlates of smoking and heavier drinking: implications for health promotion. *Advance Data from Vital and Health Statistics*, No 236. Hyattsville, Maryland: National Center for Health Statistics, 1993.
12. Mirowsky J, Ross E. Social causes of psychological distress. New York: Aldine de Gruyter, 1989.
13. Goldberg D, Huxley P. Common mental disorders: a bio-social model. London: Tavistock/Routledge, 1992.
14. Castles I. 1989-90 National health survey summary of results. Canberra: Australian Bureau of Statistics, 1991.
15. Castles I. 1989-90 National health survey health related actions Canberra: Australia Bureau of Statistics, 1991.
16. Dowsett GW. Sexual contexts and homosexually active men in Australia. Canberra: Commonwealth Department of Human Services and Health, 1994.
17. Herek GM, Glunt EK. 'An epidemic of stigma: public reactions to AIDS'. *Amer Psychol* 1988;886-891.

18. Buckham CJ, Najman JM, McCamish M. 'Depravity kills'. *New Doctor* 1990;54:7-10.
19. Brew BJ, Currie N. 'HIV-related neurological disease'. In Stewart G, ed. *Could it be HIV?* North Sydney: Australian Medical Publishing Company, 1994;21-25.
20. Najman JM, Vance JC, Boyle F, et al. The impact of child death on marital adjustment. *Soc Sci Med* 1993;8:1005-1010.
21. Jahoda M, Lazarsfeld PF, Zeisel H. *Marienthal*. London: Tavistock, 1972.
22. Morris JK, Cook DG, Shaper AG. Loss of employment and mortality. *Br Med J* 1994;308:1135-1139.
23. Achenbach TM. *Manual for the child behavior checklist 14-18 and 1991 profile*. Burlington VT: University of Vermont, Department of Psychiatry, 1991.
24. Bond CR, McMahan RJ. Relationships between marital distress and child behavior problems: maternal personal adjustment, maternal personality and maternal parenting behavior. *J Abnormal Psychol* 1984;93:348-351.
25. Hammen C, Gordon D, Burge D, et al. Maternal affective disorders, illness and stress: risk for children's psychopathology. *Am J Psychiatry* 1987;144:736-741.
26. Angus G, Wilkinson K. *Child abuse and neglect Australia 1990-91*. Australian Institute of Health and Welfare: child welfare series no. 2. Canberra: AGPS, 1993.
27. Morrell S, Taylor R, Quine S, Kerr C, Western J. A cohort study of unemployment as a cause of psychological disturbance in Australian youth. *Soc Sci Med* 1994;11:1553-1564.
28. Campbell A, Converse PE, Rodgers WL. *The quality of American life: perceptions, evaluations and satisfaction*. New York: Russell Sage, 1976.
29. Kramer M, et al. Changing living arrangements in the population and their potential effect on the prevalence of mental disorder: findings of the eastern Baltimore mental health survey. In: Cooper B, ed. *Psychiatric Epidemiology*. London: Croom Helm, 1987;3-26.
30. Rowland DT. *Ageing in Australia*. Melbourne: Longman Cheshire, 1991.
31. Gregory RG. The Australian labour market in the 1990s. Address at QUT, Roneod, 3 June 1993.
32. Australian Bureau of Statistics. *Australia's long-term unemployment: a statistical profile*. Canberra: AGPS, 1994.
33. Durkheim E. *Suicide Trans*. In: Spaulding JA, Simpson G, Simpson G, eds. London: Routledge and Kegan Paul, 1968.
34. Cameron RJ. *Family formation and dissolution 1982*. Canberra: AGPS, 1985.
35. Callan VJ, Noller P. *Marriage and the family*. North Ryde, NSW: Methuen, 1987.
36. Cherlin AJ. *Marriage, divorce, remarriage*. Mass: Cambridge, 1992.
37. Castles I. *Australia's families: selected findings from the survey of families in Australia, March 1992 to May 1992*. Canberra: Australian Bureau of Statistics, 1993.

## **Section 2**

**Mental health problems  
particularly affecting males**

# Childhood mental health problems

---

M. G. Sawyer

Research and Evaluation Unit  
Women's and Children's Hospital  
Adelaide

---

## Introduction

**The mental health problems of boys pose a significant public health problem in Australia. A high percentage of boys experience mental health problems, boys more frequently attend mental health clinics than girls, and boys are much more frequently remanded in custody than girls<sup>1,2,3,4</sup>. A range of severe mental health disorders such as childhood autism are also more frequently experienced by boys<sup>5</sup>.**

This chapter presents a selected review of literature relevant to the mental health problems experienced by boys. Three issues are examined: (i) the nature of mental health problems experienced by boys, (ii) the prevalence and distribution of childhood mental health problems, and (iii) possible risk factors for childhood mental health problems. The final section of the chapter discusses policy implications arising from these issues.

Two caveats should be noted when reading this chapter. First, consistent with the focus of this monograph, the chapter emphasises the problems experienced by boys and only limited attention is given to problems experienced more often by girls. An earlier NH&MRC monograph specifically addressed the problems of girls and several previous publications have compared the nature and prevalence of mental health problems experienced by boys and girls<sup>6,7,8</sup>. Second, the focus of the chapter is on providing a broad overview of the mental health problems experienced by boys. In light of this, it is not possible to examine many important issues relevant to specific populations such as the mental health problems of Aboriginal children, children living in non-English-speaking families or homeless children.

For brevity, the term 'childhood' is used throughout the chapter. However, in many areas this also encompasses the problems of adolescents.

## The nature of mental health problems experienced by boys

An important consideration in any discussion about childhood mental health problems is the lack of a sharp boundary between what is considered normal and abnormal childhood behaviour. This makes it more difficult to reach agreement about which behaviours should be considered age or sex inappropriate among children than among adults. This difficulty is made greater by a lack of agreement between different professional groups about the nature of the problems which should be encompassed by the term 'mental health problems'<sup>9</sup>.

In general, there are two broad groups of mental health problems. The first group is labelled behavioural or externalising problems. This group is comprised of problems which are associated with aggressive, antisocial or undercontrolled behaviour. The

second group is labelled emotional or internalising problems and is comprised of problems which are associated with fearful, anxious or overcontrolled behaviour<sup>10</sup>. In addition to these two broad groups of childhood problems, there are a range of less common childhood disorders such as eating disorders and pervasive development disorders.

The three case studies described below highlight the range of mental health problems which are experienced by boys:

### **Case study 1**

John is a 14-year-old boy who is constantly disruptive in class. John's parents report that he was always impulsive and difficult to manage at home. He had difficulty with his academic work while attending primary school and was given remedial help. There is a long history of marital problems in John's family and on one occasion the parents separated for a brief period. John's father was described as a 'heavy drinker' who had 'problems' during his childhood. John was recently cautioned by the police after becoming involved in a fight with another adolescent. The principal at John's school has indicated that John will be suspended from school if he continues his disruptive behaviour.

Boys more commonly experience conduct disorders than girls and there is often a history of family problems or difficulties with school work. The vast majority of serious adult antisocial behaviour problems have their onset during childhood or early adolescence and these problems appear to be passed on across successive generations in the same families<sup>11,12</sup>. Unfortunately, the outcome for children with conduct disorders is often poor and progress in developing effective treatment programs has been slow<sup>11,13</sup>.

### **Case study 2**

Alan is an eight-year-old boy who often complains of headaches or stomach aches and does not want to go to school. Alan has missed several days at school during the past term because of various illnesses and this has adversely affected his school work. Alan is a timid and fearful child who has difficulty making friends and has been teased by other children in his class. He reported that he is often anxious when separated from his mother. Alan's parents and teachers were not aware that he was anxious when at school and away from his mother.

Childhood emotional disorders encompass a range of problems but generally include increased anxiety, sadness, and difficulties with peer relationships<sup>14,15</sup>. These problems can significantly hinder children's academic progress. While children with emotional problems generally have a better outcome than those with antisocial behavioural problems, they have an increased risk of developing a range of adult mental health problems<sup>14</sup>. A difficulty in providing help for children with emotional problems is that their difficulties may not be recognised by parents and teachers<sup>16</sup>. This is important because referral to mental health services is generally initiated by parents or teachers. As a result, it is possible that children with internalising problems will less often be identified and referred for help.

### **Case study 3**

James is a five-year-old boy who was referred to a child development unit because he has markedly delayed speech development and poor relationships with other children. James avoids eye contact and shows little emotional warmth in relationships with other family members. At home, James readily becomes upset if his routine is disrupted and he spends long periods of time playing aimlessly with toys alone in his room. James's parents report that his behaviour is difficult to manage and is a source of great stress for their family.

Childhood autism is a severe developmental disorder which is more frequent among boys than girls. The disorder has a male-to-female sex ratio of about 3 to 1 and a

prevalence of about 4 per 10,000 children in the community<sup>5</sup>. Children with autism typically have severe difficulties with social relationships, experience difficulties with their speech and language development, and often exhibit a range of strange or unusual behaviours. Most children with autism continue to experience significant problems throughout their life and require close supervision and support in their adulthood<sup>2,5</sup>. While early research suggested that problems in child-parent relationships were an important cause of childhood autism, it now seems more likely that underlying biological problems are responsible for the onset of the disorder in children.

These case studies highlight the diversity of mental health problems experienced by boys. In addition to these examples, boys are at increased risk for a range of other social and mental health problems including hyperactivity, substance abuse and homelessness. Concern has also been expressed about the tendency for research investigating the impact of sexual abuse on boys to have lagged behind that of girls<sup>17</sup>. These problems all impose a significant burden of suffering on boys, their families and their communities.

## **Prevalence and distribution of mental health problems**

Overseas, several large-scale studies have investigated the prevalence of childhood mental health problems<sup>18,19,20,21</sup>. A good example is the Ontario Child Health Study<sup>18</sup>, which investigated the prevalence of externalising and internalising disorders among 4-16 year old children in Ontario. The disorders studied were Conduct Disorder, Hyperactivity, Emotional Disorder, and Somatisation. Overall, the prevalence of one or more of these disorders was 18 per cent among children in the community. However, there were substantial differences in the prevalence of disorders among boys and girls in the study. In particular, boys showed a higher prevalence of the two externalising disorders evaluated in the study. Thus, overall, the prevalence of Conduct Disorder was 8 per cent among boys and 3 per cent among girls and the prevalence of Hyperactivity was 9 per cent among boys and 3 per cent among girls. A different pattern of results was found with the two internalising disorders. Among the younger children the prevalence of Emotional Disorders was 10 per cent for boys and girls while among the 12-16 year old children it was 5 per cent for boys and 14 per cent for girls. Similarly, among 12-16 year old children, the prevalence rate for Somatisation was 5 per cent among boys and 11 per cent among girls. Among the younger children, Somatisation Disorder was too rare to produce reliable prevalence estimates.

In New Zealand, two ongoing prospective studies have described the prevalence of mental health problems among children in Dunedin and Christchurch<sup>22,23,24</sup>. In one of these reports, Anderson et al<sup>22</sup> examined the prevalence of mental health disorders among 792 11-year-old children who were in an ongoing study of child development in Dunedin. The prevalence of mental health disorders among the group was 18 per cent, with boys having a higher prevalence of disorders than girls. The overall sex ratio of boys to girls was 2 to 1. Consistent with the results from the study by Offord et al<sup>18</sup>, a higher prevalence of externalising problems was identified among boys.

In Australia there have been several studies which have investigated the prevalence of childhood mental health problems. One of the first studies investigated the prevalence of mental health disorders among children and adolescents in Heyfield, Victoria, in the course of a broader study of the health of the town's population<sup>25</sup>. The study reported that 11 per cent of children and 18 per cent of the adolescents had a mental health disorder. The rates for younger boys and girls were not reported separately, but there was little difference in the rates which were reported for male and female adolescents. A further study of children and adolescents in Canberra reported that younger boys were twice as likely to be rated as disturbed as girls. However, this pattern gradually changed after the age of eight years with rates initially becoming similar across the two sexes and the prevalences then becoming higher among girls than among boys<sup>26,27</sup>. More recently, Connell investigated the prevalence of mental health disorders among 10-11-year-old children in urban, metropolitan and rural Queensland<sup>28,29</sup>. The prevalence of disorders

across all the regions was 14 per cent, with 7 per cent of children being diagnosed as having emotional disorders and 7 per cent having conduct disorders.

Information about the sociodemographic distribution of mental health problems has been reported in two Australian studies. Connell<sup>28,29</sup> reported a higher prevalence of problems among children in metropolitan and urban regions, with 18 per cent of children in the metropolitan region being diagnosed as having a mental health disorder, 15 per cent in the urban region and 10 per cent in the rural region. The pattern appeared to be similar for boys and girls, although the specific prevalences of disorders among children of different gender in the regions was not reported. Information about the distribution of mental health problems among boys was also reported in a study of 10-11-year-old and 14-15-year-old children in Adelaide<sup>30</sup>. In this study there was a consistent pattern of higher prevalence rates among boys attending the lowest socio-economic class schools. The study also reported that only a small proportion of boys and girls with mental health problems received help for their problems.

In summary, while the prevalence of childhood mental health problems identified in different studies has varied, Gould et al<sup>31</sup> have suggested that the overall prevalence is unlikely to be less than 12 per cent. As well, Gould et al noted that the rate of maladjustment for boys exceeded that for girls in 22 of 25 British and American studies which published the rates for boys and girls. The median ratio of male:female disorders in these studies was about 2:1<sup>31</sup>. In general, this reflects a pattern of younger boys having a higher prevalence of mental health problems than girls, primarily due to the higher prevalence of externalising disorders experienced by boys. During adolescence, males experience fewer internalising disorders than females. As a result, the difference in the prevalence of mental health problems between adolescents of different gender is less than that which occurs in younger children. These issues are complex, however, and a recent study has reported the prevalences of several mental health disorders among children of different age and gender. In this study, the size of the difference in the prevalence rates for boys and girls varied substantially for different disorders among children of different age<sup>21</sup>.

## Risk factors

During the past 20 years, numerous studies have investigated risk factors which are important in the onset of childhood mental health problems<sup>32,33,34,35,36</sup>.

Three broad groups of factors are discussed in this section: (i) family factors, (ii) social factors and (iii) school factors. In each area, the emphasis is on risk factors for externalising problems as these are the problems more commonly experienced by boys. For brevity, genetic factors which may influence childhood mental health problems are not discussed. Recent reviews of genetic factors are available and these reviews suggest that genetic factors are a substantial contributor to several childhood mental health disorders<sup>37,38</sup>.

### Family factors

Several aspects of family functioning have been identified as risk factors for conduct disorders or delinquency<sup>32,33,39</sup>. First, the presence of family discord has repeatedly been found to be a risk factor for conduct disorder<sup>33</sup>. Second, the use of ineffective approaches to manage children's behaviour is a risk factor for conduct disorders. In particular, Patterson<sup>39</sup> has suggested that a lack of house rules, parental monitoring of children's behaviour, effective contingencies to manage children's behaviour and techniques for dealing with family difficulties are important risk factors. Third, criminal behaviour or alcoholism in the parents greatly increases the risk of conduct disorder for children<sup>33</sup>. It appears that the risk is particularly strong if a mother is affected, but this may be due to the influence of partner selection whereby a high proportion of mothers with these problems select a male with similar problems to be their partner.

## Social factors

Several social factors have been linked to childhood mental health problems. These include differences in social class, ethnic class, immigrant status, and geographic region<sup>34,35,36</sup>.

Offord noted that the two dimensions of social class which have received the greatest attention are the economic dimension and the prestige dimension<sup>36</sup>. The economic dimension is measured by level of family income or by a combination of variables measuring family adversity while the prestige dimension is based on occupational status. There is considerable evidence that there is a strong relationship between economic disadvantage and child mental health problems but only a weak relationship between occupational status and child mental health problems<sup>36</sup>. For example, in the Ontario Child Health Study, low income, receiving welfare benefits and living in subsidised housing were all associated with a higher prevalence of childhood mental health problems. Similarly, Anderson et al<sup>35</sup> reported that there is a higher prevalence of children with conduct disorders living in families which are experiencing significant disadvantage in New Zealand.

It is important to note that most of the evidence suggests that the relationship between childhood mental health problems and economic disadvantage is mediated by family factors or childhood factors which are associated with economic disadvantage, rather than by the economic disadvantage itself<sup>36</sup>. In other words, because economically disadvantaged families experience more family discord or parental criminal behaviour there are more children with mental health problems in disadvantaged families.

## School factors

As noted by Offord<sup>36</sup>, when discussing possible influences of the school environment on child and adolescent mental health, three issues must be considered. First, what is the evidence that schools can influence the prevalence of mental health problems among children? Second, what are the processes by which schools influence children? Third, what is the evidence that schools can be changed to benefit their students? These issues have been the subject of several review articles and books<sup>40,41,42,43</sup>.

One of the most comprehensive studies investigating the influence of schools on children was conducted in England<sup>42</sup>. The study found that differences in the school environment did appear to have an influence on delinquency, attendance at school, behaviour at school, and public examination results. The study also identified several features which appeared to have a beneficial influence on these outcomes. These features included: (i) the ample use of rewards and praise, (ii) the availability of a pleasant and comfortable working environment, (iii) the opportunity for children to take responsibility and participate in the running of the school, (iv) an appropriate emphasis on academic matters in the school, (v) positive modelling of behaviour by teachers, (vi) good classroom management skills exhibited by teachers, and (vii) good agreement among staff about the curriculum and approaches to discipline. Features which did not appear to have a major influence on these outcomes included pupil-teacher ratio, class size, and the use of punishment as a disciplinary measure<sup>42</sup>.

There are, however, limitations to the studies which have investigated the influence of schools on children's development. In particular, the number of schools included in the studies has generally been small and the analysis of the results of the studies is complex because of the need to take into account differences in the intake of students into each school<sup>36</sup>. It also seems likely that the environment in schools is not stable but may vary from year to year making it difficult to study the effect of particular features over a prolonged period of time. Despite these limitations, Rutter<sup>39,40</sup> has argued that there is now strong evidence suggesting a causal relationship between school processes and children's achievements.

# Policy implications

The material presented in this chapter has several policy implications:

1. The high prevalence of mental health problems experienced by boys poses a major public health problem for Australia. These problems impose a severe burden of suffering on the children, their families and their communities. Progress to develop interventions which have the capacity to help the large number of children with problems has been slow. There is an enormous need to develop effective interventions which can provide help for children and adolescents with mental health problems.
2. The provision of economic support alone is unlikely to decrease the incidence and prevalence of childhood mental health problems because these problems are generally mediated by other factors such as family discord or poor parent-child management skills. It is important that preventive and treatment programs address risk factors which have a known association with childhood mental health problems.
3. Only a small proportion of children with mental health problems receive specialised help for their problems<sup>30</sup>. Furthermore, the limited number of trained clinicians available to help children with mental health problems makes it unlikely that specialised treatment services will be able to provide effective help for the majority of children with these problems. In light of this, it is imperative that new community-wide interventions which have the potential to decrease the incidence and prevalence of childhood mental health problems be developed and evaluated.
4. A large proportion of children and adolescents attend general practitioners<sup>26</sup> and virtually all children regularly attend school until early adolescence. Interventions delivered in collaboration with general practitioners or schools have the potential to reach large numbers of children and adolescents with mental health problems. There is a great need to develop and evaluate such interventions.
5. There is little research in Australia which focuses on the identification and evaluation of interventions which may decrease the incidence and prevalence of childhood mental health problems. This greatly decreases the likelihood that effective new preventative or treatment programs will be developed. There is a great need to encourage the development of researchers in Australia who have the skills to develop and evaluate new interventions.

## References

1. Kosky R, Eshkevari HS, Kneebone G, eds. *Breaking out. Challenges in adolescent mental health in Australia*. Canberra: Australian Government Publishing Service, 1992.
2. Institute of Medicine Division. *Research on children and adolescents with mental, behavioral, and developmental disorders*. Washington: National Academy Press, 1989.
3. Rutter M, Hersov L, eds. *Child and adolescent psychiatry*. Oxford: Blackwell Scientific Publications 1985.
4. Kosky RJ, Eshkevari HS, Carr VJ, eds. *Mental health and illness*. Sydney: Butterworth-Heinemann 1991.
5. Schreibman L. *Autism*. London: Sage Publications, 1988.
6. Health Care Committee Expert Advisory Panel on Women and Mental Health. *Report on Women and mental health. Monograph Series No. 1*. Canberra, Australian Government Publishing Service 1991.
7. Eme RF. Sex differences in childhood psychopathology: A review. *Psychol Bull* 1979;86:574-595.

8. Brody LR. Gender differences in emotional development: A review of theories and research. *J Personality* 1985;53:102-149.
9. Sawyer M, Meldrum D, Tonge B, Clark J. *Mental health and young people*. Hobart, Tasmania: National Youth Affairs Research Scheme, 1992.
10. Achenbach TM. *Assessment and taxonomy of child and adolescent psychopathology*. California: Sage Publications, 1985.
11. Kazdin AE. Treatment of antisocial behavior in children: Current status and future directions. *Psychol Bull* 1987;102:187-203.
12. Patterson GR, DeBaryshe BD, Ramsey E. A developmental perspective on antisocial behavior. *Am Psychol* 1989;44:329-335.
13. Robins LN. *Deviant children grown up*. New York: Robert E. Kreiger 1974.
14. Hersov L. Emotional disorders. In: Rutter M, Hersov L, eds. *Child and adolescent psychiatry*. Oxford: Blackwell Scientific Publications 1985:382-399.
15. Kosky RJ. Developmental aspects of emotional disorder in children and adolescents. In: Kosky RJ, Eshkevari HS, Carr VJ, eds. *Mental health and illness*. Sydney: Butterworth-Heinemann 1991.
16. Sawyer MG. *Childhood behavioural problems: discrepancies between reports from children, parents and teachers*. Adelaide, South Australia: University of Adelaide, 1990. Unpublished doctoral dissertation.
17. Watkins B, Bentovim A. The sexual abuse of male children and adolescents: A review of current research. *J Child Psychol. Psychiat* 1992;33:197-248.
18. Offord DR, Boyle MH, Szatmari P, et al Ontario child health study. II. Six-month prevalence of disorder and rates of service utilisation. *Arch Gen Psychiatry* 1987;44:832-836.
19. Rutter M, Tizard J, Yule W, Graham P, Whitmore K. Isle of Wight studies. 1964-1974. *Psychol Med* 1976;6:313-332.
20. Rutter M, Tizard J, Whitmore K. eds. *Education, Health and Behaviour*. Huntington, New York: RE Krieger 1981.
21. Cohen P, Cohen J, Kasen S, et al An epidemiological study of disorders in late childhood and adolescence. I. Age- and gender- specific prevalence. *J Child Psychol Psychiat* 1993;34:851-868.
22. Anderson JC, Williams S, McGee R, Silva PA. DSM-III disorders in preadolescent children. *Arch Gen Psychiatry* 1987;44:69-75.
23. Fergusson DM, Horwood LJ, Lynskey MT. Prevalence and comorbidity of DSM-III-R diagnoses in a birth cohort of 15 year olds. *J Amer Acad Child Adoles Psychiatry* 1993;32:1127-1134.
24. McGee R, Feehan M, Williams S, Partridge F, Silva PA, Kelly AB. DSM-III disorders in a large sample of adolescents. *J Amer Acad Child Adoles Psychiatry* 1990;29:611-619.
25. Krupinski J, Docent MD, Baikie AG, et al A community health survey of Heyfield, Victoria. *Med J Aust* 1967;1204-1211.
26. Hennessy BL, Bruen WJ. Youth in Canberra - results and implications of a mental health survey. *Aust N Z J Psychiat* 1973;7:55-59.
27. Hennessy BL, Bruen WJ, Cullen J. The Canberra mental health survey preliminary results. *Med J Aust* 1973;14:721-728.
28. Connell HM, Irvine L, Rodney J. The prevalence of psychiatric disorder in rural school children. *Aust NZ J Psychiat* 1982;16:43-46.
29. Connell HM, Irvine L, Rodney J. Psychiatry disorder in Queensland primary schoolchildren. *Aust Paediatr J*. 1982;18:177-180.

30. Sawyer MG, Sarris A, Baghurst PA, Cornish CA, Kalucy RS. The prevalence of emotional and behaviour disorders and patterns of service utilisation in children and adolescents. *Aust N Z J Psychiat* 1990;24:323-330.
31. Gould MS, Wunsch-Hitzig R, Dohrenwend B. Estimating the prevalence of childhood psychopathology. *J Amer Acad Child Adolesc Psychiatry* 1981;20:462-476.
32. Rutter M. Family and school influences on behavioural development. *J Child Psychol Psychiat* 1985;26:349-368.
33. Robins LN, Conduct disorder. *J Child Psychol Psychiat* 1991;32(1):193-212.
34. Offord DR, Alder RJ, Boyle MH. Prevalence and sociodemographic correlates of conduct disorder. *American Journal of Social Psychiatry* 1986;6:272-278.
35. Anderson J, Williams S, McGee R, Silva P. Cognitive and social correlates of DSM-III disorders in preadolescent children. *J Amer Acad Child Adolesc Psychiatry* 1989;28:842-846.
36. Offord DR. Social factors in the aetiology of childhood psychiatric disorders. In: Tonge B, Burrows GD, Werry JS, eds. *Handbook of studies on child psychiatry*. New York: Elsevier, 1990:55-68.
37. Rutter M, Bolton P, Harrington R, Le Couteur A, MacDonald H, Simonoff E. Genetic factors in child psychiatric disorders - I. A review of research strategies. *J Child Psychol Psychiat* 1990;31:3-37.
38. Rutter M, Macdonald H, Le Couteur AL, Harrington R, Bolton P, Bailey A. Genetic Factors in Child Psychiatric Disorders - II. Empirical findings. *J Child Psychol Psychiat* 1990;31:39-83.
39. Patterson GR, *A social learning approach* (Vol. 3). Coercive family process. Eugene, OR: Castalia.
40. Smith DJ, Tomlinson S. The school effect. A study of multi-racial comprehensives. PSI Research Report 688. Exeter: BPCCC Wheaton's Ltd. 1989.
41. Kolvin I, Garside RF, Nicol AR, Macmillan A, Wolstenholme F, Leitch IM. Help starts here. The maladjusted child in the ordinary school. London: Tavistock, 1981.
42. Rutter M, Maughan B, Mortimore P, Ouston J. *Fifteen thousand hours*. Somerset: Open Books, 1979.
43. Rutter M. School effects on pupil progress: Research findings and policy implications. *Child Develop* 1983;54:1-29.

# Suicide in men

---

R. D. Goldney

Department of Psychiatry  
University of Adelaide

---

## Introduction

Each year in Australia, more than 2000 people commit suicide. The ratio of males to females over the past 100 years has varied between 2.2 and 5.4 males to one female, and in the years 1991 and 1992 there were 1847 and 1820 males respectively, compared with 513 and 474 females.

These numbers represent the equivalent of the population of a small country town being lost by suicide each year and, in terms of the impact on the community as a whole, it is far greater than much more publicised events such as natural disasters. It has been estimated that the direct financial cost to the community in terms of productive life-years lost is \$40 million a year in Queensland alone, and when extrapolated Australia wide it is clear that Australia's financial burden due to suicide would be of the order of \$200 million each year. This figure does not allow for the emotional cost which is borne by the survivors of those who have committed suicide, or for the additional costs associated with attempted suicide.

The suicide rate in Australia over the past 100 years has remained remarkably constant overall. Australia is in the mid range of rates for suicide with the overall rate being about 12 per 100,000 per year, with that for men being about 20 per 100,000. Countries such as Ireland, Malta and Egypt are at the low end of the spectrum with reported overall rates below 10 suicides per 100,000 population, whereas countries with the greatest overall rates, greater than 25 per 100,000, are Finland, Austria, Czechoslovakia and Hungary.

Although the suicide rate over the past 100 years has been relatively stable, there have been marked variations with the male rate peaking at 24 per 100,000 at the height of the Great Depression in 1930 and the lowest recorded rate 10.6 per 100,000 in 1945 (Table 1). Such findings lend themselves readily to sociological interpretation of the effects of the Depression producing the high rate in 1930, and the effect of war producing social cohesion with a common external enemy, with a resultant low rate of suicide in 1945.

**Table 1. Male suicide in Australia 1885–1992**

Year	Males	Females	Male: Female	Male rate per 100000
1885	222	41	5.4	15.5
1900	343	78	4.4	17.4
1915	537	122	4.4	20.9
1930	791	152	5.2	24.0
1945	394	173	2.3	10.6
1960	778	314	2.5	15.0
1975	1050	478	2.2	15.1
1990	1735	426	4.1	20.3
1992	1820	474	3.8	21.5

In addition to the fluctuations over the years, there have been marked fluctuations in different age groups. Table 2 shows the male suicide rates for four different time periods and it is evident that there has been an increase in suicide in men under the age of 30 years. The greatest increase has been for adolescents, where in contrast to there being no increase in suicide rate for females, the rate for male teenagers has increased threefold. This appears to be a genuine increase, and it is strongly associated with alcohol and other substance abuse.

In contrast to the increase in young males, there has been a reduction in suicide rate in the older age groups<sup>1</sup>. This reduction appears to have emerged over the past 30 years, and it is tempting to attribute it to the better recognition and treatment of mental disorders in the elderly, although if that were the case, one would have expected a more definite decrease in suicide in older women than has occurred.

**Table 2. Male suicide rates per 100 000 in Australia for different ages for four different time periods.**

Age	1891-1910	1964	1986	1990
0-14	0.5	0.2	0.6	0.3
15-19	3.2	5.8	13.2	17.8
20-24	11.9	16.3	29.2	36.1
25-29	19.0	19.4	28.6	32.8
30-34	23.5	29.1	28.0	25.1
35-39	30.9	26.3	21.7	26.1
40-44	36.1	34.6	25.8	25.1
45-49	46.1	33.5	22.6	20.8
50-54	55.9	38.4	23.6	22.1
55-59	56.9	34.6	25.5	27.7
60-64	63.7	39.7	23.6	22.9
65-69	56.0	39.7	23.3	25.1
70-74	57.3	36.7	32.0	27.7
75+	49.1	40.0	36.7	31.8

Although even the above figures illustrate the magnitude of the problem, experts in the field generally agree that official statistics of suicidal behaviour almost certainly understate the problem. Estimates of under-reporting have varied up to 80 per cent<sup>2</sup>, and it is reasonable to assume that the number of men committing suicide in our society is at least half as many again as recorded in the official statistics. Indeed, suicide among men is a major public health problem.

## Causes of suicide

There is no single cause of suicide and the study of suicidal behaviour is an area in which many disciplines have contributed to our understanding<sup>3</sup>.

### Mental disorders

Several studies have demonstrated consistently that mental disorders were present in more than 90 per cent of people who committed suicide<sup>4</sup>. This is so not only for adults but also for children and adolescents<sup>5</sup>. People with mental disorders have about a 10 times greater risk of suicide than the general population and the degree of this risk depends on the nature of the disorder and its severity. For example, those with severe psychotic illnesses with tormenting delusions and hallucinations when combined with feelings of hopelessness are particularly at risk for suicide.

Depressive conditions are the most common and as many as 15 per cent of those afflicted with major affective disorders will eventually die by suicide. Schizophrenia has a high rate of suicide, with up to 10 per cent of sufferers dying in this manner. Alcohol and other drug dependence is also associated with a greater risk of suicide.

Research examining the link between mental disorders and suicide has demonstrated a decreased level of 5-hydroxy-indole-acetic acid, a metabolite of the neurotransmitter serotonin, in the cerebro-spinal fluid of those who commit suicide or who attempt suicide by violent methods<sup>6</sup>. It has been suggested that this could be important in evaluating suicide risk, but at present it is not clinically feasible to carry out such investigations.

Interpersonal rejection is more often than not the final precipitant to suicide. Traditional psychoanalytic concepts such as suicide being 'murder in the 180th degree' or that nobody kills himself unless he has been wished dead by another are useful clinical aphorisms to bear in mind in the assessment of individual subjects. Anniversaries of deaths, birthdays, separations and divorces can herald a particular danger time for those with suicidal impulses, especially if there are fantasies of joining persons who may have already died and this is particularly so if the mourned person has died by suicide.

### Social factors

That social factors are important is evident from the fluctuations in rates and their clear-cut association with major world events such as the Great Depression and the Second World War. Other factors such as unemployment have been said to have contributed to the increase in suicide in young men, but young women have not been spared unemployment and there has been no corresponding increase in suicide for them. However, it is possible that the impact of unemployment may be greater on young men who traditionally, particularly in Australia, have seen themselves in the 'masculine role' of provider. It is also possible that the blurring of traditional roles which has occurred with the women's movement may have contributed to social pressures on men which were not evident 30 years ago<sup>1</sup>.

The possibility that homosexuality may be associated specifically with suicidal behaviour has been examined in two large cohorts of those who have committed suicide, but there is no evidence to suggest that that is so<sup>7,8</sup>. Indeed, Shaffer concluded that 'it should be reassuring that the painful experience of establishing gay orientation does not lead disproportionately to suicide'<sup>8</sup>.

The issue of imitation or 'copy-cat' suicide has also been addressed in the past 10 years, particularly in the young, and there are now data which confirm that this is a factor, although it probably operates in only a very small proportion of those who commit suicide.

## Availability of method

The availability of method has also received widespread publicity, particularly in relation to the more strict regulation of firearms. There are studies which demonstrate that restricting one method of suicide may result in a fall in suicide rates, although that fall may not be sustained. Australian work in the late 1960s indicated that stricter regulations on the prescribing of barbiturate hypnotics and the blister packaging of medications may have had an impact on the suicide rate<sup>9</sup>, particularly for women, who traditionally chose drug overdose as a method of suicide. There has also been a direct correlation between a reduction of suicide in Britain with the introduction of North Sea gas rather than coal gas, and that is particularly pertinent as death by gas was a common form of suicide in Britain. In fact, the method of suicide is often peculiar to individual countries and the reduction of suicide rate in Britain was not accompanied by a similar reduction in some European countries who also changed to North Sea gas. However, those countries had methods of suicide which were traditionally hanging or death by drowning, rather than death by gas. In Australia, the use of firearms is particularly prevalent in male suicide and it has been argued strongly that there should be stricter gun laws. Scientific data supporting such a move is equivocal, but probably sufficient to offer support to legislative changes<sup>10</sup>.

It is evident that there is no simple cause of suicide. Having a mental disorder is probably a necessary condition for suicide to occur, but it is not a sufficient explanation and many other factors can augment or attenuate the risk of suicide.

A vignette of the person who is most likely to commit suicide is that of a male; particularly between the ages of 20 and 30, but in fact any adult male; he is probably suffering from a depressive condition with feelings of hopelessness; he may have a history of drug and/or alcohol abuse; he may have made a previous suicide attempt; his method will be more aggressive rather than passive drug taking; he may have a chronic physical illness; he may be unemployed; he may be divorced or widowed; and he may have poor social supports and a relatively unresponsive family.

## Prediction of suicide

Although a considerable body of knowledge has emerged about factors associated with suicide, the dilemma remains that although each suicide has a profound impact on immediate family and friends, in the overall community context it is an infrequent event, or in technical terms, it has a low base rate. Furthermore, the risk factors are relatively non-specific. This is despite the fact that careful examination of psychological issues in coroners' records (the psychological autopsy) usually provides a clarity of explanation about individuals who commit suicide which makes one wonder how it was not prevented. However, even using the most sophisticated of statistical techniques applied to the well recognised (but non-specific) risk factors, the fact remains that the infrequent nature (low base rate) of suicide precludes any useful application of a rule of thumb/questionnaire basis of predicting just who will commit suicide<sup>11</sup>.

## Prevention of suicide

Just as attempts to predict who exactly will commit suicide have proven to be beyond our present capabilities, so too the literature on the prevention of suicide has given no grounds for complacency<sup>12</sup>. Indeed, it is fair to note that although some research has suggested that an impact on suicide rates over a limited period of time can be made,

long-term follow up studies have not demonstrated a sustained reduction in suicide rates for any therapeutic interventions. That is not to say that the lives of individual people have not been saved by appropriate treatment and intervention. For example, promising work about the long-term impact of treatments such as Lithium in depressive conditions has emerged.

Some countries such as Finland have developed concerted programs to vigorously address mental disorders and social factors which are known to be associated with suicide, and they have set targets of, for example, a reduction of suicide rate by 20 per cent by the year 2000. However, few countries have committed themselves to such a task and it is sobering to note that in Scotland the Chief Medical Officer, a distinguished psychiatrist, Professor Robert Kendell, has deliberately chosen not to set any targets for the reduction of suicide in Scotland as he believes that they are almost certainly not achievable. While those committed to the field of suicidal behaviour might perceive Kendell's view as being pessimistic, the reality is that there is little hard scientific data to demonstrate the effectiveness of any specific suicide prevention programs.

Despite this degree of pessimism, it seems logical to pursue the optimum treatment of mental disorders, as the mortality data for major affective disorders and schizophrenia should be influenced by more comprehensive treatment programs. There is equivocal evidence from Sweden that education programs aimed at GPs recognising and treating depressive illness can influence rates of absence from the work place and hospitalisation due to depression, as well as the mortality by suicide<sup>13</sup>, and a long-term study of the effect of Lithium in the control of depressive conditions, with a resultant decrease in suicide, also shows promise<sup>14</sup>. There is also work demonstrating the potential effectiveness of a cognitive behavioural therapy approach, although the majority of that work has been done with young women who have borderline personality disorders, rather than with the more high-risk groups of men with other mental disorders<sup>12</sup>. It is fair to add that administrative issues such as the closure of psychiatric hospitals could also be playing a role in the changing pattern of suicide. Thus it is possible that some young men with mental disorders no longer have the safety or asylum which can be provided by longer term hospitalisation.

## Impact of suicide

In addition to the economic loss to the community because of premature death, there is a considerable emotional impact upon those who are bereaved through suicide. Death by suicide is perceived differently by the community, and feelings of guilt and shame predominate. Self-help organisations have been established to alleviate this morbidity<sup>15</sup>.

## Policy implications

In the absence of a clear understanding of why there have been fluctuations in the suicide rate and a lack of demonstrated effectiveness of any particular intervention programs, it can be seen that caution must be exercised in advocating any specific policy initiatives to governments. The unfortunate reality is that we do not have as much knowledge about suicide in men as could sometimes be inferred from sweeping statements in the popular media.

It is particularly important to note that although suicide is a dramatic event and has a significant impact on those in the immediate environment, it is still an infrequent event with a low base rate. Although it is tempting to inject considerable resources into areas of apparent immediate need, taken in the overall context there is often little scientific merit in some initiatives which at times appear to have been introduced for political expediency rather than being based on any rational allocation of resources with the hope of demonstrating the effectiveness of any intervention. This could be seen as a somewhat jaundiced view by some, but it is harsh reality. Indeed, probably the most important task

for researchers in Australia is to coordinate data and to ensure that information which has been gleaned so far is disseminated not only to clinicians in the field, but also to the community in general.

It is self evident that access to good community services may be of assistance<sup>3</sup>, and it could be argued that young men, in whom there has been the greatest increase in suicide, should be targeted in particular. That mental disorders, particularly depression, afflict the young, and that treatments are available, is not generally recognised in the community. Education programs about alcohol and drug abuse, and legislation about firearms and car exhausts could also have an impact.

## Summary

Suicide is a major public health problem in Australia and most of those who die in this manner are men. Although certain sociodemographic and clinical features are associated with suicide, they are relatively non-specific and we are unable to predict which individuals will commit suicide. Furthermore, we are not in a position to unequivocally recommend specific treatments. Therefore we must fall back on giving support to broad community intervention programs such as the provision of good social services with the promotion of parenting and interpersonal skills, while providing ready access to excellent facilities for the treatment of those mental disorders which are closely associated with suicide.

## References

1. Hassan R. Suicide in Australia: A sociological study. The Flinders University of South Australia, 1992.
2. Phillips DP, Ruth TE. Adequacy of official statistics for scientific research and public policy. *Suicide Life-Threaten Behav* 1993;23:307-19.
3. Kosky RJ, Goldney RD. Youth suicide: risk and prevention. In: Raphael B, Burrows G, eds. *Handbook of preventive psychiatry*, Amsterdam: Elsevier, 1995.
4. Roy A. Suicide. In: Kaplan HI, Sadock BJ, eds. *Comprehensive textbook of psychiatry*, 5th edition, Baltimore: Williams and Wilkins, 1989.
5. Goldney RD. Suicide in the young. *J Paediatr Child Health* 1993;29(suppl):50-2.
6. Jones JS, Stanley B, Mann JJ, et al CSF 5-HIAA and HVA concentrations in elderly depressed patients who attempted suicide. *Am J Psychiatry* 1990;147:1225-7.
7. Rich CL, Fowler RC, Young D, Blenkush M. San Diego suicide study: a comparison of gay to straight males. *Suicide Life-Threaten Behav* 1986;16:448-457.
8. Shaffer D, Fisher PW, Hicks R, Parides M, Gould MS. Sexual orientation in adolescents who commit suicide. *Suicide Life-Threaten Behav* (in press).
9. Oliver RG, Hetzel BS. The rise and fall of suicide rates in Australia: relation to sedative availability. *Med J Aust* 1972;2:919-23.
10. Cantor CH, Lewin T. Firearms and suicide in Australia. *Aust N Z J Psychiat* 1990;24:500-9.
11. Goldney RD, Spence ND. Is suicide predictable? *Aust N Z J Psychiat* 1987;21:3-4.
12. Williams JMG, Pollock LR. Factors mediating suicidal behavior: the utility in primary and secondary prevention. *J Ment Health* 1993;2:3-26.
13. Rutz W, von Knorring L, Walinder J. Long-term effects of an educational program for general practitioners given by the Swedish Committee for the Prevention and Treatment of Depression. *Acta Psychiatr Scand* 1992;85:83-8.
14. Ahrens B, Muller-Oerlinghausen B, Graf F. Length of lithium treatment needed to

eliminate the high mortality of affective disorders. *Br J Psychiatry* 1993;163(suppl 21):27-9.

15. Clark SE, Jones HE, Quinn K, Goldney RD, Cooling PJ. A support group for people bereaved through suicide. *Crisis* 1993;14:161-167.

RESCINDED

# Substance abuse

---

W. Hall

National Drug and Alcohol Research Centre  
University of NSW

---

## Introduction

Substance abuse and dependence are predominantly masculine forms of mental disorder in most western European societies<sup>1</sup>. Substance abuse disorders comprise the most common form of mental disorder experienced by men, and males comprise the overwhelming majority of persons who abuse and become dependent on alcohol and other psychoactive drugs, such as cannabis, heroin, and cocaine.

*Substance abuse disorders* (which include abuse and dependence) typically involve impaired control over the use of psychoactive substances such as alcohol, cannabis or heroin. Obtaining, using and recovering from the use of the drug consumes a disproportionate amount of the user's time, and users continue to use the substance in the face of problems that they know it causes. Substance abusers typically become tolerant to the effects of their preferred drugs, requiring larger doses to achieve the desired psychological effect, and abrupt cessation of use often produces a withdrawal syndrome. Many substance abusers experience other psychological and physical health problems, and their drug use often adversely affects the lives of their spouses, children and other family members, friends and workmates.

This chapter describes what can be reasonably inferred about the prevalence and patterns of substance abuse and dependence among Australian men. The focus is primarily on the abuse of alcohol and illicit drugs (amphetamines, cannabis and heroin) because these are the most widely abused psychoactive drugs in Australia<sup>2,3</sup>. Newer patterns of illicit drug use, such as the non-medical use of benzodiazepines and, more recently, steroids, are not covered in this review because of the absence of data on their prevalence and patterns of use. Nicotine dependence is excluded because it is more purely a physical than a mental health problem and the male preponderance in nicotine dependence has all but disappeared<sup>3</sup>.

## Alcohol dependence

In the view of many health professionals, 'alcoholism' is a relatively rare disorder that has a poor outcome: few alcoholics become abstinent, and many die from the medical complications of their alcohol abuse. Recent American research using standardised definitions of alcohol abuse and dependence to estimate the proportion of persons with these disorders in a random sample of the community has challenged the optimistic assumption that alcoholism is a rare disorder and the pessimistic assumption that its outcome is always poor.

The Epidemiologic Catchment Area (ECA) study involved personal interviews with 20000 Americans in Baltimore, Maryland; Los Angeles, California; New Haven, Connecticut; Durham, North Carolina; and St Louis, Missouri<sup>4</sup>. A standardised interview for detecting mental disorders was used to diagnose the presence or absence of 40 major

psychiatric diagnoses, including alcohol abuse and dependence. Although not a true random sample of the American population, it is the best data we have on alcohol abuse and dependence in a large sample from the general population.

In this study, a diagnosis of *alcohol abuse* required excessive or uncontrolled alcohol use and impairment in social or occupational functioning because of alcohol use. *Alcohol dependence* required evidence of either excessive or uncontrolled drinking, or social and occupational impairment (or both), and evidence of either tolerance or withdrawal (or both). The results indicated that 'alcoholism' (used hereafter as a shorthand for alcohol abuse and/or dependence) was the second most common mental disorder among the major diagnoses that were assessed<sup>5</sup>. A total of 14 per cent of the population suffered from 'alcoholism' (with 8 per cent suffering from alcohol dependence) at some time in their lives, compared with just over 14 per cent who had phobias at some time in their lives.

The prevalence of alcoholism was strongly related to gender and age: 24 per cent of men and 5 per cent of women had suffered from alcoholism at some time in their lives, while 12 per cent of men and 2 per cent of women had experienced this disorder in the year before they were interviewed. The percentages of men and women who had ever suffered from alcoholism decreased with age, from 27 per cent and 7 per cent among men and women aged between 18 and 29 years to 14 per cent and 2 per cent among men and women aged 65 years and older. Younger women had much higher rates than older women, so the ratio of men to women in the lifetime experience of alcoholism increased from 3.9 among those aged 18 to 29 years, to 5.1 among those aged 30 to 44 years, 6.9 among those aged 45 to 64 years, and 9.1 among those aged 65 years or more<sup>5</sup>.

The ECA study showed that the degree of experience with (or exposure to) heavy drinking was a risk factor for alcoholism. The lifetime experience of alcoholism increased from 15 per cent among all drinkers to 49 per cent of those with a history of drinking more than seven drinks in a session at least once a week. Differences in exposure to heavy drinking probably explain the differences in lifetime rates of alcoholism between men and women and younger and older persons. The ratio of men to women, for example, is nearly equal among heavy drinkers (1.5) by comparison with a nearly fivefold (4.6) male excess among all drinkers. The higher rate of alcoholism among younger men and women probably reflects the steep post-war rise in alcohol consumption to which younger people have been most exposed<sup>5</sup>.

Alcoholics in the ECA study were at high risk of suffering from other mental disorders. Nearly half (47 per cent) had a second psychiatric diagnosis (compared with a third of persons who received a psychiatric diagnosis other than alcoholism). The most common such diagnoses were drug abuse and dependence, antisocial personality disorder, mania, schizophrenia, panic disorders, and obsessive compulsive disorders<sup>5</sup>. The high rate of such disorders among alcoholics indicates that mental health workers need to be alert to the presence of substance abuse disorders among their patients and that drug and alcohol workers need to be more aware of major mental disorders among their clientele.

Alcoholism in the ECA was 'a disorder of youthful onset', with 80 per cent of those who have ever experienced a symptom having done so before age 30. It was also a disorder with a high rate of remission: half of those who had ever experienced a symptom had not experienced one for at least a year. The average length of symptoms of alcoholism was less than five years, indicating that many who drink heavily and experience symptoms of dependence can stop drinking for periods of a year or more.

Most alcoholics who stopped or moderated their drinking did so without professional assistance. Only 12 per cent had ever told a doctor about their drinking problem (27 per cent of those who were dependent, 8 per cent of those who had abused alcohol, and only 3 per cent of heavy drinkers who had experienced at least one problem). These findings indicate that alcoholism in the community has a more benign outcome than the pessimistic picture we obtain from the clinical samples, which contain a preponderance of alcoholics who have failed to stop drinking by their own efforts.

## Alcohol dependence in Australia

A smaller-scale version of the ECA study was conducted in the rural Riverland area of South Australia in 1991. The modified version of the interview schedule was used to diagnose a smaller range of mental disorders in a community sample of 1009 adults over the age of 18<sup>6</sup>. The Riverland results on alcoholism largely replicated the ECA findings. The overall lifetime prevalence of alcoholism was 18 per cent, marginally higher than the ECA result as expected because of the higher per capita consumption in Australia. There was a higher rate of lifetime experience of alcoholism among men (33 per cent) than women (5 per cent), the highest rate was in the 18 to 24 year age group, and there was a decline in lifetime rates with age as found in the ECA study<sup>6</sup>. Alcoholism was likely to occur with drug abuse, and only 3 per cent of those who had ever experienced alcoholism had received specialist mental health treatment, although 80 per cent had seen a general practitioner in the previous year.

The Riverland and the ECA results were in general agreement with those obtained in a study in 1986-1987 in Christchurch, New Zealand, which used the ECA interview to diagnose psychiatric disorders in a community sample of 1498 adults aged 18 to 64<sup>7</sup>. In Christchurch, the overall lifetime prevalence of alcoholism was 19 per cent, there was a higher rate of lifetime experience of alcoholism among men (32 per cent) than women (6 per cent), and the highest rate was in the 18 to 24 year age group, although rates did not decline as steeply with age as in the ECA study<sup>7</sup>. The fact that similar findings emerged in a survey in Edmonton, Canada, and in a variety of other non-English-speaking cultures<sup>1</sup> strengthens our confidence that the ECA findings are broadly applicable to Australian cities.

## Preventing alcohol abuse and dependence

A major development in the prevention of alcoholism and alcohol-related health problems has been the adoption of a public health perspective which shifts attention from an exclusive focus on the dependent alcohol user to consider the full spectrum of problems caused by alcohol (e.g., road traffic accidents, lost productivity, violence, and diseases such as cancer, liver cirrhosis, brain damage and heart disease). An important consequence of this perspective is that the prevalence of alcohol-related problems in the community can best be reduced by attempting to reduce alcohol consumption of the whole population not just the minority of 'alcoholics'<sup>8</sup>.

According to 'preventive paradox'<sup>8</sup>, although alcoholics experience a higher *rate* of problems than non-alcoholics, there are far more 'risky' drinkers than alcoholics. Consequently, larger reductions in alcohol-related health problems can be achieved by reducing the consumption of all drinkers rather than solely by reducing the consumption of the heavy drinking minority. Empirical support for the 'preventive paradox' has been provided by survey research in Britain<sup>8,9</sup> and New Zealand<sup>10</sup>, although more recently, doubts have been raised about the validity of the 'preventive paradox' for all alcohol-related problems<sup>11</sup>.

The public health approach adopts a broader conception of the causes of alcohol-related problems. While more traditional approaches have focused on the characteristics that predispose some drinkers to develop alcoholism, the public health approach emphasises the characteristics of the physical and social environment which encourage hazardous drinking. This is taken to include the advertising and promotion of alcohol, and the community's tolerance of the ready availability of alcohol at comparatively low prices<sup>12</sup>.

Among measures proposed for decreasing population alcohol consumption are: laws and regulations which aim to reduce the availability of alcohol (e.g., licensing regulations which restrict trading hours for liquor outlets, and the enforcement of laws on underage drinking); measures which increase the price of alcohol to reduce consumption (e.g., increased taxes levied on the alcohol content of beverages); and regulations to control the

promotion of alcohol<sup>12</sup>. These measures do not have a great deal of public support in the absence of efforts to explain their rationale<sup>13</sup>, and have been ambivalently supported in the National Health Policy on Alcohol<sup>14</sup>.

## The role of treatment

Controlled evaluations of in-patient treatment for the minority of alcoholics who seek treatment have demonstrated that about a third of such patients remain abstinent over a year, a third show reductions in their drinking, and the drinking in the remaining third is largely unchanged<sup>15</sup>. The evidence from reviews of the research literature (e.g.<sup>15,16</sup>), from large-scale follow-up studies of treatment (e.g.<sup>17</sup>), and from well-controlled studies comparing brief advice with more intensive treatment (e.g.<sup>18</sup>) indicates that there is at most a small difference in outcome between brief advice to stop drinking and in-patient treatment.

There is nonetheless good evidence that treatment for alcohol dependence has a net economic benefit. Studies of insured persons<sup>19,20</sup> show that there is a substantial reduction in health care expenditure between the three years before and the three years after having alcohol treatment. More recently, a randomised controlled trial<sup>21</sup> has shown that even intensive in-patient treatment for alcohol dependent people has net economic benefits.

In-patient alcoholism treatment may not be routinely warranted but detoxification is an important part of a public health response to alcohol-related problems. Detoxification benefits the health of the drinker and the community by postponing the emergency presentation of more severe health problems, and by providing an opportunity for intervention and referral to other treatment services. It can often be accomplished under supervision in the home (e.g.<sup>22</sup>), although some severely dependent people and homeless alcohol dependent persons, require in-patient treatment.

The role of in-patient hospitalisation for severely affected alcoholics remains controversial<sup>23</sup>. Respite care with charitable and voluntary agencies, and welfare services are important for the indigent and homeless alcoholic. Whether we should continue to provide residential treatment programs based upon the traditional 12-step approach in hospitals is more contentious. The evidence for effectiveness is absent but a case has been made on humanitarian grounds for some such provision. Enrolment in Alcoholics Anonymous is an important and inexpensive resource for alcoholics wishing to avoid relapse, and especially for the homeless and socially isolated whose drinking has cost them their family and friends<sup>23</sup>.

## Screening and brief intervention

An active field of research has been the effectiveness of screening and brief intervention. This intervention involves screening for hazardous alcohol use and alcohol-related problems among people presenting for medical treatment, and providing simple advice on how to reduce or stop consumption for those drinking at hazardous or harmful levels. The importance of brief intervention for excessive drinking reflects a growing appreciation of the fact that few people with alcoholism, and even fewer who drink hazardous amounts of alcohol, seek treatment or receive medical advice about their drinking. It is accordingly important to actively seek out such drinkers as well as those experiencing alcohol-related problems who may require more intensive intervention<sup>24</sup>.

Research has found that screening and brief advice for excessive alcohol consumption in general practice and hospital settings reduces consumption and the problems caused by alcohol (e.g.<sup>25,26,27,28</sup>). Given the economic benefits of conventional treatment there is an even stronger economic argument for brief intervention. It usually involves an investment of one to three hours in screening and brief advice which costs a small fraction of intensive in-patient treatment for alcohol dependence. Brief methods of intervention can potentially reach a far greater number of persons whose drinking is hazardous or harmful than can specialist alcohol treatment services.

## What can health professionals do?

Several recommendations can be made. When first consulting a general practitioner, and on other appropriate occasions, all adolescents and adults (and especially males) should be asked about their consumption of alcohol and their experience of alcohol-related problems. All drinkers should be encouraged to limit their regular weekly consumption to National Health and Medical Research Council Guidelines<sup>29</sup>, and to have at least two alcohol-free days each week. They should also be advised of the adverse health and social consequences which arise from binge drinking and intoxication (the increased risk of accidents in particular), and of the adverse health and social consequences associated with chronic harmful use. Any severely dependent drinkers should be encouraged to undergo detoxification and to remain abstinent.

## Drug abuse and dependence

The ECA study<sup>4</sup> also provides the best information on the prevalence of drug abuse and dependence in the community. Illicit drug use was defined as 'any nonprescription psychoactive agents other than tobacco, alcohol and caffeine, or inappropriate use of prescription drugs'<sup>30</sup>. Individuals had to have used an illicit drug on more than five occasions before they were asked about symptoms of drug abuse and dependence (to exclude individuals who had only briefly experimented with illicit drugs).

A diagnosis of *drug abuse* required a pattern of pathological use and impaired functioning (defined in the same way as alcohol abuse) while a diagnosis of *drug dependence* required only tolerance or withdrawal (except for cannabis, where a diagnosis of dependence required pathological use, impaired social functioning and either tolerance or withdrawal). The problem had to have been present for at least one month.

One in three in the ECA sample (36 per cent) had used one or more illicit drugs, with cannabis the most commonly used (having been used by 76 per cent of those who had used any illicit drug more than five times). Drug abuse and dependence (hereafter drug abuse for short) were diagnosed in 6 per cent of the population, with cannabis abuse affecting 4 per cent of the population, followed by stimulant abuse (2 per cent), sedative abuse (1 per cent), and opioid drugs (0.7 per cent). Men had higher rates of drug abuse than women (8 per cent vs 5 per cent), and the highest rate was in the 18 to 29 year age group (14 per cent overall, 16 per cent among men and 11 per cent among women), declining to 8 per cent among those aged 30 to 40 years, less than 1 per cent among those over 45 years.

As was true of alcoholism, exposure to illicit drug use was the most likely reason for the differences in rates between men and women and younger and older persons. The low rates of drug abuse among adults over the age of 40 years reflects the recency of widespread illicit drug use in American society. The contribution of exposure to the difference in rates of drug abuse between men and women is reflected in the fact that the rates were about the same for men and women who had used any illicit drug more than five times (21 per cent and 19 per cent).

There was also a high prevalence of other mental disorders among drug abusers. More than two thirds (76 per cent of men and 65 per cent of women) had a second psychiatric diagnosis. The most common diagnoses were alcoholism (60 per cent of men and 30 per cent of women), and antisocial personality disorder (22 per cent of men and 10 per cent of women). Rates of mania, schizophrenia, dysthymia, major depression, panic disorders and obsessive compulsive disorders were also elevated. The high rate of psychiatric comorbidity among drug abusers indicates the desirability of specialist mental health workers and drug and alcohol workers being more aware of major psychiatric and substance abuse disorders among their respective clientele.

Little information was provided on the remission of drug abuse because of the relative youth of drug abusers and hence the shorter duration of their disorders. As with

alcoholism, only a minority of those who had a diagnosis of drug abuse (20 per cent of men and 28 per cent of women) had mentioned their drug problem to a health professional, even though 60 per cent to 70 per cent had sought medical treatment in the previous month.

## Drug dependence in Australia

Although the rate of illicit drug use was probably higher in the USA in 1982 when the ECA study was conducted than in Australia in the 1990s, the available data suggest that the pattern of gender and age differences in drug abuse applies in Australia. The Riverland study, for example, reported that 3 per cent of the sample had ever abused illicit drugs, but there was a marked difference between the rates for men (6 per cent) and women (1 per cent). Rates were highest in the 25 to 34 year age group (6 per cent) and dropped dramatically among those aged over 45 years to 0.7 per cent. Few drug abusers (3 per cent) had ever received specialist mental health treatment, although 82 per cent had seen a general practitioner in the previous year.

The Christchurch study largely replicated the Riverland and ECA findings<sup>31</sup>. The rate of ever having used cannabis five or more times was close to that of the ECA estimate (16 per cent), as was the proportion who were marijuana abusers (5 per cent). There were also the same pattern of gender and age differences in rates, and high rates of alcohol and antisocial personality disorders among drug abusers.

## Public health policies on drug abuse and dependence

The illegality of illicit drug use prevents the use of the control policies that have been recommended to reduce alcohol-related health problems (increased taxation and decreased legal availability). The major policies to reduce the availability of illicit drugs have been law enforcement efforts. These include efforts to interdict drugs at the customs barrier, prevent their distribution, and reduce demand for drugs by prosecuting or diverting illicit drug users into treatment. These policies, some have argued, have had the unintended consequence of leaving the distribution of these drugs to the blackmarket, where there is poor quality control of purity and potency, increasing the risks of contracting HIV and other infectious diseases and of dying of unintentional drug overdoses<sup>32</sup>. This has led some to advocate the relaxation of existing prohibitions on drug use to increase opportunities for regulatory control<sup>33</sup>.

The major health policies aimed at reducing drug abuse have been media campaigns to discourage the use of illicit drugs. Among those who refuse to be discouraged, efforts have been made to reduce some of the harmful consequences of drug use. Injecting drug users have been given clean needles and syringes, and educational programs designed by user groups have been used to communicate information about how to reduce drug-related harms. There has also been a major increase in the provision of treatment for drug abusers, especially heroin users, with the numbers of such individuals enrolled in methadone treatment increasing from 800 in 1985 to 10,000 in 1992<sup>34</sup>.

## What can health professionals do?

There is as yet no evidence on the value of screening and brief intervention for illicit drug users but it is reasonable to argue by analogy that they may have a role to play in reducing drug-related harm. This would involve health workers inquiring about illicit drug use when a suspicion was raised (e.g., signs of injection, or the diagnosis of a disease common among drug users). Simple advice could then be given in a non-judgmental way to stop or reduce drug-taking. For those who continued to use, simple advice could be given on reducing risks by not sharing needles and using condoms with

sexual partners. Such brief interventions with illicit drug users have been identified by drug and alcohol experts as deserving of research into their feasibility and effectiveness<sup>35</sup>.

## Conclusions

Alcoholism is a major mental and public health issue among Australian men, who are at higher risk than women of developing the disorder and experiencing its adverse health consequences because of their greater exposure to heavy drinking. It would be desirable to undertake similar surveys to the American ECA study in Australian cities to better understand the rates of alcoholism in the Australian community. The prospects for the amelioration and prevention of alcohol-related problems are much better than is often believed. The majority of men who become alcoholics recover, and evidence suggests that the rate of recovery can be increased, and the time over which it occurs can be reduced, by screening and brief advice in medical settings. The health professions have an important role to play in reducing the harm caused by alcohol, by routinely inquiring about alcohol use, and giving simple advice about safe levels of drinking, and the hazards of intoxication and chronic harmful use.

Drug abuse is much less common than alcoholism but it still affects around 6 per cent of Australian men. It shows similar patterns to alcoholism and dependence, with young men over-represented because of their higher exposure to illicit drug use than young women or older people. Drug abusers are also likely to be alcoholics. There is probably a reasonably high rate of remission of drug abuse in the absence of formal treatment, although this, like alcoholism, needs to be better understood in the Australian community. Efforts to prevent drug abuse may benefit from the adaptation of the screening and brief intervention strategies developed for the prevention of alcohol problems. Their development and evaluation will require an innovative research effort.

## References

1. Helzer JE, Canino GJ. Alcoholism in North America, Europe and Asia. New York, Oxford University Press, 1992.
2. Chen R, Mattick RP, Baillie A. Clients of treatment service agencies. March, 1992 census findings. Commonwealth Government Printer, 1993.
3. Department of Health, Housing and Community Services. Statistics on drug abuse in Australia 1992. Canberra, Australian Government Publishing Service, 1992.
4. Robins LN, Regier DA. Psychiatric disorders in America: the epidemiologic catchment area study. The Free Press, New York, 1991.
5. Helzer JE, Burnam A, McEvoy LT. Alcohol abuse and dependence. In: Robins LN, Regier DA, eds Psychiatric disorders in America: the epidemiologic catchment area study. The Free Press . New York, 1991.
6. Clayer JR, McFarlane AC, Czechowicz AS, Wright G. Mental health in the Riverland. Adelaide: South Australian Health Commission, Mental Health Research and Evaluation Centre, 1991.
7. Wells JE, Bushnell JA, Joyce PR, Oakley-Browne MA, Hornblow AR. Preventing alcohol problems: the implications of a case-finding study in Christchurch, New Zealand. *Acta Psychiatr Scand* 1991;83:31-40.
8. Kreitman N. Alcohol consumption and the preventive paradox. *Brit J Addict* 1986;81:353-363.
9. Latcham RW, Kreitman N, Plant MA, Crawford A. Regional variations in British alcohol morbidity rates; A myth uncovered? II. Population surveys. *Br Med J* 1984;289:134-135.
10. Casswell S, Gilmore L, Ashton T. Estimating alcohol-related absenteeism in New Zealand. *Brit J Addict* 1988;83:677-682.

11. De Burgh S. Epidemiology and alcohol policy. PhD dissertation, School of Public Health, University of Sydney, 1990.
12. Walsh DC, Hingson RW. Epidemiology and alcohol policy. In: Levine, S, Lilienfeld AM, eds. Epidemiology and public policy. New York: Tavistock, 1987.
13. Flaherty B, Homel P, Hall, W. Community attitudes towards public health policies on alcohol. *Australian Journal of Public Health* 1991;15:301-306.
14. Ministerial Council on Drug Strategy. National Health Policy in Alcohol in Australia. National Campaign Against Drug Abuse, Canberra, 1989.
15. Emrick CD. A review of psychologically oriented treatment of alcoholism II. The relative effectiveness of different treatment approaches and the effectiveness of treatment versus no treatment. *J Stud Alcohol* 1975;36:88-108.
16. Heather N, Tebbut J. An overview of the effectiveness of treatment for drug and alcohol problems. National Campaign Against Drug Abuse Monograph Series Number 11. Australian Government Publishing Service, 1989.
17. Armor DJ, Polich JM, Stambul H.B. Alcoholism and treatment. John Wiley and Sons, New York, 1978.
18. Orford J, Edwards G. Alcoholism: A Comparison of treatment and advice, with a study of the influence of marriage. Oxford University Press, Oxford, 1977.
19. Holder HD, Blose JO. Alcoholism treatment and total health care utilisation and costs: A four-year longitudinal analysis of Federal employees. *J Amer Med Assn* 1986;256:1456-1460.
20. Holder HD, Schachman RH. Estimating health care savings associated with alcoholism treatment. *Alcoholism* 1987;11:66-73.
21. Walsh DC, Hingson RW, Merrigan DM, et al A randomised trial of treatment options for alcohol-abusing workers. *N Engl J Med* 1991;325:775-782.
22. Hayashida M, Alterman AI, McLellan AT, et al (1989) Comparative effectiveness of in-patient and out-patient detoxification of patients with mild-to-moderate alcohol withdrawal syndrome. *N Engl J Med* 1989;320:358-365.
23. Mattick RP, Jarvis T. An outline for the management of alcohol dependence and abuse. Quality Assurance Project. National Drug Strategy Monograph, 1994.
24. Price J. Alcohol screening and early intervention: an achievable advance in management. *Med J Aust* 1988;149:345-346.
25. Chick J, Lloyd G, Crombie E. Counselling problem drinkers in medical wards: a controlled study. *Br Med J* 1985;290:965-967.
26. Elvy GA, Wells JE, Baird KA. Attempted referral as intervention for problem drinking in the general hospital. *Brit J Addict* 1988;83:83-89.
27. Kristenson H, Ohlin H, Hulter-Nosslin MS, Trelle E, Hood B. Identification and intervention of heavy drinking in middle-aged men: results and follow-up of 24-60 months of long-term study with randomised controls. *Alcoholism* 1983;7:203-209.
28. Wallace P, Cutler S, Haines A. Randomised controlled trial of general practitioner intervention in patients with excessive alcohol consumption. *Br Med J* 1988;297:663-668.
29. National Health and Medical Research Council. Is there a safe level of daily consumption of alcohol for men and women? Recommendations regarding responsible drinking behaviour. Canberra: Australian Government Publishing Service, 1992.
30. Anthony JC, Helzer JE. Syndromes of drug abuse and dependence. In: Robins LN, Regier DA, eds Psychiatric disorders in America: the epidemiologic catchment area study. The Free Press, New York, 1991.

31. Wells JE, Bushnell JA, Joyce PR, Oakley-Browne MA, Hornblow AR, Problems with alcohol, drugs and gambling in Christchurch, New Zealand. In: Abbot MA, Evans K, eds. Alcohol and drug dependence and disorders of impulse control. Alcoholic Liquor Advisory Council, Auckland, 1992.
32. Carney T, Drew L, Mathews J, Mugford S, Wodak A. An unwinnable war against drugs: the politics of decriminalisation. Sydney: Pluto Press, 1991.
33. Hall W. The Australian debate about the legalisation of heroin and other illicit drugs, 1988-1991. *Journal of Drug Issues* 1992;22:563-577.
34. Ward J, Mattick RP, Hall W. Key issues in methadone maintenance treatment. University of New South Wales Press, 1992.
35. Carless J, Hall W. Proceedings from the national workshop on research into early / brief intervention for drug and alcohol problems. National Drug and Alcohol Research Centre Monograph Number 9, Sydney, 1990.

# Antisocial behaviour

---

R. Finlay-Jones  
School of Psychiatry  
University of New South Wales

---

## What is antisocial behaviour?

Society makes laws. Crimes are acts which break the society's laws. The simplest way of describing antisocial behaviour is to define it in terms of crimes, including those punished, those detected but not punished, those reported but not solved, and those that go unreported.

Antisocial behaviours lie on a continuum of severity. For example, most people would regard kicking the cat as less antisocial than breaking the arm of the cat's owner.

People regard the magnitude or seriousness of most crimes to vary by a factor of about 30. For example, in 1986 the Australian Institute of Criminology asked 2555 Australians to rank 13 crimes on how many times more serious they regarded each compared with the theft of a bicycle<sup>1</sup>. The results were:

- 27 times: a person stabs a victim to death.
- 23 times: a person smuggles heroin into the country.
- 19 times: a factory knowingly gets rid of its poisonous waste in a way that pollutes the city water supply. As a result one person dies.
- 18 times: a worker had his/her leg caught in an unguarded piece of machinery because the employer knowingly fails to provide safety measures. As a result the worker lost a leg.
- 14 times: a person armed with a gun robs a bank of \$5,000 during business hours. No one is physically hurt.
- 11 times: a parent beats his/her child with his/her fists. The child is hurt and spends a few days in hospital.
- 11 times: a man beats his wife with his fists. As a result she spends a few days in hospital.
- 7 times: a person illegally received social security cheques worth \$1000.
- 5 times: a person cheats on their Commonwealth income tax return and avoids paying \$5000 in taxes.
- 5 times: a doctor cheats on claims he makes to a Commonwealth health insurance plan for patient services for an amount of \$5000.
- 4 times: two adult males willingly engage in a homosexual act in private.
- 3 times: a person breaks into a home and steals \$1000 worth of household goods.
- 1 time: a person steals \$5 worth of goods from a shop.

Many people reading this list will be surprised at some of the rankings, although which antisocial act causes a surprise will probably differ according to the age, education, social class and residence of the reader. Violating another person so badly that the person dies still remains the worst crime of all for most people.

## Antisocial behaviour resulting in imprisonment

At midnight on 30 June 1991, Australian prisons held just over 15,000 adults. Ninety-five per cent of them were men<sup>2</sup>. The gender-specific prevalence of prisoners in the Australian population is 221 male prisoners per 100,000 men and 11 female prisoners per 100,000 women, a 20-fold difference.

**Table 1. Gender ratio of Australian prisoners of different ages, 1991\***

Age	No of prisoners	% Men
18	367	96%
19	609	96%
20-24	3917	96%
25-29	3306	94%
30-34	2604	94%
35-39	1748	96%
40-44	1054	95%
45-49	643	97%
50-54	386	96%
55-59	175	99%
60-64	99	96%
65+	55	98%

\*Adapted from Walker<sup>2</sup>

This gender difference holds for all ages (Table 1) and is true of Aborigines and whites in Australia. In trying to explain it, it is important to note first, how robust this gender difference is, and second, to note that while other factors are never so important as to cause the gender difference to disappear, they may influence the size of it and sometimes quite markedly.

For example, marital state alters the picture a little. The gender ratio is 25:1 for single prisoners, 18:1 for married prisoners, 13:1 for divorced prisoners, 11:1 for separated prisoners and 4:1 for widowed prisoners.

A tertiary education has some effect, reducing the gender ratio to 8:1, although this effect is confined to a small group of prisoners who make up less than 1 per cent of all inmates.

**Table 2. Imprisonment rates per 100 000 population and gender ratio of prisoners in Australia, by country of birth**

Country	No of prisoners per 100000	Gender ratio
Vietnam	157	135:1
Turkey	309	84:1
Greece	51	74:1
Yugoslavia	121	47:1
Italy	49	32:1
Lebanon	275	24:1
Africa	54	21:1
Australia	132	19:1
UK, Eire	56	19:1
New Zealand	168	18:1
PNG/Oceania	289	17:1
South America	142	15:1
USA/Canada	119	12:1

\*Adapted from Walker<sup>2</sup>

Country of birth is probably the most important mediating variable of a demographic kind (Table 2). In Australian prisons, the gender ratio is 46:1 for the combined group of inmates born in Vietnam, Turkey, Yugoslavia, Lebanon, Greece and Italy, while for the Australian-born it is 19:1, as it is for the English, Irish and New Zealanders. The gender difference of the Vietnamese-born (135:1) is 11 times greater than that of the American-born (12:1).

Men commit crimes at a greater rate than women for all offences which are punished by imprisonment. However, there is considerable variation in the gender ratios of imprisonment for different crimes. The usual 20:1 gender ratio (or greater) holds for homicide, assault, sex offences, robbery, break and enter, property damage, growing or manufacturing drugs, and driving offences. The gender ratio drops to 11:1 for 'other' thefts, dealing in drugs, justice procedures, fraud, receiving, possessing drugs, and extortion, which together account for the convictions of 28 per cent of male prisoners and 50 per cent of female prisoners.

It may be inferred that the crimes for which men are imprisoned are more 'serious' crimes, which usually means more violent crimes, and this is reflected in the penalties. The gender ratio of prisoners serving six months to life is 23:1, while for prisoners serving less than six months it is 14:1.

## **Antisocial behaviour defined as who gets caught**

The gender ratio is much smaller when the behaviour is defined as those who get caught, as opposed to those who are caught, convicted and imprisoned. The arrest rates are specified for Australian adults and juveniles separately in Table 3. Juveniles tend to break, enter, steal (including stealing cars), and to a lesser extent, rob. On the other hand, adults tend to assault people. However, in each of these categories, the gender ratio is between 10:1 and 16:1 for adults and between 7:1 and 15:1 for juveniles. The gender difference is smallest for fraud, where the gender ratio drops to 2:1 for adults and juveniles.

**Table 3. Arrest rates in Australia 1987-88\***

Alleged crime	Rate per 100000		Gender ratio
	Men	Women	
<b>Motor vehicle theft</b>			
Adults	134.4	8.2	16:1
Juveniles	521.1	47.9	11:1
<b>Break, enter, steal</b>			
Adults	235.2	19.8	12:1
Juveniles	1545.7	104.8	15:1
<b>Robbery</b>			
Adults	31.5	3.3	10:1
Juveniles	40.9	5.8	7:1
<b>Serious assault</b>			
Adults	130.7	12.8	10:1
Juveniles	95.9	13.8	7:1
<b>Fraud</b>			
Adults	138.2	66.4	2:1
Juveniles	81.4	44.8	2:1

\*Adapted from Mukherjee and Dagger<sup>1</sup>

**Table 4. Gender ratio for persons found guilty, England and Wales 1989\***

	Men ('000)	Women ('000)	Gender ratio
<b>Indictable offences</b>			
Sexual offences	7.2	0.1	72:1
Burglary	42.0	1.3	32:1
Motoring	10.8	0.4	27:1
Robbery	4.4	0.2	22:1
Violence against person	51.2	4.4	12:1
Criminal damage	8.7	0.7	12:1
Drug offences	20.2	2.4	8:1
Theft, etc	107.9	26.6	4:1
Fraud	17.6	4.7	4:1
All other	23.6	2.1	11:1
Total indictable offences	293.7	43.0	7:1
<b>Summary offences</b>			
Motoring	648.0	58.9	11:1
Non-motoring	348.2	120.4	3:1
Total summary offences	996.3	179.2	6:1
<b>All offences</b>	1289.9	222.2	6:1

\*Calculated from Home Office<sup>3,4</sup>

## International comparisons

These statistics are not peculiar to Australia. In England and Wales in 1989, about 48,000 people were in prison, of whom 96 per cent were men<sup>4</sup>. This represents a gender ratio of

27:1<sup>3</sup>. The gender ratio is much smaller (6:1) for crimes for which people are found guilty without necessarily going to prison (Table 4). In England and Wales, the smallest gender ratio is for fraud, and the largest is for sexual offences. In America, the smallest gender ratio in arrests is that for fraud, being 1.4:1 for adults and 3:1 for juveniles (Table 5). The gender ratio for all arrests is 4:1 for juveniles and 5:1 for adults. In short, a substantial gender difference in antisocial behaviour is found worldwide<sup>5</sup>.

**Table 5. Total arrests USA 1983\***

	Men ('000)	Women ('000)	Gender ratio
<b>Juveniles</b>			
Burglary	133.7	9.7	14:1
Robbery	31.0	2.2	14:1
Homicide	1.1	0.1	11:1
Stolen property (buying, receiving, possessing)	22.0	2.2	10:1
Aggravated assault	25.8	5.0	5:1
Fraud	15.9	4.6	3:1
<b>All crimes</b>	<b>1226.2</b>	<b>327.9</b>	<b>4:1</b>
<b>Adults</b>			
Burglary	215.2	16.2	13:1
Robbery	85.1	7.0	12:1
Aggravated assault	177.9	27.0	7:1
Stolen property (buying, receiving, possessing)	69.0	9.5	7:1
Homicide	13.3	2.1	6:1
Fraud	128.4	92.3	1.4:1
<b>All crimes</b>	<b>6497.1</b>	<b>1211.5</b>	<b>5:1</b>

\*Calculated from Gibbons and Krohn<sup>6</sup>

## Summary of gender differences in antisocial behaviour

The gender difference in antisocial behaviour varies from a low of about 2:1 to a high of about 20:1 after taking into account the type of crime committed, whether it was detected and whether it was punished by imprisonment.

On the one hand, even higher ratios are found when certain ethnic and educational groups or marital states are specified, but on the other, the gender difference never completely disappears. This robust finding, that men commit more antisocial acts than women no matter how the acts or actors are defined, demands further study.

For example, Braithwaite<sup>7</sup> pointed out that any general theory of crime has to explain 13 empirical findings, of which the first was the gender difference. (The others are that crime is committed disproportionately by 15-25-year-olds, by unmarried people, by people living in large cities, by people who frequently change their dwelling place and who live in areas where everyone else does, by people who do not take seriously compliance with the law, and by a number of sub-groups of young people: young people who are only weakly attached to a school, who do poorly at school, who have low education and job aspirations, who are weakly attached to their parents, and who are friendly with criminals).

# Explaining the gender difference in antisocial acts

If we restrict ourselves to explaining only the first on Braithwaite's list, the gender difference in antisocial behaviour, then a general theory of crime must account for:

- (a) the robustness of the gender difference in antisocial behaviour;
- (b) why it is greatest for sexual offences, high for robberies and thefts, and smallest for fraud;
- (c) why it is greater among prisoners than arrestees or self-reports, even after controlling for the type of crime.

## (a) The robustness of the gender difference in antisocial behaviour

Several theories have been put forward to explain antisocial behaviour<sup>8</sup>, but most have not addressed the gender difference in the frequency of the behaviour, or they offer explanations which contradict the empirical facts. For example, **opportunity theories of crime** explain criminal acts as the natural result when people are denied legitimate opportunities to get what they want. Yet women, who throughout time and space commit fewer antisocial acts than men, have generally been denied more opportunities than men.

Social control theories, such as that of Hirschi<sup>9</sup>, suggested that we were all prone to committing antisocial acts, but those of us with strong social bonds were less likely to do so. Hirschi argued that lower rates of antisocial behaviour would be shown by people who were more attached emotionally to others, more committed to those relationships, more involved in appointments, schedules and deadlines with other people, and who believed more strongly in obeying the rules of the society. Hirschi's 'social bond' was made up of these four elements of attachment, commitment, involvement and belief. The social bond may link the individual to family, school or church. To the degree that women show more attachment, commitment, involvement and belief than men, so social control theory helps to explain the robustness of gender differences in antisocial behaviour.

**Self-control theories of crime**, such as that described by Gottfredson and Hirschi<sup>10</sup> shift the emphasis from external to internal sources of control. Gottfredson and Hirschi argue that self-control is an idea similar to conscience, but without any connotation of compulsion to conformity. They argue that the major cause of low self-control appears to be ineffective parenting.

The self-control theory of crime would explain the gender difference in antisocial behaviour if it was found first that boys are parented less effectively than girls, and second that they show less self-control (or conscience) than girls, and finally, that the first causes the second.

There are some reports of the first finding. Boys are less closely supervised than girls<sup>11</sup> and so have a greater opportunity to engage in delinquent and criminal behaviour<sup>12</sup>. More particularly, Hagan et al<sup>13</sup> found that the gender ratio in self-reported delinquency was greatest in families headed by employers, and that this was because adolescent males in such families were the least controlled by their mothers and the least likely to perceive the risks of getting punished as threatening.

There are also findings that boys show less evidence of conscience than girls. For example, girls expressed more shame and guilt than boys over having been in trouble with the police<sup>14</sup>.

**Labelling and subcultural theories of crime** suggest that society creates outcasts with a common fate who band together to face the same problems and share common values. This results in the continuing of their criminal careers. Thus these theories are more successful at explaining why people continue to behave in an antisocial way than they are at explaining why people commit an antisocial act in the first place.

Men might be more readily labelled than women as deviant because they are more likely to commit crimes that are serious. They undoubtedly do commit more serious crimes, based on the gender difference in sentence length reported above.

It is not intuitively obvious why men might be more likely than women to seek out and join a criminal subculture once they had been labelled as deviant. However, the empirical facts support the idea that boys are more likely than girls to have delinquent friends<sup>15</sup>. Girls are also significantly more concerned than boys about every possible consequence of being labelled as delinquent<sup>16</sup>.

### **(b) The gender difference is greatest for sexual offences, large for robberies and thefts, and smallest for fraud**

The gender difference in sexual crimes is best explained by identifying sexual crime as a variant of violent crime generally. Just as lack of legitimate opportunities to get rich is a poor explanation of robbery, so lack of opportunity for consensual sex is a poor explanation of sexual crime<sup>17</sup>. The gender difference in sexual aggression is more likely to be another outcome of the traditional male socialisation about the appropriateness of male aggression and dominance<sup>18</sup>. Alder<sup>19</sup> identified the presence of sexually aggressive peers as an important predictor of sexual aggression, echoing the explanation for male aggression generally (see below).

In explaining the smallest gender difference, that for fraud, it has been argued that women outnumber men in many white-collar occupations, such as bank tellers and clerical workers, and hence have a relatively greater opportunity to commit fraud than other crimes.

While that is true for fraud, it is not true that women have the same reduced opportunity to commit all other crimes. For example, women have just as many opportunities as men to commit assault and homicide, yet they are crimes with a gender ratio of between 10:1 and 15:1. Opportunism seems unlikely to be a powerful explanation of gender differences.

A more useful approach to explaining why fraud shows the smallest gender difference is to focus on the third finding: large gender differences are found for antisocial behaviour that is marked by impulsivity and aggression. For example, men commit 10-15 robberies for every one committed by a woman. Robbery is the example par excellence of an aggressive act, usually performed impulsively. The robber is not angry, the primary goal is to get money, and the secondary goal is a sense of power over the robbed. How is the gender difference in robbery explained?

According to Campbell and Muncer<sup>20</sup>, there are five explanations:

1. Men are stronger and robbery needs strength. This argument is countered by the observations that a weapon is as effective as strength, and women have equal access to weapons.
2. Men need money more than women. This argument is countered by poverty statistics.
3. Robbery is risky and men are greater risk-takers. In fact, robbery is rarely risky. The adversaries in robbery are rarely equal in terms of numbers, the availability of a weapon or in preparedness. A predominantly female activity such as prostitution is probably riskier than robbery.
4. Most robberies are impulsive, opportunistic acts carried out on the street of the inner city after dark, and this is more the territory of men than women. If this were so, the ratio of this type of robbery compared with a well-planned robbery would be greater for men than it is for women. However, the ratio of planned to spontaneous robberies is the same for men and women<sup>21</sup>.
5. The last explanation, and the one favoured by Campbell and Muncer, is simply that robbery is psychologically rewarding to men and not to women. Men have been

socialised in such a way that their expression of any form of instrumental aggression is reinforced.

**Social learning theories of crime** suggest that the gender difference for many violent crimes such as assaults and robberies might be explained by gender differences in how children are socialised. The general theory has been expressed in various ways:

1. How much aggression is permitted of children by their parents is greater for boys than for girls<sup>11</sup>. This is debatable. For example, mothers do not differ in the degree to which they punish the aggression of boys and girls<sup>22</sup>.
2. Boys are punished more harshly physically than are girls<sup>23</sup>.
3. The peer groups of boys reward aggression by reacting to it<sup>24</sup> while the peer groups of girls ignore it<sup>25</sup>.

It seems clear that boys engage in more rough-and-tumble play than girls throughout the world<sup>26</sup>. However, there is no direct evidence to link a propensity to engage in rough-and-tumble play with a propensity to aggressive behaviour in later life.

Nevertheless, boys initiate and receive more attacks of all kinds than do girls<sup>27</sup>. In general, males are more assertive, less inhibited in expressing anger and more likely to use physical aggression<sup>28</sup>.

Finally, **biological theories of aggression** have been put forward. For example, Money and Ehrhardt<sup>29</sup> found that girls who had been exposed before birth to higher than usual levels of androgens were more likely to be tomboyish and to enjoy rigorous physical activities, including rough-and-tumble play.

In animals, the link between testosterone and aggression is seen most clearly in males that fight directly over access to females. But in many species, access to females is not governed by fighting but by status (which is not necessarily dependent on aggression), and in those species fighting and testosterone are dissociated<sup>30</sup>.

In adolescent boys and young men, there is evidence that androgen levels are correlated with various measures of individual aggressiveness, but it is weak and variable<sup>31</sup>. There are no simple genetic or hormonal factors that can explain the variation in aggressive and antisocial behaviour between individuals or the difference in such behaviour between males and females<sup>30</sup>.

### **(c) Gender differences are greatest in prison, less among those arrested and least among self-reports of antisocial acts**

The chivalry hypothesis argued that the gender difference in imprisonment rates was the result of the more lenient treatment of women. In fact, the opposite may be true: female offenders are said to be punished harshly and inequitably<sup>32,33</sup>. The extreme version of the chivalry hypothesis, that the gender difference is explained entirely by treating antisocial women leniently, is easily refuted: the gender difference in antisocial acts is still apparent before arrest or punishment, although it is certainly smaller<sup>34</sup>.

Nevertheless, once the seriousness of the crime is controlled, it may well be that men are given longer sentences than women. This may be because men commit criminal acts less often under mitigating or provoking circumstances, and express less shame, guilt and remorse to the court when tried.

There is an important corollary: court proceedings and imprisonment are shaming ceremonies which stigmatise rather than reintegrate the offender<sup>7</sup>, and hence may be more likely to provoke further criminal acts in those so shamed, unless the experience in prison includes a therapy aimed at correcting this. (Reintegrative shaming refers to ways in which deviant acts are declared shameful while not stigmatising or casting out the deviant actors, on the condition that they make suitable redress and apology).

Braithwaite's theory has important policy implications for ways of dealing with antisocial behaviour other than courts and imprisonment, and is discussed in detail below.

# Summary

The gender difference in antisocial behaviour probably begins in early childhood, with gender differences in parental control of the expression of aggression. It proceeds with gender differences in the development of self-control, of conscience, and of shame and guilt. Young men are then more likely than young women to commit violent crimes. These are more likely to attract a prison sentence. Even when the crimes are matched for level of violence, the man may receive a longer sentence than the woman because he has not developed the skills necessary to express his guilt. A prison sentence, particularly a longer one, encourages the formation of a criminal subculture and a personal sense of being an outcast or scapegoat, rather than a sense of reintegration with the society that is doing the shaming. This personal and social idea of being excluded encourages recidivism, increasing the gender difference in antisocial behaviour.

## Policy implications

### 1. The link between parenting and antisocial behaviour in children

From a public health point of view, an important subject for mental health research in Australia is the nature of the link between parenting and the appearance and persistence of antisocial behaviour, particularly aggression, in children. This should be complemented by research into the origins of gender differences in the development of conscience and empathy.

### 2. Reducing recidivism

The ideas expressed by Braithwaite<sup>7</sup> about the role of reintegrative shaming in reducing juvenile and adult antisocial behaviour need to be applied to sentencing policy. Some practical examples have been described<sup>35</sup> and will be summarised here.

As part of the punishment of juvenile offenders, innovative meetings, known as community conferences in Australia and as family group conferences in New Zealand, have been established which are conducive to reintegrative shaming, because (a) conference participants include people who respect and care most about the offender, which encourages reintegration; and (b) the victim confronts the offender, which encourages shaming.

The approach in both countries involves assembling in a room the offender and supporters of the offender, who are usually but not exclusively members of the nuclear family, and the victim, accompanied by supporters of the victim, who are also usually members of the nuclear family. The meeting is supervised by a coordinator, who may be a member of the police or one of the staff of a government department such as the Department of Social Welfare.

The offender plays an important role in describing the nature of the offence. The psychological, social and economic consequences of the offence for victim and offender are drawn out in discussion guided by the coordinator. The victim and supporters of the offender usually express their disapproval of the offence. At the same time, the coordinator tries to bring out support for and forgiveness of the offender from the others. Disapproval of the act as bad is combined with an attempt to sustain the identity of the actor as good.

Braithwaite and Mugford<sup>35</sup> suggested that these 'reintegration ceremonies' are sufficiently important to provoke a redesign of contemporary criminal justice systems. They discussed the essential aspects of the ceremony as follows.

The victim supplies important details of the consequences of the offence, of which the offender might otherwise remain ignorant. This prevents the offender from minimising the crime.

The event, but not the perpetrator, is defined as irresponsible or wrong or criminal, by people chosen as better persuaders of the offender than, say, a magistrate. (The authors suggest that these will usually be close kin whom the offender respects. However, it might be love, not respect, for the persuader that is more salient in persuading the offender that the offence was wrong).

The offender is not stigmatised. Traumatic life events suffered by the offender, such as physical or sexual abuse, may be elicited, which encourage the victim and the others to forgive rather than shun the offender.

The supporters of the offender are held accountable for coming up with a plan of action, which acknowledges both individual and collective responsibility for the offence and describes how an apology, reparation, and proof of a new attitude by the offender will take place. The plan of action must be endorsed by all at the meeting, and the victim often has the right of veto. Admitting collective responsibility aids the reintegration of the offender.

The victim is encouraged to feel satisfaction by being granted power. Victims are asked: 'What do you want out of this meeting here today?' In contrast to the powerless victims on courthouse steps who call for more blood, justice or punishment, they often reply that they want the offenders to learn from their mistakes and get their lives back in order. Sometimes they will waive a claim for compensation if the offender appears prepared to change. It seems important that the person who was victimised by the offence is not permitted to go away from the meeting with any persistent sense of remaining a victim. In this way, victims too are reintegrated.

The offender must be encouraged to dissociate his responsible self from his irresponsible self by apologising. The verbal apology may be accompanied by culturally appropriate physical acts such as a handshake, getting on one's knees or bowing. Such acts are incompatible with maintaining a public criminal or delinquent identity as irreversible.

A successful meeting will elicit empathy for both victim and offender. This is usually achieved by acts of self-disclosure which would otherwise remain private and limited to confidants. Victims admit that anyone can make a mistake. The offender agrees that he has hurt more than the victim. Supporters concede that they too have offended in the past.

The ritual of apology has its corollary in the ritual of forgiveness, expressed in the words and acts of the victim. The victim should feel able to narrow his physical distance from the offender, to make eye contact with the offender, to sit next to him while both sign a mutually satisfactory plan of action, to say something like 'I forgive you' in response to the offender's apology, even to embrace the offender. To forgive is to give up the conviction that one has been insulted, the cognitive precursor of the destructive rage felt by the chronic victim. The expression of forgiveness is essential to the victim's reintegration as well as to the offender's.

Reintegration agreements must be followed through to ensure that they are enacted.

The failure of the first meeting, as evidenced by reoffending, must be greeted with relentless optimism. Family conferences are rescheduled, the reintegration ceremony is repeated again and again. The offender's recidivism is interpreted not as his failure but as the failure of the community to give him the right support. The coordinator must never give up by stigmatising the offender.

From the point of view of this chapter's subject, the apparent success of community conferences is of great interest, because they confront and try to reverse some of the very issues which have been highlighted as likely explanations of men's greater tendency to antisocial behaviour: men have been less well socialised by their parents, are less likely to feel bad at doing wrong, are less skilled at expressing sorrow and apology, and are more likely to be stigmatised by traditional shaming ceremonies such as the court appearance and the prison sentence.

## References

1. Mukherjee SK, Dagger D. The size of the crime problem in Australia. 2nd ed. Canberra: Australian Institute of Criminology, 1990.
2. Walker J. Australian prisoners 1991. Results of the National Prison Census 30 June 1991. Canberra: Australian Institute of Criminology, 1992.
3. Home Office. Prison statistics England and Wales 1989. London: HMSO, 1990.
4. Home Office. Criminal statistics England and Wales 1989. London: HMSO, 1990.
5. Adler F. The incidence of female criminality in the contemporary world. New York: New York University Press, 1981.
6. Gibbons DC, Krohn MD. Delinquent behaviour. 4th ed. New Jersey: Prentice Hall, 1986.
7. Braithwaite J. Crime, shame and reintegration. Cambridge: Cambridge University Press, 1989.
8. Shoemaker DJ. Theories of delinquency. 2nd ed. Oxford: Oxford University Press, 1990.
9. Hirschi T. Causes of delinquency. Berkeley: University of California Press, 1969.
10. Gottfredson MR, Hirschi I. A general theory of crime. California: Stanford University Press, 1990.
11. Sutherland EH, Cressey SR. Criminology. 10th ed. New York: Lippincott, 1978.
12. Maccoby EE. Social groupings in childhood: their relationship to prosocial and antisocial behaviour in boys and girls. In: Olweus D, Block J, Radke-Yarrow M, eds. Development of antisocial and prosocial behaviour. Research, theories and issues. New York: Academic Press, 1986.
13. Hagan J, Gillis AR, Simpson J. The class structure of gender and delinquency: towards a power-control theory of common delinquent behavior. *Amer J Sociol* 1985;90:1151-1178.
14. Morris RR. Attitudes towards delinquency by delinquents, non-delinquents and their friends. *Brit J Criminol* 1965;5:249-265.
15. Box S. Deviance, reality and society. London: Holt, Rinehart and Winston, 1981.
16. Jensen GF, Erickson M. The social meaning of sanctions. In: Krohn M, Akers R, eds. Crime, law and sanctions: theoretical perspectives. Beverly Hills: Sage, 1978.
17. Malamuth NM, Check JVP, Briere J. Sexual arousal in response to aggression: ideological, aggressive and sexual correlates. *J Personal Soc Psychol* 1986;50:330-340.
18. Koss MP, Leonard KE, Beezley DA, Oros CJ. Nonstranger sexual aggression: a discriminant analysis of the psychological characteristics of undetected offenders. *Sex Roles* 1985;12:981-992.
19. Alder C. An exploration of self-reported sexually aggressive behaviour. *Crime Delinquen* 1985;31:306-331.
20. Campbell A, Muncer S. Men and the meaning of violence. In: Archer J, ed. Male violence. London: Routledge, 1994.
21. Fortune EP, Vega M, Silverman IJ. A study of female robbers in a southern correctional institution. *J Crim Justice* 1980;8:317-325.
22. Maccoby EE. Social development: psychological growth and the parent-child relationship. New York: Harcourt Brace Jovanovich, 1980.
23. Eron LD, Huesmann LR. The genesis of gender differences in aggression. In: Luszcz MA, Nettelbeck T, eds. Psychological development: perspectives across the life-span. Holland: Elsevier, 1989.

24. Fagot BI, Hagan R. Aggression in toddlers: responses to the assertive acts of boys and girls. *Sex Roles* 1985;12:341-351.
25. Archer J. Childhood gender roles: social context and organisation. In: *Childhood social development: contemporary perspectives*. Hillsdale NJ: Lawrence Erlbaum, 1992.
26. Boulton MJ. The relationship between playful and aggressive fighting in children, adolescents and adults. In: Archer J, ed. *Male violence*. London: Routledge, 1994.
27. Cairns RB. *Social development: the origins and plasticity of interchanges*. San Francisco: Freeman, 1979.
28. Archer J, Lloyd BB. *Sex and gender*. New York: Cambridge University Press, 1985.
29. Money J, Erhardt AA. *Man and woman, boy and girl*. Baltimore: Johns Hopkins, 1972.
30. Turner AK. Genetic and hormonal influences on male violence. In: Archer J, ed. *Male violence*. London: Routledge, 1994.
31. Archer J. The influence of testosterone on human aggression. *Brit J Psychol* 1991;82:1-28.
32. Gibbons DC. *Society, crime, and criminal behavior*. 4th ed. New Jersey: Prentice Hall, 1982.
33. Rutter M, Giller H. *Juvenile delinquency: trends and perspectives*. New York: Guilford, 1984.
34. Smith DA, Visher CA. Sex and involvement in deviance/crime: a quantitative review of the empirical literature. *Amer Sociol Rev* 1980;45:691-701.
35. Braithwaite J, Mugford S. Conditions of successful reintegration ceremonies. *Brit J Criminol* 1994; in press.

**Section 3**

**Factors affecting male  
mental health**

# War and mental health

---

B. I. O'Toole, R. P. Marshall, D. A. Grayson and R. J. Schureck

Department of Psychiatry, University of Queensland  
Commonwealth Department of Human Services and Health, Canberra  
Department of Geriatric Medicine, University of Sydney  
Faculty of Medicine, University of Sydney

---

## Introduction

In war, suffering extends to soldiers and civilians, whether victors or vanquished. For the soldiers and civilians who are invaded by foreigners, for the forces of invasion and for those in touch with them at home, war produces extremes of suffering not only for the time it rages but for the lifetimes of the survivors. War can be 'hell on earth'; the effects on humans have been well documented in recent history: the holocaust, the killing fields of Cambodia, the carnage in the former Yugoslavia are in living human memory. While the horrors of war have been described since ancient times<sup>1,2</sup> it is only in relatively recent times that science has turned its attention to war and its aftermath. Much has been learned, particularly about human reaction to trauma<sup>3</sup>, although little seems to have been learned in the community arena; humans remain an aggressive species and wars are still fought, there is a resistance to recognition, detection and acknowledgment of mental disorder, and there are shortcomings in provision of community treatment services.

In Australia's history, most wars have been fought in foreign countries, thus the direct impact of military invasion has been little felt by the general population, although the infamous 'Brisbane Line' attests to preparations made in expectation of invasion after the attack on Darwin in 1942 and other instances of foreign incursion. Australians at large therefore had no national trauma to bear to the degree of those who lived in Europe during the Second World War, or those in Cambodia during the Pol Pot regime, or those currently living in Bosnia. Immigration policies since the Second World War have changed this situation and now sizeable proportions of the Australian population from all parts of the world — central and southern Europe, the Middle East, South America, Asia — bear the scars of war. For the general population of Australia who were not direct military participants, the effects of war are various: certainly in the Second World War the whole community united in a sense of national purpose and identity, although Vietnam split the community with the moratorium rallies to end the war. During war, suicide rates fall, but there are effects on the families caused by absences of the participant, these effects extending to parenting and often including bereavement. After the war the angst continues for the survivors, particularly among those exposed to the worst of war's horrors. The secondary effects of trauma are transmitted through the combatants' families, as they are left to cope with the returned soldier<sup>4</sup> or the war survivor. Sadly, there has been relatively little scientific inquiry into the effects on families, particularly on children's development.

## The initial postwar cost is suicide

In spite of the ubiquity of psychological suffering, scientific inquiry into the effects of war was generally confined to the physical and often surgical side of war injuries. There were

no large-scale inquiries into mental health. There were, however, a number of large long-term follow-up mortality studies conducted in the United States after the Second World War. These showed that former soldiers suffered an increased suicide risk, particularly in the immediate post-war years, but that generally war veterans died at a lower rate than their community (age-sex matched) peers, arguably because military personnel are among the fittest and healthiest of their generation. These findings — elevated suicide risk and lower overall mortality risk — have largely been replicated in Australia in a study of mortality in Vietnam-era Australian National Servicemen conducted in the early 1980s<sup>5,6,7,8</sup>. They were also the principal findings of a US Centers for Disease Control (CDC) mortality study<sup>9</sup> conducted as a prelude to their study<sup>10,11,12</sup> of health and welfare in US Vietnam-era veterans in the late 1980s (see below). Suicide, then, is the most dramatic early aftermath of war for otherwise ostensibly healthy participants.

It has taken a long time for society to recognise and accept that there were psychological and thus mental health impacts of war on soldiers, their families and their communities. Indeed, it is largely the Vietnam generation of returned US soldiers that has prompted inquiry into the effects of war exposure on combatants. This has resulted in the formal recognition of the entity Post Traumatic Stress Disorder (PTSD) as a subtype of anxiety disorders by the American Psychiatric Association's Diagnostic and Statistical Manual, in its 3rd Edition in 1980 (referred to as DSM-III)<sup>13</sup>. Although only recently formally recognised, PTSD has a long history, even being described in Shakespeare's *Henry IV* (Part 1, Act 2, Scene 3, lines 52-92), in Samuel Pepys' *Diaries* after the Great Fire of London<sup>2</sup> and in accounts after the American Civil War<sup>1</sup>.

## Post Traumatic Stress Disorder: an ongoing cost

Despite its being now well recognised that the psychological response of humans to various forms of extremely stressful trauma are surprisingly uniform, difficulties surrounding the diagnosis of PTSD were compounded by the various formulations in early editions of the DSM: In DSM-I, in 1952, there was a concept of 'gross stress reaction' that recognised acute reactions, but this rather rudimentary concept of acute PTSD was removed from the nomenclature in 1968 with the publication of DSM-II (which, ironically, was the time of greatest troop build-up in Vietnam). Finally, as a result of growing clinical experience and interest in the problems of American Vietnam veterans, it was formulated as a specific entity in DSM-III (1980)<sup>13</sup>; it has later been revised (DSM-III-R, 1987)<sup>14</sup> after further more focused and refined studies. At the present time, PTSD is included as an anxiety disorder in DSM-III-R and includes three major sets of symptoms. In DSM-III-R it is recognised that there can be acute and chronic forms of the disorder (neither of which existed in DSM-II in 1968) and that the onset of the disorder can be relatively immediate or can be delayed, sometimes over many years.

The current criteria for diagnosis of the disorder are:

- (a) Experience of an event that is 'outside the range of usual human experience and that would be markedly distressing to almost anyone';
- (b) Persistent reexperiencing of the event by either recurrent and intrusive recollections, recurrent distressing dreams, sudden acting or feeling the event was recurring, or intense psychological distress at exposure to events that resemble or symbolise an aspect of the event;
- (c) Persistent avoidance of things associated with the trauma or numbing of general responsiveness that was not present before the event;
- (d) Persistent symptoms of increased arousal such as sleep difficulties, irritability, concentration difficulty, hypervigilance, exaggerated startle, or physiologic reactivity upon exposure to events that resemble or symbolise the event;
- (e) Duration of symptoms for at least one month.

If symptoms begin six months or more after the event, this qualifies for the delayed subtype of PTSD, although it is acknowledged that Group B symptoms may arise months or years after the event, while Group C symptoms would usually have been present throughout the intervening period.

Thus, the disorder consists of the various features of the event itself, of the phenomena of reexperiencing the trauma, of symptoms of avoidance and numbing, and of increased arousal. The minimum duration of one month allows discrimination of the disorder from the transient reaction that may arise from exposure to traumata and which may settle relatively quickly (i.e., within several days or weeks) in some people. Scandinavian research suggests that, of all people exposed to a horrifying event, about 70 per cent will not experience any long-lasting psychological after-effects, about 10 per cent will experience transient upsetting effects that will settle down quickly, a further 10 per cent will have more serious reactions that will settle only after time and possibly with professional help, and the last 10 per cent will go on to experience long-lasting seriously debilitating consequences. In Australia, the long-term consequences are tangible: currently half of all TPI (Totally and Permanently Incapacitated) pensions from the Vietnam conflict paid by the Department of Veterans Affairs are due to PTSD.

### **PTSD is not easily recognised**

There are several problems in recognising PTSD. The diagnosis of the disorder and its differentiation from other disorders are not always easily accomplished. First, one has to establish that the person has been exposed to an event that would cause horror. This is important because there are symptoms which are directly referable to the trauma itself, for instance reexperiencing of the specific traumatic event, distress at reminders of it, nightmares and flashbacks involving images or symbols of it. This can be a problem because the avoidance and denial features often may cause sufferers to be reticent and not speak about things that would make a clinician suspect the presence of the disorder. There are also other symptoms as part of the disorder (emotional numbing, arousal, cognitive disturbances) which may not refer to any specific event and which may also occur in other mental disorders. PTSD has some shared features with other disorders and PTSD sufferers often come for treatment with symptoms of anxiety, depression, or with physical complaints that can lead to PTSD being missed. Another common presentation is substance abuse, particularly alcohol. This may arise gradually, but is often related to the individual's attempt to deal with distressing symptoms such as memories, anxiety and arousal.

Arguably, PTSD is the major and ongoing psychological cost of war, and it is no wonder that PTSD occurs more frequently in combat soldiers than in the general community, although PTSD also occurs there<sup>15</sup>. It was only during the 1970s that it was recognised that combat-related PTSD had similar features to disorders noted after torture, rape, crime victimisation, and natural disasters; the 'battered wife syndrome' was later recognised to be PTSD in one of its many manifestations. PTSD has been reported after conventional wars such as the First and Second World Wars<sup>16,17</sup>, the Lebanon War<sup>18</sup> and the Falklands War. The disorder has been observed in survivors of concentration camps and survivors of torture such as the refugees from Cambodia. It has also been reported in survivors of natural and man-made disasters such as the Granville train disaster of 1973, the Hyatt Skywalk collapse in the US, the Beverley Hills Supper Club fire, and cyclone Oscar which devastated Fiji. In other trauma circumstances such as domestic violence and child abuse, it has also been identified. It has been described in rescuers and helpers after such events as the Mount Erebus air crash and the Ash Wednesday bush fires<sup>19,20,21</sup>. Australian work has been reviewed by Burges-Watson<sup>22</sup> and a general review of the social, psychological and psychiatric consequences of exposure to trauma has been supplied by Raphael<sup>23</sup>.

Attitudes have changed as fashions of diagnosis and treatment have changed. First World War veterans were thought to be suffering from 'shell shock', or even 'disordered action

of the heart'. The prevailing attitude after the Second World War was that the psychological effects of combat exposure, if persistent, were due to an inherent weakness, often labelled 'character disorder', as the basis of the illness diagnoses featured 'neurasthenia', 'inadequate personality', 'anxiety neurosis' and similar stigmatising labels. Because PTSD is frequently accompanied by other disorders such as alcohol abuse, and its sufferers, particularly military combat soldiers, are prone to act out in aggressive ways, this reinforced the notion that an inherent flaw in the person was responsible. In the 10 years after the end of the Vietnam conflict, it remained unfashionable or unwarranted to have any mental health after-effects. The war itself was unpopular, and its warriors swept under the carpet and encouraged to put the past behind them as soon as possible. There is no doubt that a 'stiff upper lip' may be useful during conflict, particularly if the man is expected to return to battle, but it is not a useful way of dealing with the problems of the veteran-now-civilian. However, rather than at the urging or human concern of any government, it was the fear of poisoning by exposure to pesticides (herbicides, insecticides, antimalarials) and the possible subsequent liabilities of government and the chemical companies that has prompted studies of the Vietnam generation, particularly in the US but also in Australia. These studies reveal a good deal about mortality effects and health effects on survivors.

## Research after the Second World War

No large-scale government-sponsored research was done in Australia after the Second World War such as was the case in America during the decades from the mid 1940s to the late 1960s. Studies in the US included mortality studies of special groups, such as men diagnosed with or discharged due to various medical conditions evident while in service such as 'psychoneurosis'<sup>24,25</sup> and alcoholism<sup>26</sup>. Other special groups studied in large scale after the Second World War included prisoners of war<sup>27</sup> and traumatic amputees<sup>28</sup>. One of these studies<sup>24</sup> used a cohort of men who were born 1914-1918 and discharged from the US Army with a diagnosis of 'psychoneurosis' after serving at least 90 days. These men were found to have 20 per cent higher mortality rate than their army peers who were not discharged 'psychoneurotic'. In addition, psychoneurotics' suicide rate was 3.15 times that of the controls and their homicide death rate was 2.6 times higher. This study also showed that the mortality rate of the sample of controls (drawn from the files of National Life Insurance, covering 98 per cent of Second World War veterans) was only 87 per cent of the rate in the general population. The elevated suicide rate found in general follow-up research may be accounted for by the excess in those who experience illness while in service.

### Australian POW study

The major Australian study of Second World War veterans<sup>29,30,31,32</sup> compared 170 randomly selected prisoners of war (POWs) with 172 randomly selected non-POW veterans 40 years after the end of the war. Clinical psychiatric interviews were conducted with both groups, focusing on depression, anxiety and alcohol-related illnesses. The two groups were very similar on a range of social and demographic factors but the POWs were significantly more depressed than the non-POW veterans. They were alike in the prevalence of post-war alcohol abuse and dependence diagnoses (16 per cent for POWs versus 15 per cent for non-POWs) but on all other diagnoses, the POWs' prevalence exceeded that of the non-POWs: 71 per cent versus 46 per cent for any diagnosis; 45 per cent versus 27 per cent for anxiety disorders; 47 per cent versus 23 per cent depression (major and other combined). In both groups, given a veteran had reported a disorder other than major depression, it was far more likely to be recurrent and long lasting rather than an isolated, single period of illness. The major occurrence of episodes was in the eight years after the war for each illness; between half and three quarters of all its episodes occurred in this 1945-1953 period. The remaining episodes seem uniformly spread over the period 1954-1983, with a trend indicating increasing frequency with the

passage of time. There were no differences between the two groups in this temporal pattern. The two groups also showed similar personality profiles, except that the POWs demonstrated a significantly higher level of introversion, which the authors attributed to their higher depression. The authors emphasise that the results of the study rests on the accuracy of self-reporting of their veteran subjects, although they observed that, particularly among the POWs, there were very few men who could be considered to be 'complainers', which possibly contributes to under-reporting. Stoicism is often found among veterans of all conflicts and avoidance and denial are common features of PTSD, making it difficult to diagnose in veterans.

The principal shortcoming of this study, however, was the absence of a 'control' group reflecting community prevalences of these illnesses. The 172 veterans in the non-POW group were chosen to be like the POWs other than that they avoided capture. We would expect such a group, nonetheless, to have undergone significant war stress and trauma, although perhaps not as severe as that of the POWs. The fact that POWs showed more anxiety and depression than non-POWs would indicate that these after effects of war would be expected in the non-POW group as well. In the above study, for instance, there were no significant differences between POWs and non-POWs on anxiety measures but they scored 20 per cent and 16 per cent higher respectively than age-matched male non-veterans normal scores. This point is underlined when it is acknowledged that only the healthier sector of the male community serve in the military forces, and that something of a stoic ethos may prevail among veterans, possibly leading to under-reporting of psychiatric illness, particularly for this generation of men.

## Studies of the Vietnam generation

As a response to the 'Agent Orange' controversy in the late 1970s, the Australian Government set up the Australian Veterans Health Studies (AVHS)<sup>5,6,7</sup> to examine the effect of chemical and other exposures in Vietnam. Studies were conducted of the relative incidence of birth defects among children of veterans and non-veterans, of mortality rates of National Service veterans compared with non-veterans, and of the feasibility of a comprehensive health study (including mental health). This health study was planned but was never carried out, in spite of being called for by the then Royal Commission into herbicide use in Vietnam<sup>33</sup>. In the US, there was a swift response in the conduct of the 'Legacies of Vietnam' project<sup>34</sup> and the 'Ranch Hand Study' conducted by the US Air Force<sup>35,36</sup> ('Operation Ranch Hand' was the code name for the herbicide spraying operation). This study was of large proportions and included physical examinations, psychiatric interviews of veterans and their families in comparing 'ranch handers' with other air force personnel who served at the same time and who were matched for age, sex, race, rank and job in the air force. It found principally that there were few differences between the 'ranch handers' and the controls except in subjective reports of bodily symptoms; no significant health differences were found on physical and psychiatric examination.

After the 'Agent Orange' controversy had been raging for half a decade, in the mid 1980s the US Government sponsored two independent very large studies of Vietnam-era veterans ('Vietnam veterans' served in Vietnam, 'era veterans' served in the military during the Vietnam war but did not serve in Vietnam). These two studies took as their focus physical and particularly psychological health. The Vietnam Experience Study<sup>9,10,11,12</sup> was conducted by the Centres for Disease Control (CDC) while the National Vietnam Veteran Readjustment Study<sup>37,38</sup> was conducted by the Research Triangle Institute (RTI). While their prevalence estimates for various disorders are different, and thus the estimate of how much ill health and disability can be attributable to war may be different in each study, together they provide the most technologically advanced data to hand on the effects of war on the people who were involved in and who may still suffer from it.

## The Australian Vietnam Veterans Health Study

In the mid 1980s, an Australian team consisting of the current authors (then from Sydney University and the Vietnam Veterans Counselling Service) began planning to obtain funding for a study of the physical and psychological health of a random sample of Australian Vietnam veterans. Like the American studies, the Australian study was designed to measure the prevalence of illness, particularly psychiatric illness, in a sample of veterans and to investigate the contribution of war service to this. All three studies used slight modifications of the same standard psychiatric assessment interview, developed for population studies. This makes it possible to compare Australian data with American data, which is particularly useful given that one of the American studies also used a group of community controls, which was beyond the resources of the Australian study. If the overall American and Australian populations bear comparison, then these data may provide further insights about the effects of war. The Australian study has only recently been completed and the results have not yet made their way to publication in scientific journals. Some results of this national study of a random sample of 1000 Australians who were posted in the Australian Army to Vietnam between 1962 and 1972 are reported below.

In addition to comparisons with American Vietnam veteran figures, it is fortuitous that the same interview instrument has been used in two Australasian general population studies of mental health. One of these was a representative sample of 1498 men and women aged 18-64 in Christchurch, New Zealand, during 1986<sup>39,40</sup> and the other was a study of 1009 adults, men and women 18 years or older, in the Riverland region of South Australia during 1991<sup>41</sup>. Table 1 below presents the prevalences (percentages) for men for some illnesses in these two populations, and for the Australian veterans interviewed in the Australian Vietnam Veteran Health Study.

It can be seen that the Australian veterans have slightly less depression and anxiety than the New Zealand population, and much less than the Riverland population, both over their whole lifetime and in the last six months. Note that the Riverland study was conducted partly out of concern for the local agricultural community, which has seen a series of harsh times since the mid 1980s, which might account for the high levels of anxiety and depression. By contrast, the veterans have more problems associated with alcohol abuse or dependence, and dramatically more phobias, particularly social phobia, again both over lifetime and currently. The New Zealanders, on the other hand, have much more anxiety disorders and alcohol problems than the Riverlanders, but less depression and phobias.

**Table 1. Prevalences (percentages) of several psychiatric diagnoses for the Christchurch (denoted NZ), Riverland (denoted RIV) and Australian Vietnam veteran (denoted AVV) populations**

Diagnoses	Lifetime prevalences			Six-month prevalences		
	NZ	RIV	AVV	NZ	RIV	AVV
Major depression	8.8	15.1	6.0	3.4	10.6	0.9
Panic	0.9	2.8	3.1	0.5	2.1	1.9
Obsessive-compulsive	1.0	1.5	2.5	0.6	1.1	1.2
Generalised anxiety	27.1	11.6	7.3	7.7	9.6	3.6
Alcohol abuse/dep.	32.0	18	41.1	14.1	6.9	19.2
Antisocial personality	4.2	4.1	5.6	1.3	0.7	1.5
Agoraphobia	2.7		2.3	1.0		1.7
Social phobia	4.3		14.4	2.8		10.3
All phobias	6.8	12.1	21.6	4.4	7.6	15.5
Somatisation	0	5.8	0.3	0	5.3	0.3

Table 2 below summarises lifetime prevalences from the two US studies and the Australian study, and Table 3 presents similar 'current' illness rates. Note the Australian and one of the US studies (RTI) used six months to define current, while in the other (CDC) study 'current' refers to only the last month. In addition, as mentioned above, Australian usage of the term Vietnam veteran means anyone who saw service in Vietnam; in American usage these people are called 'Vietnam theatre veterans'. Additionally the Americans use the term 'era veteran' to denote anyone who was in the military during the Vietnam war but who did not serve in Vietnam; there is no similar Australian term. In addition, one of the US studies included a civilian sample, matched on age, sex and race/ethnicity to the Theatre sample.

**Table 2. Lifetime prevalences for the Research Triangle Institute study (RTI), the Centres for Disease Control study (CDC) and the Australian Vietnam Veteran Health Study (AVVS). The American studies comprise Vietnam theatre veterans (termed 'vets'), Vietnam 'era' veterans, and in the RTI study a community control group (labelled 'cntrl')**

Diagnoses	RTI			CDC		AVVS
	Vets	Era	Cntrl	Vets	Era	Vets
Major depression	5.1 <sup>a,b</sup>	4	1.5	12.5 <sup>a</sup>	8	6
Dysthymia	4.2 <sup>a,b</sup>	2.8	1.2			9
Panic	1.8	1.2	2.1	3.4 <sup>a</sup>	1.5	3.1
Obs.-compulsive	1.8 <sup>b</sup>	1.2	0.3	1.7	1.1	2.5
Generalised anxiety	14.1 <sup>a,b</sup>	10.1	9.9	23.5 <sup>a</sup>	17.2	7.3
Alcohol abuse/dep.	39.2 <sup>b</sup>	37.9	25.2	50.6 <sup>a</sup>	41.8	41.1
Antisocial pers.	9.5 <sup>b</sup>	9.4	4	23 <sup>a</sup>	21.1	5.6
Simple phobia				8.2 <sup>a</sup>	4.1	10.2
PTSD	Not available	Not available	Not Available	14.7 <sup>a</sup>	3.2	17.1

Footnotes

a. Statistically significant difference between Vietnam theatre and era veterans

b. Statistically significant difference between Vietnam veterans and community controls

Overall, the prevalences in the US and the Australian veteran samples agree more closely than do those between the Australian veterans and the general populations presented in Table 1. While there is not a very high prevalence of depression (compared with general community levels), it does appear to be related to war service. Similarly for generalised anxiety disorder, although the prevalence of this illness is markedly less among Australian than US veterans. Problems with alcohol are marked among all veteran populations, but this does not seem to be so clearly war related, and may in part be a by-product of military service. Similarly, antisocial personality disorder appears to be more military related than war related. Even so, this is notably less common among Australian than US veterans. The rarer illness of obsessive-compulsive disorder may also be war related.

**Table 3. 'Current' prevalences for the RTI study (last six months), the CDC Study (last month) and the Australian Vietnam Veteran Study (AVVS; last six months)**

Diagnoses	RTI			CDC		AVVS
	Vets	Era	Cntrl	Vets	Era	Vets
Major depression	2.8 <sup>a,b</sup>	0.5	0.4	4.5 <sup>a</sup>	2.3	0.9
Panic	0.9	0.6	0.4			1.9
Obs.-compulsive	1.5 <sup>a,b</sup>	0.0	0.0			1.2
Generalised anxiety	4.5	3.2	2.9	4.9 <sup>a</sup>	3.2	3.6
Alcohol abuse/dep.	11.2	9.2	7	13.7 <sup>a</sup>	9.2	19.2
Antisocial pers.	2.0 <sup>b</sup>	1.1	0.0			1.5
Simple phobia						7.3
PTSD	15.2	2.5	1.2	2.2	Not available	11.4

Footnotes:

a. Statistically significant difference between Vietnam theatre and era veterans

b. Statistically significant difference between Vietnam veterans and community controls

The level of PTSD over a lifetime in the American and Australian studies are close. The current prevalences vary somewhat, probably because of the differences in defining 'recent' (six months or one month). The illnesses that show an effect of war on lifetime prevalences, also tend to show this effect for current prevalences. This indicates that these after-effects of war service do not readily dissipate, but remain with many of these men 20 or so years, at least, into their attempted readjustment.

## Conclusions

Taken together, what can be said about the effect of war on the mental health of Australian war veterans? There would appear to be three major observations that emerge.

First, although prevalence rates of depression and anxiety are lower among our Vietnam veterans than the community, the evidence indicates that the degree of this illness is influenced by war stress, and that the effect of war persists in many veterans for many years.

Second, veterans report high lifetime prevalences of alcohol-related problems, but these do not seem as related to war stress as to military life stress. This result is in accord with the Australian POW study failure to find a difference in alcohol related problems between POWs and non-POWs. However, the American studies indicate that their current excess of alcohol problems is war related. This may be because those with more severe war stress have alcohol problems which show uncommon persistence throughout their post war lives, or because they later develop such problems as an indirect effect of their war stress.

Third, and perhaps most surprisingly, there is clear evidence among our Vietnam veterans of high levels of lifetime and current phobic disorders, particularly simple and social phobia. The CDC data indicate that simple phobia is clearly war related (they did not study the other phobias), and the Second World War study describes a strongly war-related imbalance in post war 'Anxiety Disorders' — combined disorders of generalised anxiety, panic disorder, obsessive-compulsive neurosis, agoraphobia, social phobia and post-traumatic stress disorder — 45 per cent among POWs compared with 27 per cent among non-POWs.

In addition it must be noted that recognition of veterans' problems has been hard won, both in America and in Australia, as elsewhere in the world. While the size of the Second World War population is dwindling (half of all men born in Australia currently over the age of 65 are the Second World War veterans) and the size of the Korean and Vietnam forces constitute a small proportion of the population, even of their cohort peers, when added to the effects on families, particularly children who grow up in a disturbed household, the problem assumes much larger proportions. An added complication of the Vietnam conflict (never officially declared a 'war') is in the reduction of services for veterans compared with the Second World War, and the refusal of recognition of their contribution which prompted the veteran community to hold a 'Welcome Home Parade' in Sydney in 1987, attended by 25,000 veterans, or about half of the entire veteran population. Social and general phobias may be seen as a direct result of community, military and government disdain for the veterans of Vietnam. Alcohol abuse may be the direct effect of military canteen or mess socialisation and as self medication for psychological problems.

### **The hidden other victims in Australia**

As alluded to in the introduction, many Australians who have immigrated from war-torn countries would have been exposed to trauma to a degree similar to that experienced by combatants, or worse when incarceration and torture are taken into consideration. As well as refugees arriving at airports there are the 'boat people', whose horrors also include attack by pirates, hazardous natural conditions and loss of life on the journey. Several initiatives have been taken to bring services to these victims of trauma, although the full extent of the problem remains largely unknown, and the availability of services insufficiently widespread. Problems of detection and treatment are exacerbated when language and cultural difficulties present themselves. Cultural reticence to disclose or discuss exposure to trauma results in failure to suspect, and therefore detect, traumatic reactions.

If the US community epidemiological data<sup>15</sup> apply to Australia, then at least 1- in-100 people have or have had the disorder PTSD, and this rate rises in people known to have been directly exposed to trauma (such as combat soldiers and other occupational groups); this makes it a sizeable problem for the community. However, there are no general community data for Australia, and little research into subgroups such as refugees, among which it would be suspected to be high. In addition, certain other subgroups of the Australian population such as police, fire, ambulance and emergency services regularly experience events that have potential to cause PTSD. There are other occupational groups at higher risk of exposure to trauma: bank and financial institution employees and small businesses handling cash. At present, no community service exists to meet the needs of such people when they are exposed to trauma.

In 1980, the Australian government set up the Vietnam Veterans Counselling Service (VVCS) to assist veterans and their families with their psychological health. It is a unique service in that it has gathered a good deal of expertise in trauma-related counselling and therapy, and a first-hand experience in the secondary effects of trauma. Although chronically under-resourced, it provides a good model for other treatment services dealing with the primary and other effects of traumatic exposure, particularly war caused. It has been favourably reviewed several times (not least by a House of

Representatives committee of inquiry, as well as the Royal Commission<sup>33</sup>) and recommendations made for improving its staffing and support levels, and hence its effectiveness. However, its administration and its support remain in the doldrums in a government department that sees itself 'winding down' as the bulk of its clients (the Second World War veterans) age and decline in numbers. The VVCS is available for veterans and their families, but there is no ready access for other community groups to this or any similar service. Indeed, there has never been an investigation documenting the need for a similar service to either occupational groups or the community at large. Until this problem is recognised, detection and support for these other groups remains only a hope.

## References

1. Trimble MR. Post-traumatic neurosis. New York: John Wiley & Sons; 1981.
2. Daly RJ. Samuel Pepys and post traumatic stress disorder. *Br J Psychiatry* 1983;143:64-68.
3. Wilson JP, Raphael B. International handbook of traumatic stress. New York: Methuen, 1993.
4. Solomon Z, Wagsman M, Levy G, Fried B, Mikulincer M, Benbenishty R, Florian V, Bleich A. From the front line to home front: a study of secondary traumatisation. *Fam Process* 1992, 31:289-302.
5. Fett M.J., Dunn M., Adena M.A., O'Toole B.I., Forcier L. The mortality report. Part I. A retrospective cohort study of mortality among Australian national servicemen of the Vietnam conflict era, and an executive summary of the mortality report. Canberra: Australian Government Publishing Service, 1984.
6. O'Toole B.I., Adena M.A., Fett M.J. The mortality report. Volume II. Factors influencing mortality rates of Australian national servicemen of the Vietnam conflict era. Canberra: Australian Government Publishing Service, 1984.
7. Forcier L., Hudson H.M., Fett M.J. The mortality report. Part III. The relationship between aspects of Vietnam service and subsequent mortality among national servicemen of the Vietnam conflict era. Canberra: Australian Government Publishing Service, 1984.
8. Donovan J., Adena M.A., Rose G., Battistutta, D. Case-control study of congenital anomalies and Vietnam service, Canberra: Australian Veterans Health Studies, Australian Government Publishing Service, 1983.
9. Centers for Disease Control Vietnam Experience Study: Post-service mortality among Vietnam veterans. *JAMA J Am Med Assoc* 1987;257:790-795.
10. Centers for Disease Control Vietnam Experience Study: Health status of Vietnam veterans. I. Psychosocial characteristics *JAMA J Am Med Assoc* 1988;259:2701- 2707.
11. Centers for Disease Control Vietnam Experience Study: Health status of Vietnam veterans.II Physical health. *JAMA J Am Med Assoc* 1988;259:2708-2714.
12. Centers for Disease Control Vietnam Experience Study: Health status of Vietnam veterans.III Reproductive outcomes and child health. *JAMA J Am Med Assoc* 1988;259:2715-2719.
13. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 3rd edition, Washington, DC: APA, 1980.
14. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. Revised 3rd edition., Washington, DC: APA 1987:247-251.
15. Helzer JE, Robins LN, McEvoy L. Post-traumatic stress disorder in the general population: findings of the epidemiological catchment area Survey. *N Engl J Med* 1987;317:1630-1634.

16. Grinker R, Spiegel JP. Men under stress. Philadelphia: Blakiston Co, 1945.
17. Kardiner A, Spiegel H. War stress and neurotic illness. New York: Haeber, 1947.
18. Solomon Z, Weisenberg M, Schwarzwald J, Mikulincer M. Post-traumatic stress disorder among front line soldiers with combat stress reaction: the 1982 Israeli experience. *Am J Psychiatry* 1987;144:448-454.
19. McFarlane AC. Post-traumatic morbidity of a disaster: A study of cases presenting for psychiatric treatment. *J Nerv Ment Dis* 1986;174:4-14.
20. McFarlane AC. Long-term psychiatric morbidity after a natural disaster: implications for disaster planners and emergency services. *Med J Aust* 1986;145:561-563.
21. McFarlane AC. Post-traumatic phenomena in a longitudinal study of children following a natural disaster. *J Amer Acad Child Adolesc Psy* 1987;26:764-769.
22. Burges-Watson P. Post-traumatic stress disorder in Australia and New Zealand: a clinical review of the consequences of inescapable horror. *Med J Aust* 1987;147:443-447.
23. Raphael B. When Disaster Strikes. New York: Basic Books, 1986.
24. Keehn RJ, Goldberg ID, Beebe GW. Twenty-four year mortality follow-up of army veterans with disability separations for psychoneurosis in 1944. *Psychosom Med* 1974;35:27-46.
25. Keehn RJ. Probability of death related to army life. *Lancet* 1974;2:170.
26. Robinette CD, Hrubec Z, Fraumeni JF. Chronic alcoholism and subsequent mortality in World War II veterans. *Amer J Epidemiol* 1979;109:687-700.
27. Keehn RJ. Follow-up studies of World War II and Korean Conflict prisoners. *Am J Epidemiol* 1980;111:194-211.
28. Hrubec Z, Ryder RA. Traumatic limb amputations and subsequent mortality from cardiovascular disease and other causes. *J Chron. Dis* 1980;33:239-250.
29. Tennant CC, Goulston KJ, Dent OF. The psychological effects of being a prisoner of war: forty years after release. *Am J Psychiatry* 1986;143:618-621.
30. Tennant CC, Goulston KJ, Dent OF. Clinical psychiatric illness in prisoners of war of the Japanese: forty years after release. *Psychol Med* 1986;16:833-839.
31. Tennant CC, Goulston KJ, Dent OF. Australian prisoners of war of the Japanese: post-war psychiatric hospitalisations and psychological morbidity. *Aust N Z J Psychiat* 1986;20:334-340.
32. Venn AJ, Guest CS. Chronic morbidity of former prisoners of war and other Australian veterans. *Med J Aust* 1991;155:705-712.
33. Royal Commission on the Use and Effects of Chemical Agents on Australian Personnel in Vietnam. Final report (volumes 1-9). Canberra: Australian Government Publishing Service, 1985.
34. Egendorf A, Kadushin C, Laufer RS, Rothbart G, Sloan L. Legacies of Vietnam: comparative adjustment of veterans and their peers. Washington, DC: Center for Policy Research Inc.; 1981; Publication V101, 134-630.
35. Lathrop GD, Wolfe WH, Albanese RA, Moynahan PM. An epidemiological investigation of health effects in air force personnel following exposure to herbicides: baseline morbidity study results. San Antonio, Texas: US Air Force School of Aerospace Medicine, February 1984.
36. Lathrop GD, Wolfe WH, Machado SG et al An epidemiological investigation of health effects in Air Force personnel following exposure to herbicides: first follow-up examination results. San Antonio, Texas: US Air Force School of Aerospace Medicine, October 1987.
37. Kulka RA, Schlenger WE, Fairbank JA, Hough RL, Jordan BK, Marmar CR, Weiss DS.

- Trauma and the Vietnam generation. Report of findings from the national Vietnam veterans readjustment study. Vol 1. New York: Brunner/Mazel, 1990.
38. Kulka RA, Schlenger WE, Fairbank JA, Hough RL, Jordan BK, Marmar CR, Weiss DS. The national Vietnam veterans readjustment study. Vol 1. Tables of findings and technical appendices. New York: Brunner/Mazel, 1990.
  39. Wells JE, Bushnell JA, Hornblow AR, Joyce PR, Oakley-Browne M. Christchurch psychiatric epidemiology study, Part 1: Methodology and lifetime prevalence for specific psychiatric disorders. *Aust N Z J Psychiat* 1989;23:315-326.
  40. Oakley-Browne M, Joyce PR, Wells JE, Bushnell JA, Hornblow AR. Christchurch psychiatric epidemiology study, part II: six-month and other period prevalences of specific psychiatric disorders. *Aust N Z J Psychiat* 1989;23:327-340.
  41. Clayer JR, McFarlane AC, Czechowicz AS, Wright G. Mental health in the Riverland. Adelaide: South Australian Health Commission, Mental Health Research and Evaluation Centre, 1991.

# Unemployment and mental health

---

A. H. Winefield

Department of Psychology  
University of Adelaide

---

In Western societies, work has traditionally been regarded as an integral feature of men's lives and young boys have been encouraged to aspire to the role of a successful breadwinner able to support a wife and family. After Freud and Erikson, many mental health experts have seen transition to the work role as a crucial aspect of men's healthy psychological development. This role has been threatened in recent years by increasing levels of unemployment. Since 1990, for example, the levels of unemployment have increased sharply in many countries, with half of the OECD countries now showing rates of 10 per cent or more<sup>1</sup>. There is increasing evidence in the research literature suggesting a link between unemployment and mental health in men, although a number of issues remain unresolved. Perhaps the most obvious of these issues concerns the role of poverty (or relative poverty). Can the psychological distress that usually follows involuntary job loss be explained solely in terms of economic deprivation or are other factors involved? Another controversial issue concerns the extent to which the psychological distress observed in unemployed men is caused by job loss (social causation), or whether men who are psychologically distressed for other reasons tend to become unemployed (drift). It is known that individuals vary in how they react to unemployment, as well as to other environmental stressors, and much research has been devoted to identifying factors that might moderate emotional reactions to job loss. Factors that have been studied include age, unemployment duration, work commitment, socioeconomic status, ethnic origin, financial security, and social support.

## Methodological approaches

### Studies of aggregate data

Different research methods have been used to study the possible link between unemployment and mental health. One approach is to analyse large-scale statistical (i.e., aggregate) data that have been collected in the past. For example, Brenner<sup>2</sup> carried out complex analyses on aggregate data which showed a strong relationship between the employment rate in manufacturing industries and admission to mental hospitals in New York State from 1910 to 1967. Although the results of such analyses are suggestive, they do not necessarily establish that involuntarily job loss produces a decline in mental health in the individual. Other explanations are possible. For example, tolerance of mental ill-health (but not mental ill-health itself) might increase during times of economic depression. Another possibility is that it was not the job losers themselves who were admitted to mental hospitals but their dependants, or perhaps their employers faced with bankruptcy.

### Case studies

Clearly, evidence from aggregate studies needs to be supplemented by studies focusing on the individual in order to establish a causal connection between unemployment and

mental ill-health. Some studies have been based on in-depth case study interviews<sup>3,4</sup>. They present vivid and graphic details about how some men respond to job loss, but, because the groups are self-selecting, they may be unrepresentative and therefore it may be unwise to attempt to generalise from them.

## **Cross-sectional studies**

Cross-sectional studies compare employed and unemployed groups of men at a single point in time. These studies are superior to those based on case studies because they allow quantification. For example, it has been shown that unemployed groups are significantly more anxious and depressed and display lower self-esteem than employed groups. Such studies are valuable in establishing psychological correlates of unemployment, but they are not able to establish causes. Although it may well be plausible to assume that the observed differences in mental health were consequences of employment status, it is equally plausible to assume that individuals high in anxiety or depression and low in self-esteem might be the ones most likely to be laid off as well as the least likely to be re-employed (or to be offered jobs in the first place). A third possibility is that the mental ill-health and the unemployment might both be consequences of a third factor, such as the death of a loved one, or a physical injury.

## **Longitudinal studies**

To demonstrate a causal connection between unemployment and a decline in mental health, it is necessary to observe the same individuals over time. This kind of study is known as a longitudinal study. If it could be shown, by comparing them before and after job loss, that a group of individual job losers displayed a decline in mental health after job loss, this would suggest a causal connection. However, even this kind of evidence is open to other interpretations. For example, suppose a comparison group of non job losers, individuals observed at the same time, showed a similar decline in mental health. In that case, we would seek a different explanation. Perhaps many people in the community, regardless of their employment status, experienced a decline in mental health because of some environmental disaster, such as a bushfire or an earthquake.

Ideally, a longitudinal study which aims to demonstrate the effects of job loss on men's mental health should compare two groups of men on at least two occasions: before and after the job loss (arising say, from an organisation introducing large scale staff cuts, or 'restructuring'). This is known as a prospective longitudinal study. The two groups would comprise job losers and non job losers which, ideally, would be matched initially in terms of their mental health. If the job losers showed a significant decline in mental health after job loss, whereas the other group showed no change, it would seem reasonable to attribute the decline in mental health to the job loss. Unfortunately, very few such studies have been reported in the literature. The reason is fairly obvious. A researcher would embark on such a study only if he or she had good reason to believe that an organisation was about to retrench some of its workers. In that case, the workers themselves would also be aware of the threat and their mental health would have been affected already. Indeed, some studies in the US<sup>5</sup> and in Sweden<sup>6</sup> have shown that the anticipation of involuntary job loss can be even more distressing than the event itself.

Most of the longitudinal studies to have been reported have begun with a group of unemployed men and studied them over a long period, during which time some will have reentered the workforce<sup>7,8,9</sup>. There is some evidence from such studies that men show improved mental health after reentry into the workforce, as well as decreased mental health after further job loss. Although such evidence is convincing, it may not be generalisable because of the absence of satisfactory baseline measures of mental health (taken before the initial job loss) as well as the lack of a comparison group of employed men.

Some longitudinal studies have focused on school leavers, comparing at-school baseline measures of mental health with later measures taken after the youngsters have left school

and entered the workforce. Such prospective longitudinal studies avoid some of the methodological difficulties often encountered in prospective longitudinal studies of mature-age job losers. First, the at-school baseline measures are not confounded with fear of job loss as is usual with older workers. Second, failure to find work (or job loss) in a recent school leaver does not have the same financial implications as it does for an older man who is likely to have a dependent wife and children, as well as a mortgaged house and car. Indeed, the unemployed school leaver is unlikely to be worse off financially than he was at school. A number of such studies have been reported in the literature including those by Banks and Jackson<sup>10</sup> in the UK, as well as a number of Australian studies<sup>11,12,13,14</sup>. Findings from these studies will be described in the final section.

## Outcome measures

Many studies have relied on self-report measures or inventories. Some of the most commonly used inventories have been designed to detect minor mental disorder (potential cases). Others have been designed to measure symptoms of anxiety or depression, or somatic symptoms, or characteristics such as self-esteem, perceived control over the environment (internal/external locus of control), hopelessness, social alienation, or depressed mood.

## Theoretical approaches

Although much of the research concerned with the effects of unemployment on men's mental health has been atheoretical, a number of theories have been advanced to try to explain its effects. Four theories which have been proposed specifically to explain psychological responses to unemployment are: stages theory, deprivation theory, agency restriction theory, and the vitamin model.

### Stages theory

Stages theory assumes that the psychological reaction to unemployment can be described sequentially as shock, optimism (associated with increased effort to regain work), pessimism, and finally resignation. Overall, research evidence provides little support for such theories<sup>15,16</sup>.

### Deprivation theory

Jahoda's deprivation theory<sup>17,18</sup> assumes that employment has manifest benefits (earning a living) and latent benefits (helping to keep us in touch with reality). The latter provide a time structure for the waking day, regular social contacts, external goals, identity, and enforced activity. Jahoda has argued that even bad jobs are preferable to unemployment. This latter assertion, however, is inconsistent with recent research findings which have shown that unsatisfactory jobs are just as bad as (or even worse than) unemployment from the point of view of mental health (and physical health).

### Agency restriction theory

Fryer has criticised deprivation theory on the ground that the supposed latent benefits of employment are often the reverse. He refers to: 'Arbitrary time structure without regard for human needs; autocratic supervision; activity for unclear or devalued purposes; a resented identity; the vacuous nature of imposed activities' (Fryer<sup>19</sup>, pp12-13). As an alternative, he has proposed an agency restriction theory which, by contrast with deprivation theory, assumes that people are fundamentally proactive and independent rather than reactive and dependent. He goes on to suggest that the role of poverty has been underemphasised in much recent research on unemployment compared with research carried out in the 1930s. He believes that lack of financial resources prevents

people from organising personally satisfying life styles (through the restriction of personal agency). Although, Fryer's view may well be true of some people, it seems unlikely that it applies to all unemployed people.

## **Vitamin theory**

Warr's vitamin theory<sup>20</sup> extends Jahoda's deprivation theory and applies it generally to work and non-work environments and does not distinguish between manifest and latent benefits. He describes nine features of the environment (opportunity for control, opportunity for skill use, externally generated goals, variety, environmental clarity, opportunity for interpersonal contact, availability of money, physical security and valued social position) which are assumed to benefit mental health in the way that vitamins benefit physical health. The first six are assumed to operate like vitamins A and D (which can be harmful in excess) and the last three to operate like vitamins C and E, which cease to be beneficial above a certain limit but are never harmful.

## **Moderating factors**

Obviously, whatever impact unemployment has on men's mental health, it is unlikely to affect them all uniformly. Some will suffer more than others. Several factors have been shown to moderate the impact of unemployment on mental health. Some moderating factors are environmental (such as money), whereas others have to do with personal characteristics such as self-esteem and introversion-extraversion. Factors that have been shown to moderate unemployment distress include environmental factors: financial resources, duration of unemployment, stress of lost job, social support; demographic characteristics: age, social class, ethnic origin; and individual characteristics: employment commitment, personality factors, and time use.

## **Environmental factors**

Not surprisingly, numerous studies from all over the world have shown that money is an important resource that helps unemployed men cope, even the perceived ability to borrow a moderate sum in an emergency<sup>21,22</sup>. The evidence on duration of unemployment is less clear, with some studies showing a curvilinear relation: some men seem able to adjust to long-term unemployment, showing better mental health than after shorter periods<sup>9</sup>. Several studies have shown that where the lost job was stressful, losing it can be associated with improved mental health as well as reemployment in a more satisfactory job<sup>23,24</sup>. Social support has also been demonstrated to be an important factor moderating the mental health of unemployed men, although the relationship is not a simple one. For example, job loss often entails being cut off from a potentially important source of social support workmates.

## **Demographic factors**

Studies comparing young with mature-aged unemployed men have shown that the impact on mental health is much greater in older groups, even where the groups are matched for unemployment duration<sup>25</sup>. Social class differences are usually confounded with money and job satisfaction. Not surprisingly, perhaps, the research findings are conflicting and inconclusive. Hepworth<sup>26</sup> in the UK found that higher status was associated with better coping whereas Kaufman<sup>27</sup> in the US found the opposite. Warr & Payne<sup>28</sup> found little difference, except that lower-class men had more financial worries and were less able to manage their spare time. Finally, Rodgers<sup>29</sup> found an interaction with sex such that unemployment caused most distress in lower-class men and in upper-class women. Differences in ethnic origin are frequently confounded with differences in social class, although a study by Warr et al<sup>30</sup> in the UK found that unemployed male black teenagers were less distressed than their white counterparts.

## Personality factors

Some studies have shown that men who have a strong commitment to work experience greater distress than those with weaker commitments<sup>31,32</sup>, but a recent study has shown that employment commitment is an unstable characteristic<sup>33</sup>, and other studies have found that redefining one's attitude to work can reduce unemployment distress<sup>9,34</sup>.

Personality characteristics that have been shown to moderate the impact of unemployment on men's mental health negatively include neuroticism<sup>35,36,37</sup>, low self-esteem<sup>37</sup>, introversion<sup>36</sup> and lack of religiosity<sup>38</sup>. Finally, several studies have shown that unemployed men who use their time in constructive activities involving other people, cope best<sup>39,40,41,42</sup>.

## Controversial issues

The two fundamental issues that remain unresolved are: (a) is the psychological distress associated with unemployment a consequence of unemployment (social causation) or are psychologically distressed individuals more likely to become and/or remain unemployed (drift)? and (b) can the psychological distress associated with being unemployed be explained solely by financial disadvantage?

Some light on both these questions is shed by the prospective longitudinal studies of school leavers mentioned earlier. Although all of the studies included young women as well as young men, overall the differences between them were slight. The study by Banks & Jackson<sup>10</sup> in the UK showed that young people who left school and got jobs displayed a significant improvement in mental health whereas those who became unemployed showed a significant deterioration. Patton & Noller<sup>13</sup> in Queensland showed a decline in those becoming unemployed but no change in those getting jobs. A similar finding was reported by Feather and O'Brien<sup>11</sup> in South Australia.

By contrast, Gurney<sup>12</sup> in Victoria and Winefield et al<sup>14</sup> in South Australia reported an improvement in those who got jobs, but no change in those who became unemployed. How can these conflicting results be reconciled? First, the studies by Banks and Jackson and by Patton and Noller looked only at academic underachievers and consequently the results may not be generalisable to the wider population of school leavers. Second, the employed and unemployed groups in the study by Feather and O'Brien were not matched on the at-school baseline measures: those who got jobs after leaving showed superior mental health while at school than those who later became unemployed. The studies by Gurney and by Winefield et al looked at a broad cross-section of school leavers; moreover, the employed and unemployed comparison groups were well matched on the at-school baseline measures. Consequently, the results may have greater validity. Winefield et al also distinguished between employed youngsters who were satisfied with their jobs and those who were dissatisfied with their jobs. Importantly, they found consistently (in the course of a 10-year longitudinal study) that the dissatisfied employed were as badly off in terms of mental health as the unemployed. This finding has been confirmed by O'Brien and Feather<sup>43</sup>.

These findings have clear implications for both of the controversial issues described above. First, they provide clear support for the view that the poorer mental health shown by unemployed men is a consequence of failure to find satisfactory work (social causation). Of course, one must accept that some people are unemployed because they have serious mental health problems that make them unemployable (drift). However, this does not seem to be a major factor in the case of unemployed school leavers. Second, because unemployed school leavers are generally no worse off financially than before (unlike mature men with dependants who are made involuntarily redundant), their relatively poor mental health cannot be explained solely by financial hardship .

## Conclusions

Some recent research studies have been concerned with developing counselling strategies for helping men cope with involuntary job loss<sup>44, 45</sup>. Such programs, as well as seeking to help alleviate the psychological distress associated with job loss, are also designed to help the unemployed individual to regain employment, and consequently maintain an optimistic attitude and a strong commitment to work.

These programs assume the future availability of jobs. Unfortunately, there is a danger that unemployment counselling which is based on this assumption may encourage a false or unrealistic belief in some people who have virtually no chance of reemployment, and thus perpetuate and intensify their psychological distress. A more humane and effective approach might be to encourage them to redefine their attitudes to work and perhaps seek alternative activities.

What is an effective strategy for coping with job loss must depend, *inter alia*, on whether the job loser has a realistic prospect of reemployment, and this, in turn, will depend on whether national governments and those who elect them are committed to ensuring that all citizens who are willing and able to work are provided with the opportunity. Future policy needs to be informed by the accumulating research evidence which shows that, for many men, mental health depends upon satisfactory employment.

## References

1. OECD. Economic Outlook, December 1994.
2. Brenner MH. Mental illness and the economy. Cambridge: Harvard University Press, 1973.
3. Hayes J, Nutman P. Understanding the unemployed. London: Tavistock, 1981.
4. Marsden D, Duff E. Workless: some unemployed men and their families. Harmondsworth: Penguin, 1975.
5. Kasl SV, Cobb S. Some mental health consequences of plant closing and job loss. In: Ferman LA, Gordus JP, eds Mental health and the economy. Kalamazoo: Upjohn, 1979.
6. Arnetz BB, Brenner SO, Levi L, Hjelm R. Neuroendocrine and immunologic effects of unemployment and job insecurity. *Psychother Psychosom* 1991;55:76-80.
7. Warr PB, Jackson PR. Men without jobs: some correlates of age and length of unemployment. *J Occup Psychol* 1984;57:77-85.
8. Warr PB, Jackson PR. Factors influencing the psychological impact of prolonged unemployment and re-employment. *Psychol Med* 1985;15:795-807.
9. Warr PB, Jackson PR. Adapting to the unemployed role: a longitudinal investigation. *Soc Sci Med* 1987;24:1-6.
10. Banks MH, Jackson PR. Unemployment and risk of minor psychiatric disorder in young people. *Psychol Med* 1982;12:798-98.
11. Feather NT, O'Brien GE. A longitudinal study of the effects of employment and unemployment on school-leavers. *J Occup Psychol* 1986;59:121-44.
12. Gurney RM. The effects of unemployment on the psycho-social development of school leavers. *J Occup Psychol* 1980;53:205-13.
13. Patton W, Noller, P. Adolescent self-concept: Effects of being employed, unemployed or returning to school. *Aust J Psychol* 1990;36:247-59.
14. Winefield AH, Tiggemann M, Winefield HR, Goldney RD Growing up with unemployment. London:Routledge, 1993.

15. Archer J, Rhodes V. The grief process of job loss: a cross-sectional study. *Brit J Psychol* 1993;84:395-401.
16. Fryer DM. Stages in the psychological response to unemployment: a (dis)integrative review. *Curr Psychol Res Rev* 1985;Fall: 257-73.
17. Jahoda M. Work, employment and unemployment: values, theories and approaches in social research. *Amer Psychol* 1981;36:184-91.
18. Jahoda M. Economic recession and mental health: some conceptual issues. *J Soc Issues* 1988;44:13-23.
19. Fryer DM. Employment deprivation and personal agency during unemployment: a critical discussion of Jahoda's explanation of the psychological effects of unemployment. *Social Behaviour* 1986;1:3-23.
20. Warr PB. *Work, unemployment, and mental health*. Oxford:Clarendon Press, 1987.
21. Finlay-Jones R, Eckhardt B. Psychiatric disorder among the young unemployed. *Aust N Z J Psychiat* 1981;15:265-70.
22. Finlay-Jones R, Eckhardt B. A social and psychiatric survey of unemployment among young people. *Aust N Z J Psychiat* 1984;18:135-43.
23. Fineman S. *White collar unemployment: impact and stress*. Chichester:Wiley, 1983.
24. Schwefel D. Unemployment, health and health services in German-speaking countries. *Soc Sci Med* 1986;22:409-30.
25. Broomhall HS, Winefield AH. A comparison of the affective well-being of young and middle-aged unemployed men matched for length of unemployment. *Brit J Med Psychol* 1990;63:43-52.
26. Hepworth SJ. Moderating effects of the psychological impact of unemployment. *J Occup Psychol* 1980;53:139-45.
27. Kaufman HG. *Professional in search of work: coping with the stress of job loss and unemployment*. New York:Wiley, 1982.
28. Warr PB, Payne RL. Social class and reported changes in behavior after job loss. *J Appl Soc Psychol* 1983;13:206-22.
29. Rodgers B. Socio-economic status, employment and neurosis. *Soc Psychiat Epidem* 1991;26:104-14.
30. Warr PB, Banks MH, Ullah P. The experience of unemployment among black and white urban teenagers. *Brit J Psychol* 1985;76:75-87.
31. Jackson PR, Stafford EM, Banks MH, Warr PB. Unemployment and psychological distress: the moderating role of employment commitment. *J Appl Psychol* 1983;68:525-35.
32. Shamir B. Protestant work ethic, work involvement and the psychological impact of unemployment. *J Occup Psychol* 1986;7:25-38.
33. Banks MH, Henry P. Change and stability in employment commitment. *J Occup Organ Psychol* 1993;66:177-84.
34. Stokes G. Work, unemployment, and leisure. *Leisure Studies* 1983;2:269-86.
35. Payne RL. A longitudinal study of the psychological well-being of unemployed men and the mediating effect of neuroticism. *Hum Relat* 1988;41:119-38.
36. Kirchler E. Job loss and mood. *J Econ Psych* 1985;6:9-25.
37. Schaufeli WB. Unemployment and mental health in well- and poorly-educated school-leavers. In: Verhaar CHA, Jansma LG, et al, eds *On the mysteries of unemployment*. The Netherlands:Kluwer, 1992.
38. Shams M, Jackson PR. Religiosity as a predictor of well-being and moderator of the

- psychological impact of unemployment. *Brit J Med Psychol* 1993;66:341-52.
39. Feather NT. Reported changes in behaviour after job loss in a sample of older unemployed men. *Aust J Psychol* 1989;41:175-85.
  40. Feather NT, Bond MJ. Time structure and purposeful activity among employed and unemployed university graduates. *J Occup Psychol* 1983;56:241-54.
  41. Kilpatrick R, Trew K. Life-styles and psychological well-being among unemployed men in Northern Ireland. *J Occup Psychol* 1985;58:207-16.
  42. Winefield AH, Tiggemann M, Winefield HR. Spare time use and psychological well-being in employed and unemployed young people. *J Occup Organ Psychol* 1992;65:307-13.
  43. O'Brien GE, Feather NT. The relative effects of unemployment and quality of employment on the affect, work values and personal control of adolescents. *J Occup Psychol* 1990;63:151-65.
  44. Hansen GB. Layoffs, plant closings, and worker displacement in America: serious problems that need a national solution. *J Soc Issues* 1988;44:153-62.
  45. Steinweg DA. Implications of current research for counseling the unemployed. *J Employ Couns* 1990;27:37-41.

# Hazardous occupations and mental health

---

L. Meldrum and B. Raphael  
Department of Psychiatry  
University of Queensland

---

The Concise Oxford Dictionary defines a *hazard* as a source of danger, and *hazardous* as risky or dependent on chance. Therefore, hazardous occupations could be those in which the worker is exposed to danger, or which are risky and dependent on chance<sup>1</sup>. The effects of hazardous occupations on mental health are unclear because of a number of factors present in the person exposed to danger in the hazardous occupation.

Personal appraisal of danger is one of the factors that influence adverse outcomes of exposure to hazards in the workplace. A number of other variables influence how a person perceives a stressful incident — past experiences and personal background, religious beliefs, cultural values, attitudes, daily moods, learned fears, prejudices and the environment in which the incident occurs.

As well as personal perceptions affecting outcome, the level of injury that is associated with any hazard in the workplace also contributes to the end result. This injury may be physical or psychological. Physical injuries may result in permanent disability, death or may involve long-term recovery. A similar situation also occurs with psychological injury, which in many instances may be unrecognised by the worker and employer alike. Both psychological injury and persistent chronic disorder have contributed to the enormous increase in workers' compensation claims.

The cost to industry of injury and accidental death is enormous. It has been found that the cost of mental health problems to industry is also immense. In England and Wales, mental health problems cost 80 million working days a year, which is 30 times greater than days lost through industrial disputes<sup>2</sup>. It has been found that most people associate their jobs with their mental health problems<sup>3</sup>. Employers have begun to plan to protect their workers from activities that would put them at risk or cause harm, through policies on occupational health and safety<sup>4</sup>, but many of these have not yet encompassed an adequate recognition of mental health.

One of the major mental health problems that has appeared in workers in hazardous occupations in the course of their employment is post traumatic morbidity. Post traumatic stress disorder (PTSD) is a condition which arises after an event outside the range of usual human experience, which would be markedly distressing to almost anyone and is usually experienced with intense fear, terror and helplessness. The symptoms involve reexperiencing of the event, avoidance or numbing of responsiveness, and increased arousal. Such phenomena may appear in *reaction* to a distressing event, but the diagnosis can be made only if the disturbance lasts longer than one month by current criteria<sup>5</sup>.

A variety of other disorders can emerge in this context, such as major depression and substance abuse. It has been found that such events may contribute to a significant decline in a person's physical health<sup>6</sup>.

## Men and hazardous occupations

It has been traditional in terms of gender role prescriptions in Anglo-Saxon, Western and many other societies, that men have been the main workers in any occupations that would be readily identified as hazardous. This includes police, fire services, emergency service work, security industry, military, heavy industry and many other occupations. All work in these spheres has been heavily dominated by male gender values including beliefs in men's physical strength, invincibility, power and capacity to deal with and master threat. Other occupations that do not specifically deal with hazards but may encounter them have, for the most part, seen men as the ones who should face any threat if this is expected.

With changes in work practices and equal opportunity provisions, many of these occupations or places of occupation are now shared by women, who even in recent times have taken a role in combat. At the same time, changing values have allowed for recognition that men too are not invincible and may be threatened, shocked, traumatised and even psychologically disabled by their experiences in the workplace. Nevertheless, the 'macho' style persists, making it difficult for men dealing with hazards or affected by them to acknowledge either their fear or distress. This sometimes leads them to drown their difficulties in the male-accepted model of self medication — heavy drinking.

The issues discussed below represent a summary of current scientific studies in the field of hazardous occupations. Most have been conducted with men and the findings apply to them except where specified otherwise (e.g., nurses). Nevertheless, all reported findings and proposals should take into account these gender-based social constructs and how they may influence or shape the variables considered.

## Reactions to hazardous events

The reactions that each person experiences to exposure to any hazardous event are unique. Some of the common reactions experienced are shock, fear, anger, helplessness, sadness and shame. Many of these feelings occur during the processing of what has been termed a *normal reaction to an abnormal event*. Differing personal perceptions of the abnormal event result in distinctive patterns of reactions. No two people exposed to the same hazard react in exactly the same manner. Numerous other effects can be experienced including physical and mental tension, sleep disturbances, dreams and nightmares of the event, intrusive memories and feelings, numbing and a general inability to share emotions, irritability, depression, social withdrawal, as well as a number of physical sensations, mental reactions and the propensity for self-medication<sup>7</sup>.

## Public health impact of hazardous occupations

Because Australia has no standardised method of recording workplace injuries and deaths, it is difficult to state unequivocally which industries are the most hazardous to workers. The most complete collection of statistics on industrial injuries can be gathered from the Estimates of National Health and Safety Statistics in Australia for 1991-92<sup>8</sup>. These statistics are compiled from contributing States and Territories but it must be remembered that, at best, they are estimates and not a valid Australian data set.

According to these estimates, 193 fatalities were recorded in Australian industries during the financial year 1991-1992. According to this report, deaths of male workers in 1991-92 accounted for 93 per cent (180) of the total workplace deaths<sup>8</sup>.

In the statistics compiled by Worksafe Australia during 1986-87, injuries were occurring every 6.5 minutes, compared with 1983-85 figures of every 8 minutes<sup>9</sup>. Worksafe estimates show that 624,368 weeks of working time were lost during 1991-92, with an average of 7.2 weeks per occurrence for males, whereas females recorded an average of 9.2 weeks per occurrence. These figures, of course, cover a wide range of injuries and

disabilities, some brief, others more prolonged, and may not include many psychological injuries and their outcomes.

Workers employed in the Australian transport and storage industries accounted for 8 per cent of all workers' compensation cases (42 per cent in road transport and 21 per cent in rail transport) recorded in the 1991-92 Estimates. More than 70 per cent of the workers' compensation claims were recorded in the occupations of labourer (35 per cent), tradesperson (26 per cent) and plant and machine operator or driver (17 per cent). Seventy six per cent of the total workers' compensation cases recorded were for males<sup>8</sup>.

It has been found that time lost through injury and disease was poorly recorded in the data supplied to Worksafe. The average work time lost ranged from 5.8 weeks in mining industries to 8.7 weeks in finance, property and business services<sup>8</sup>.

The total estimated cost to the Australian national economy during 1992-93 of workers' compensation claims was \$4.8 billion. When averaged out to a percentage of total labour costs, workers' compensation amounted to 2 per cent. The indirect cost of workers' compensation for occupational injury and disease may be as high as \$9.7 billion<sup>8</sup>.

The degree to which psychological injury and associated morbidity is covered in these statistics is unclear, but it is unlikely that it is individually addressed. For instance, a recent study has shown that PTSD and significant disability occurred in 25 per cent of injured motor vehicle accident victims studied. It was found that PTSD was undiagnosed and untreated<sup>10</sup>.

## Compensation

Numerous damages claims have been taken to the courts by workers for debilitating outcomes of stressful incidents at their workplace. The extent (i.e., number and cost) of compensation claims for workplace stress in general, and PTSD or other syndromes, is not known. In addition, many cases are settled 'before court'<sup>11</sup> which generally requires the litigants not to reveal the conditions of settlement, so accurate records of the number of settlements for stress claims are not available. Certainly, claims are increasing in this field and settlements in the order of \$500,000 are not infrequent. To reduce the cost to the Australian economy of occupational death and injury, both physical and psychological, it is important that 'high risk' employment areas be clearly defined.

## High risk employment

High risk employment areas have been interpreted as those which include threat to:

- (a) the safety of the general population
- (b) the safety of the employees<sup>12</sup>.

Some occupations, however, may by their nature lead to members being exposed to 'hazards', including those likely to produce psychological injury, either as part of the work (e.g., police, body identification teams, fire services) or because of the risks coincident to their work (e.g., bank officers at risk of armed hold-up). Some occupations may induce stressors that are potentially hazardous as part of their work (e.g., military). Some jobs may be considered excessively stressful, so that with regard to mental health, they may be the cause of more chronic disorders<sup>2</sup>. In a recent survey of a service industry in Queensland, the most significant sources of 'job stress' were found to be insufficient staff to cope with workload, abuse and/or difficult customers, and the continuous nature of telephone calls<sup>13</sup>. Some jobs may be understood as stressful because of high rates of psychological morbidity, such as suicide associated with them (e.g., radiographers, dentists, nurses<sup>2</sup> and physicians<sup>14</sup>).

The economic consequences recorded in the workers' compensation figures do not relate to the human cost and the wider impact that death and injury in the workplace has on the community. It is this community that is so important in supporting workers, particularly

those who work in hazardous occupations. It has long been recognised that many events that happen outside the workplace may impact on the worker's capacity to deal with perilous occupations — both physically and mentally. It is also true that reactions to stressful, dangerous events that occur in the workplace may also be taken home and thereby create a vicious circle of stress for the worker.

## Management, workers and unions

In all considerations of hazardous or high risk occupations, workplaces, or roles, the views of management, workers and unions should be taken into account. It is critical that all are involved in identifying risk in any consideration of contributors to stress; response systems; education; training; and the various forms of assistance or counselling. Furthermore the background relationships of these workplace systems may influence stress levels, hazards and outcomes. Throughout the discussions below, these systems should be considered and encompassed.

### 'Vicarious' victims

Vicarious or secondary victims are those who may not be personally injured in a traumatic event, but may experience many of the emotional or physical reactions of the primary victim. When workers are physically injured, psychological reactions may occur in:

- (a) the person injured;
- (b) observers of the injury;
- (c) those experiencing a near miss;
- (d) those at risk themselves;
- (e) at times family members; and
- (f) those who must care for the injured.

Research into the impact of trauma on the vicarious victims is still in its infancy, with few published research outcomes. In one study, 17 ferry workers who had no direct contact with the capsizing of the passenger ferry 'Herald of Free Enterprise' in Zeebrugge harbour were found to be dysfunctional in 'areas of work, social activity and interpersonal relationships' (p. 9). Sixteen of the 17 had been unable to return to work<sup>15</sup>. Similarly, an increase in domestic violence was reported in the Mount St. Helen's area after the ashfall<sup>16</sup>, and is likely to have involved a range of vicarious as well as direct victims.

### Stressors in emergency services

Firefighting has been ranked as one of the most stressful occupations in the US<sup>17</sup>. The stress levels in this emergency service may have some relationship with the level of injury incurred by Australian firefighters. It has been found that during stressful periods, people are more prone to accidents<sup>7</sup>. Worksafe statistics indicate that the fire service's injury incidence is twice the rate of all other Australian industries. Firefighters suffered 80 per cent of all the injuries recorded for the fire brigade industry. Other occupation groups within the industry recorded injuries that resulted in severe conditions at a rate of 21 per cent, whereas firefighters' rate of similar injuries was 30 per cent. Interestingly, burns accounted for only 2 per cent of fire brigade industry injuries<sup>18</sup>.

Research into the stressful aspects of a State fire service in Australia found that deaths of children, the suffering of the injured, the nature of the injuries and dealing with dead people were significantly stressful aspects of their employment. It was also found in this study that organisational issues such as lack of resources, poor operational leadership and the pressure of work were significant stressors<sup>19</sup>. Other emergency services have investigated stress factors present in their workplace. A survey conducted in an

Australian State Ambulance service identified five stress components in their work: (a) being away from family; (b) administration weaknesses; (c) interaction with medical staff; (d) work variables; and (e) fieldwork<sup>20</sup>. It was found that stress factors experienced by British ambulance officers could be classified in four main areas: '(1) organisational and management problems, (2) unfamiliar and difficult duties (uncertainty) (3) work overload and (4) interpersonal relations' (p. 323)<sup>21</sup>. These research results emphasise that reactions to dangers or hazards in the workplace may be influenced by a number of other variables, such as organisational stressors and shift work, and that these may be responsible for a high level of background distress and associated psychological morbidity, for instance anxiety and depression.

## Organisational stressors

Workers exposed to danger often have to contend with a number of organisational stressors already present in their workplace. It has been found that 'factors intrinsic to the job' were the primary predictor of poor mental health for managers and shopfloor workers, whereas the pressure experienced by the 'organisational structure and climate' was found to be the only significant predictor of poor physical health in the shopfloor workers<sup>22</sup>. Organisational structure is often determined by the organisational culture of values, ideas and beliefs shared by members of the same work organisation<sup>4</sup>. The culture may exert powerful pressure on employees to determine 'appropriate' group norms and behaviour. When the organisation is exposed to extreme stressors, the most dominant aspect of its belief system determines the course of events for both the organisation and its employees.

Research conducted by the Australian police found that organisational stressors such as rules, regulations, social ethos and poor supervision were rated as highly stressful in their occupation<sup>23</sup>. Organisational or large group change in a workplace may cause the employees to suffer reactions: anxiety about implications for their own jobs and status, and a sense of loss of the familiar very similar to a grief reaction. It has been suggested that when these reactions are present in a workplace they may obstruct decision-making and choice and aggressive behaviour may erupt<sup>24</sup>.

## Shift work

Shift work is an added stressor for the worker and his or her family. It has been found that the problems of shiftworkers may be divided into two groups: social/domestic and health. Health problems of sleep, fatigue and digestive problems have been identified in surveys conducted on more than 7000 Australian shiftworkers. The necessity for families to make adjustments to a shift worker's work program, concern for the safety of families left alone at night and the interference with regular social activities have also been identified as stressors by Australian shift workers<sup>25</sup>. Recent research also suggests that shift work may significantly affect the mental health of commencing nurses<sup>26</sup>. There is new understanding of shift work's impact on circadian rhythms and the neuroendocrine shifts that may make a possible contribution to the development of depression<sup>27</sup>.

An additional stressor that has been found to affect workers is the effect of their work patterns on their family life. Research conducted into the effect of extended absences from home of the male spouse/parent found that such absences caused difficulties in family relationships<sup>28</sup>. These difficulties may relate to the level of support given to the worker by his/her partner. Research conducted into the stress levels experienced in a West Australian Emergency Service found that 65 per cent of the respondents to their survey were emotionally supported by their spouses after exposure to a traumatic event<sup>19</sup>.

The added stress brought into a home environment by workplace incidents may cause additional tension which may in turn rebound in poorer workplace performance, or impact on marital and family relationships. In all these instances there may be a significant impact on mental health.

# Workplace violence

The community in which workers live and the current level of violence that exists may also impact on the employee's ability to cope with stressors in their occupation. Workers and management alike may also have to contend with violence that occurs in the workplace.

Violence perpetrated in the workplace may include physical assault, harassment, abuse, and victimisation — racial and sexual<sup>40</sup>. Techniques recommended to manage occupational violence include:

- management of occupational violence within the sphere of human resource management;
- non-acceptance of occupational violence as a hazard of the position;
- dangers should be identified and, where possible, remedied;
- 'band-aid' approaches of only providing post-event counselling of 'sick' employees should be avoided;
- employees should be included in the consultations on the development of appropriate workplace strategies to reduce violence; and
- all intervention procedures initiated within the organisation should be evaluated and reviewed on a regular basis<sup>29</sup>.

Occupational assault is being increasingly encountered in the workplace and may be generally divided into acute or chronic assault. Staff who are exposed to a sudden and unexpected violent incident such as armed robbery are those who suffer acute violence<sup>30</sup>. Personnel who are placed in the role of caring for violent people, such as prison officers and nursing and medical staff in psychiatric institutions, are often subjected to chronic or regular abuse<sup>31</sup>. The reactions that may be experienced by persons exposed to such occupational violence may lead to high arousal, a physiological fight/flight reaction and a range of psychological responses in an attempt to cope with threat<sup>32</sup>. Researchers are investigating the effects of exposure to trauma and hazards as such reactions evolve over time.

## Long-term effects of exposure to trauma

Research conducted with firefighters after the Ash Wednesday bushfires, which began on 16 February 1983, found that intense and prolonged exposure resulted in powerful and intrusive images<sup>33</sup>. The study found that 32 per cent of the 469 South Australian firefighter subjects were suffering psychological reactions at four months after the fire, 27 per cent at 11 months and 30 per cent at 29 months post-disaster<sup>34</sup>. Interviews were conducted with all who had developed significant symptoms at 42 months post-disaster. Of the 58 subjects diagnosed with PTSD, there were only 16 with this as a single diagnosis, 13 with a dual diagnosis of anxiety disorder and PTSD, and 29 with a dual diagnosis of major depression. The group with the single diagnosis of PTSD had sustained greater property losses. PTSD, in this study, was therefore predicted rather more by the chronic distress caused by secondary stressors experienced (e.g., destruction of farms and death of stock during the bushfire) than the threat encountered during the bushfire<sup>35</sup>.

There have been well established links between psychological or behavioural factors and the development of coronary artery disease, sudden death and serious ventricular arrhythmias. During periods of stress, responses of the sympathetic nervous system of the body can raise blood pressure, cause cardiac arrhythmias and somatic symptoms<sup>36</sup>. Data gathered after the Newcastle earthquake in 1989 showed a significant increase in deaths due to coronary heart disease in the days after the earthquake, but the natural disaster did not appear to have contributed to any other long-term effects on physical

health<sup>37</sup>. While this data was gathered after a natural disaster, the implication for a major incident in a large workforce could be similar.

Numerous studies have been undertaken which investigate the short-term effects of exposure to hazards, but there is little data available on the long-term effects of exposure to hazards in the workplace. The studies listed in Table 1 give an indication of the impact of hazards on workers in the short term.

## **Table 1: Short-term impact of exposure to hazards in the workplace**

---

---

---

### **Identification of stressors**

People exposed to the same stressor vary in outcomes. Some stressors are so severe that all are affected — at least initially — yet all do not go on to more prolonged or chronic disorder<sup>43</sup>. It has been found that continual exposure to work-related stressors increases workers' stress levels and increases demands on their adaptation ability<sup>44</sup>. It is important that all workplaces develop procedures to identify the hazardous aspects of their employment. Exposure to dangerous practices in the workplace, as well as contributing to the possibility of physical injury of the worker, may well cause very significant levels of damage to the mental well-being of the employee.

### **Prevention planning**

Very few prevention programs for mental health are present in Australian workplaces. Many of these programs entail a great deal of workplace hours in the planning, implementation, evaluation and review. All prevention programs should be designed for a specific workplace and for the needs of that workplace.

A prevention planning group should be established in a workplace to gather information on hazards present, methods of prevention, mitigation of negative outcomes and evaluation of programs and their effectiveness. The members of this group should construct a data base of the dangers present in the workplace, that is, the size and nature of the problems that may threaten the well-being of workers<sup>45</sup>. While some preventive goals have been established for major incidents or disasters, there is a need for much

more systematic development of objectives and outcomes for the implementation of mental health interventions, including those directed at workers. Any identification of factors that may endanger the physical health of the workers will enable mental health prevention programs to be planned and implemented, in this context as well as in those contexts specific to psychological trauma and mental health.

To assess the levels of hazards in the workplace, employers should institute a health monitoring system in which a data base is established on:

- hazards present on the worksite;
- potential hazards present in the workplace (is the company vulnerable to armed holdup, could severe road trauma affect the workplace — is there a main arterial road nearby?);
- the numbers of exposures to danger recorded in the workplace;
- sick-leave absences recorded after traumatic incidents in the workplace;
- staff turnover rates and their relationship to traumatic incidents; and
- any major organisational changes/restructuring that may have taken place in recent times.

This information may then be used to develop a prevention training program specifically for a particular workplace. A prevention program must be developed collaboratively with workers and be seen to receive support from all aspects of the workplace. It must be clearly stated that the program is based on the assumption that workplace accidents may be preventable and that programs may be developed to ensure that equipment, environment, procedures and support services can be effectively operationalised to prevent any long-term pathology developing<sup>46</sup>. To be effective, interventions to mitigate the psychological impact of trauma should be easily accessible to all workers and be part of this comprehensive approach<sup>47</sup>.

## Preventive action

Strategies of stress management should include the alteration of work conditions to remove stressors, reduce the stress levels, and to assist the development of practical coping methods for stressed individuals in the workplace<sup>48</sup>. It has been found that the most effective programs:

1. provide information and skills to individuals so they can do a better job of looking after themselves and
2. alter the culture and structures of the workplace to promote performance and reduce unnecessary stress (p. 45<sup>49</sup>)

The development of a Stress Management Plan for the workplace should include a program of research, education and implementation of intervention programs and support services. Management programs should begin with a searching look at the workplace environment to assess the needs of the organisation, the workers and the cost benefits that may accrue. The targets for worksite stress management intervention should be aimed at worksite stressors, extra-organisational stressors, and the outcomes of stress — physiological, psychological and behavioural<sup>50</sup>. Three stages of prevention — primary, secondary and tertiary — may be applied to the improvement of occupational mental health and the management of stress in the workplace<sup>51</sup>.

*Primary prevention* is designed to reduce stressors in the workplace<sup>51</sup>. Through the identification of the stressors present in the workplace, management may then plan the most effective methods of education and intervention. It has been recommended that assessment of major stressors in the workplace must include:

- evaluation of factors in the work environment (including management practices and organisational aspects) contributing to low morale and stress at work;

- evaluation of factors outside the working environment and experienced stress in terms of physical and psychological symptoms; and
- evaluation of organisational issues including use of WorkCare benefits (p. 392<sup>52</sup>).

These evaluation documents must be constructed as a result of consultation with workers in all levels of the workplace. If questionnaires are to be used in the workplace to gather information on stressors, these documents should be 'appropriate, intelligible, unambiguous, unbiased, capable of coping with all possible responses, appropriately coded, it must be piloted before use and ethical' (p. 1264<sup>53</sup>). Management should first attempt to reduce or eliminate any stressors that are within their control.

The *secondary prevention* component of a stress management program involves education programs designed to teach those people at the worksite skills that will enable them to manage the stressors and reactions to them that they encounter in their employment<sup>51</sup>. A survey of Australian emergency service personnel found that education of *all* personnel about trauma and trauma reactions is an extremely important aspect of psychological support services<sup>54</sup>. A survey of staff of a Queensland service industry identified 'appropriate training' as a high priority in reducing the frequency of stressful incidents in the workplace<sup>13</sup>.

The education programs should be planned with specific aims, objectives and anticipated outcomes and the effectiveness of the program should be constantly evaluated. It has been found that education, preparation and even stress inoculation techniques have lessened the stressor impact of threats which are in any way likely to be anticipated. This is especially so if the supportive process of a 'buddy' or peer working with a more junior person can be introduced as in a work-related setting<sup>55</sup>.

A *tertiary prevention* program is one that provides resources after the emergence of symptomatology and dysfunction for individuals or organisations. Rehabilitative services planned to prevent the recurrence of any post-trauma dysfunction, come into this category<sup>56</sup>. Sadly, these are lacking in many Australian settings with respect to psychological morbidity and mental health outcomes. This lack of rehabilitation also applies for stress generally, and traumatic stress outcomes such as PTSD in particular.

## Intervention outcomes

Some months after the world's worst oil rig disaster, at Piper Alpha in the North Sea, on 6 July 1988, accommodation modules containing a number of bodies were raised and brought to the island of Flotta in the Orkney archipelago for recovery and identification<sup>55</sup>. The longer term follow-up of those who worked on this task on Flotta has shown that workers have maintained positive attitudes to the outcome of the operation<sup>57</sup>. Low levels of distress in police officers who volunteered for body recovery have been attributed to good organisation, sensitive staff management practices, preparation and debriefing and post-trauma monitoring<sup>57,58</sup>. It was also noted that at the three-year follow-up there was an increase in the number of officers who felt that they had been under stress because of their body-handling duties<sup>57</sup>.

A study was made into the long-term effects of stress-management courses which included relaxation training, rational thinking, priority setting and assertiveness training. The courses, in an Australian capital city, were arranged in six 1.5 hour sessions once weekly with a large educative component. Group discussion and support were found to be 'crucial components' of the course. The follow-up survey of this program found that a reduction in stress levels was achieved mainly through tension control (i.e., full relaxation, 'cue relaxation, breathing control, recognising body tension and its causes, rational thinking and life-style planning'). Decreases in perceived stress predicted changes in life-style and a reduction in the use of stress-related medications was found as a result of this program<sup>59</sup>. This type of stress management has been designed to develop avoidant emotion-focused coping, whereas active coping, in which the impact of stressors

is reduced by action taken by the stressed person, has been found by some researchers to produce more beneficial outcomes<sup>60</sup>.

It has been found that workplaces that provided follow-up counselling for health improvement interventions showed considerably more improvement than sites without counselling support<sup>61</sup>. It is critical that early referral to counselling support be initiated in workplaces where employees have been exposed to hazardous experiences. If workplace support services are functioning it is important that a system of referral to expert mental health services be available for persons who are at risk of developing chronic disorders. It was found after the Ash Wednesday bushfires that, although specialised training had been given to relief workers to assist those affected by the disaster, the level of detection of psychiatric problems was low. Referrals for mental health assistance were often late, thereby increasing the risk of vulnerability to chronic disorders<sup>62</sup>.

## Evaluation

Most of the Australian programs of post-trauma support and intervention have had few evaluative studies conducted, so the efficacy of programs such as critical incident stress debriefing (CISD) is, as yet, unknown. In research conducted into the programs conducted after the Newcastle earthquake, it was found that 'there was no evidence of a more rapid rate of recovery for those who were debriefed compared with those who were not debriefed' (p. 42<sup>63</sup>). This study did not focus on emergency workers and was not a trial of CISD. Limited evaluation has been carried out on post-trauma interventions of emergency service or hospital personnel in Australia. One study using a questionnaire format with rating scales and open-ended questions showed a reduction of impact of the event over time after CISD had occurred<sup>64</sup>. Neither of these Australian studies has been replicated.

## Recovery

The *recovery environment* is particularly important in helping the person assimilate a traumatic experience, and of vital importance is the social support network. As in bereavement, the social supports available to the individual are likely to be of great value in helping them deal with and cope with the stress that has occurred<sup>65</sup>. Initially, support may be naturally mobilised in the 'therapeutic community' effect immediately after a traumatic event. Strength may be sought from those who have experienced similar exposure, and may occur in the acute period or later. This is also part of what might be achieved in debriefing. It may also be part of what is a natural process, making mastery of what was experienced and of each person's actions<sup>65</sup>. At a later stage it might occur in mutual support or self-help organisations.

It is important workers be encouraged to adopt responsibility for their self care so that they may take an active approach in identification of personal problems and working towards recovery. Support systems in the workplace and within the family situation as well as professional carers may, at times, impede the recovery process<sup>66</sup>. Because of their closeness to the trauma, support systems may not want to recognise reactions because they are threatened themselves. Victims of traumatic events have often related stories of the lack of understanding and empathy by professionals and mental health professionals, by compensation boards, administrative and legal systems, subjecting the traumatised person to what has become known as the 'second trauma'<sup>67</sup>.

It is also important that staff members are educated to assist other staff through the 'difficult times' by being empathic listeners, by allowing people their own space when required and providing support in the workplace if necessary. Effective peer support in the workplace provides a supportive network in stressful times as well as stopping the sense of isolation often present after exposure to traumatic incidents<sup>66</sup>.

The prevention of work-related post-traumatic stress reactions in hazardous occupations

is not an easy task and will require intense planning, involving management, workers and unions; cooperation at all levels in the workplace; research into the stressors present in the workplace; an education program designed around the needs of the workplace; and a network of support that will assist all those participating to face and deal with the stressful aspects of their employment. Programs will need to develop a careful balance between appropriate recognition of and response to stress effects in hazardous occupations and any undue treatment of normal reactions as illness. Procedures should be put in place to assist the recovery processes that deal with events that are an inevitable part of human experience. Compassion and understanding, helpful expectations and an active addressing of the problems through collaborative, anticipatory responses and well planned programs, will contribute to a strong positive ethos for mental health within an organisation.

## References

1. Fowler HW, Fowler FG, eds. The concise Oxford dictionary. Oxford: Clarendon Press, 1979:278.
2. Creed F. Mental health problems at work. *Br Med J* 1993;306:1082-3.
3. Cherry N. Stress, anxiety and work: a longitudinal study. *J Occup Organ Psychol* 1978;51:259-270.
4. Braverman M. The contribution of traumatic stress theory to a theory of organisational crisis management. Paper presented at the Australasian Critical Incident Stress Association Conference, The University of Queensland, 4 November, 1993.
5. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. (4th ed.) (DSM-IV). 1994 Washington, DC: American Psychiatric Press.
6. Herbert TB, Cohen S. Stress and immunity in humans: A meta-analytic review. *Psychosom Med* 1993;55:364-379.
7. Raphael B. Traumatic stress: what it is and what to do. Canberra: National Health and Medical Research Council, 1992.
8. Worksafe Australia. Estimates of national occupational health and safety statistics 1991-1992. Canberra: Commonwealth Information Services, 1993.
9. Ore T. Inter-industry variations in occupational injuries in Australia. *Journal of Occupational Health and Safety* 1992;8(1):41-45.
10. Green MM, McFarlane AC, Hunter CE, Griggs WM. Undiagnosed post-traumatic stress disorder following motor vehicle accidents. *Med J Aust* 1993;159:529-534.
11. Baisden M. Stress and Workers Compensation in Queensland. Presentation at the Queensland Association of Traumatic Stress, Brisbane, 4 June, 1993.
12. Kaufman, R, Kaufman, J. What should high-risk operations evaluate relative to safety and safety training. *Performance Improvement Quarterly* 1992;5(3):16-25.
13. Crouch B. Survey of job stress in customer service. Brisbane: Musgrave and Associates, 1993.
14. Holmes CF, Rich CL. Suicide in physicians. In: Blumenthal FJ, Kupfer DJ eds. *Suicide over the life cycle*. Washington: American Psychiatric Press, 1990;599-618.
15. Dixon P. Vicarious victims of a maritime disaster. *British Journal of Guidance and Counselling* 1991;19(1):8-12.
16. Adams PR, Adams AR. Mount Saint Helen's ashfall: evidence for a stress reaction. *Amer Psychol* 1984;39(3):252-260.
17. Boxer PA, Wild D. Psychological distress and alcohol use among fire fighters. *Scandinavian Journal of Environmental Health* 1993;19:121-125.

18. McKeown, B. OHS performance overviews 1991-92 *Worksafe News* 1994;9(1):4-5.
19. Paton D, Cacioppe R, Smith L. Critical incident stress in the West Australian Fire Brigade. Perth: Curtin University, 1992.
20. Kneipp D, Welsh R, Wong J. Assessment of levels and causes of stress in the Queensland Ambulance Service and possible interventions of management. SM502 Research Elective, Medicine V, 1991. University of Queensland.
21. James A. Perceptions of stress in British ambulance personnel. *Work Stress* 1988;2(4):319-326.
22. Cooper C, Bramwell RS. A comparative analysis of occupational stress in managerial and shopfloor workers in the brewing industry. *Mental Health, Job Satisfaction and Sickness* 1992;6(2):127-138.
23. Evans BJ, Coman GJ. General versus specific measures of occupational stress: an Australian police survey. *Stress Medicine* 1993;9(1):11-20.
24. Stein HF. Aggression, grief-work, and organisational development: theory and case example. *Organisation Development Journal* 1988;6(1):22-28.
25. Wallace M. Shiftwork and the health of emergency medicine providers. Paper presented at the International Conference on Pre-Hospital Emergency Care 'Global Perspectives', pp 259-264, at the Gold Coast, Queensland, 19-23 October, 1992.
26. Healy D, Minors DS, Waterhouse JM. Shiftwork, helplessness and depression. *J Affective Disord* 1993;29:17-25.
27. Healy D, Waterhouse JM. Reactive rhythms and endogenous clocks. *Psychol Med* 1991;21:557-564.
28. Foster D, Cacioppe R. When his ship comes home: the stress of the Australian seafarer's partner. *Australian and New Zealand Journal of Family Therapy* 1986;7(2):75-82.
29. Toohey J. Occupational violence: a problem becoming an issue. *Journal of Occupational Health and Safety* 1993;9(1):3-4.
30. Grainger C. Occupational violence: managing the risk of assault in the workplace. *Journal of Occupational Health and Safety* 1993;9(1):43-47.
31. Grainger C. Staff safety in psychiatric hospitals. *Journal of Occupational Health and Safety* 1993; 9(2): 153-159.
32. Raphael B. Psychiatric aspects of preventive intervention with victims of violence. In: Chappell D, Grabosky P, Strang H, eds. *Australian violence: contemporary perspectives*. Australian Institute of Criminology: Canberra 1991;241-262.
33. McFarlane AC. PTSD: Synthesis of research and clinical studies: the Australia bushfire disaster. In: Wilson JP, Raphael B, eds. *International Handbook of Traumatic Stress Syndromes*. New York: Plenum Press, 1993:421-429.
34. McFarlane AC. The longitudinal course of posttraumatic morbidity: the range of outcomes and their predictors. *J Nerv Ment Dis* 1988;176:30-39.
35. McFarlane AC. The relationship between psychiatric impairment and a natural disaster: the role of distress. *Psychol Med* 1988;18:129-139.
36. Ziegler MG, Ruiz-Ramon P, Shapiro MH. Abnormal stress responses in patients with diseases affecting the sympathetic nervous system. *Psychosom Med* 1993;55:339-346.
37. Dobson AJ, Alexander HM, Malcolm JA, Steele PL, Miles TA. Heart attacks and the Newcastle earthquake. *Med J Aust* 1991;155:757-761.
38. Genest M, Levine J, Ramsden V, Swanson R. The impact of providing help: emergency workers and cardiopulmonary resuscitation attempts. *J Trauma Stress* 1990;3(2):305-313.

39. Davis RC, Friedman LN. The emotional aftermath of crime and violence. In: Figley CR, ed. *Trauma and its wake: the study and treatment of post-traumatic stress disorder* pp 90-112. New York: Brunner/Mazel.
40. Gersons BPR. Patterns of PTSD among police officers following shooting incidents: a two-dimensional model and treatment implications. *J Trauma Stress* 1989;247-257.
41. Raggatt P. Work stress among long-distance coach drivers: a survey and correlational study. *J Organ Behav* 1991;12(7):565-579.
42. Tranah T, Farmer RD. Effects on train drivers: psychological reactions of drivers to railway suicide. *Soc Sci Med* 1994;38(3):459-469.
43. Breslau N, Davis GC. Posttraumatic stress disorder: the stressor criterion. *J Nerv Ment Dis* 1987;175(5):255-264.
44. Lewis, DJ McLin PA. Stress management: a program designed to facilitate coping. *Today's OR Nurse* 1991;13(7):23-26.
45. Cryer C. Research and prevention projects aimed at work-related injury in New Zealand. *Journal of Occupational Health and Safety* 1991;8(4):309-316.
46. Larsson TJ. We need applied prevention - not statistics. *Journal of Occupational Health and Safety* 1991;7(4):287-294.
47. Raphael B. *NHandMRC scope for prevention in mental health*. National Health and Medical Research Council: Canberra, 1993;81-107.
48. Lazarus, RS. Psychological stress in the workplace. Special issue: *Handbook on job stress*. *J Soc Behav Per* 1991;6(7):1-13.
49. Adams JD. A healthy cut in costs. *Personnel Administrator* 1988;33(8):42-47.
50. Ivancevich JM, Matteson MT, Freedman SM, Phillips JS. Worksite stress management interventions. *Amer Psychol* 1990;45(2):252-261.
51. APA/NIOSH Health Promotion Panel. Occupational mental health promotion: a prevention agenda based on education and treatment. *American Journal of Health Promotion* 1992;7(1):37-44.
52. Milgrom J. Absenteeism and the identification of stressors. *Journal of Occupational Health and Safety* 1992;8(5):389-400.
53. Stone DH. Design a questionnaire. *Br Med J* 1993;307:1264-1266.
54. Meldrum L, Raphael B. A survey of critical incident stress management programs in the emergency services in Australia 1992. Paper presented at the Critical Incident Stress Management Across the Life Span conference, The University of Sydney, 18-20.11.1992.
55. Alexander D, Wells A. Reactions of police officers to body handling after a major disaster: a before and after comparison. *Br J Psychiatry* 1991;159:547-555.
56. Williams T. Trauma in the workplace. In: Wilson J, Raphael B, eds. *International handbooks of traumatic stress syndromes*, pp 925-933; New York: Plenum Press, 1993.
57. Alexander DA. Stress among police body handlers: a long-term follow-up. *Br J Psychiatry* 1993;163:806-808.
58. Thompson J, Solomon M. Body recovery teams at disasters: trauma or challenge? *Anxiety Research* 1991;4:235-244.
59. Sedgwick AW, Paul B, Plooij D, Davies M. Follow-up of stress-management courses. *Med J Aust* 1989;150(9):485-6,488-9.
60. Peterson L. A brief methodological comment on possible inaccuracies induced by multimodal measurement analysis and reporting. *J Behav Med* 1984;7:307-313.
61. Erfurt JC, Foote A, Heireich MA. Worksite wellness programs: incremental

- comparison of screening and referral alone, health education, follow-up counselling, and plant organisation. *American Journal of Health Promotion* 1991;5(6):438-448.
62. McFarlane AC. The Ash Wednesday bushfires in South Australia. Implications for planning for future post-disaster services. *Med J Aust* 1984;141:286-291.
  63. Kenardy J, Webster R. Does stress debriefing work? Paper presented at the Inaugural Lingard Symposium, *The Spectrum of Traumatic Stress*, Kirkton Park, Pokolbin NSW 27.11.1992; Newcastle: The Hunter Institute of Mental Health.
  64. Robinson R Mitchell JT. Evaluation of psychological debriefings. *J Trauma Stress* 1993;6(3):367-382.
  65. Raphael B. *When Disaster Strikes*. New York: Basic Books, 1986.
  66. Hodgkinson PE, Stewart M. *Coping with catastrophe: a handbook of disaster management*. London: Routledge, 1991.
  67. Symonds M. The 'second injury' to victims. *Evaluation and Change*. Special Issue, 1980;36-38.

# Homelessness and mental health

---

H. Herrman

Department of Psychiatry  
St. Vincent's Hospital, Melbourne

---

## Introduction

National reports estimate that thousands of Australians, including many thousands of young people, live without adequate shelter<sup>1,2</sup>. Homelessness is defined in the 1989 report of the Human Rights and Equal Opportunity Commission as *that state in which people have no access to safe and secure shelter of a standard that does not damage their health, threaten their personal safety, or contribute to their marginalisation by the absence either of cooking facilities or facilities that permit adequate personal hygiene*. This definition gives weight to the absence of the most basic features of a 'home', and encompasses those living on the street, in squats, in refuges and shelters. It also encompasses those moving about between relatives and friends, since 'such accommodation is necessarily temporary, usually insecure and fails to offer...protection and support'<sup>1</sup>. Those living in rooming houses and intermittently in small inner-city hotels may be considered homeless if such places fail to offer any sense of 'permanency' or protection from others.

Most homeless people in this country, as in Britain and the United States, are men, although women and homeless families are growing sub-groups. Homeless people have diverse characteristics and needs. Variations in, for example, age, sex, history, and physical and mental health, as well as accommodation types, have implications for service needs.

The extent of serious mental disorder among single homeless men, broadly defined, is similar in Australia to that found elsewhere in the Western world<sup>3</sup>. During the 1980s in Australia, the problems of ill and disaffiliated people became increasingly apparent to service agencies. The problems have been less visible than in other parts of the world, hidden to a large degree in special accommodation houses, cheap boarding houses, and shelters or crisis accommodation centres<sup>4,5,6</sup>.

Mental disorder is a wide and variably used term. In this paper, the term 'severe mental disorder' will refer to psychotic disorders (schizophrenia and related disorders), the major mood disorders (severe depression and bipolar disorder or manic-depression), and dependence on alcohol and other psychoactive substances (not tobacco). These terms are defined in the *American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, (Version III, Revised)*. Other important groups of disorders, such as mental retardation and the organic mental disorders, have been less extensively studied in these settings.

## Prevalence of severe mental disorder

Surveys in the US, Britain and Australia over the past 10 years suggest that between a quarter and a half of single homeless men, whether narrowly defined as shelterless or more broadly defined, are suffering severe and perhaps chronic mental disorder<sup>3</sup>. Surveys using standardised diagnostic interviews suggest that a higher proportion of the men

have had one or more of the severe disorders at some stage of life<sup>7,5</sup>. Even so, the rates tend to be lower than those among homeless women<sup>8</sup>.

These estimates include men with substance use disorders, many of whom have severe mental disorders of other types and physical ill health as well. The high rates of occurrence in the same individual of two or more mental disorders, and of mental and physical disorders are now being recognised. In a Melbourne survey of homeless and disaffiliated people<sup>5</sup>, 9 per cent of respondents received current diagnoses, and 20 per cent diagnoses at some time in life, in more than one broad category of mental disorder.

A recent study of homeless men in a Sydney shelter found that more than a third of men tested had impairment of memory or other aspects of intellectual functioning. While this may well be related to excessive use of alcohol in many of the men, the possibility remains that some intellectually impaired homeless men could benefit from treatment if their impairment is detected<sup>6</sup>.

## **Variations by time, place and person**

The number and proportion of those with mental disorder among homeless men appear to have increased significantly over the past 20 years. At the same time, the proportion of young chronically ill men has apparently increased and the proportion of older men with problems of substance abuse has decreased. There has been a marked shift in age distribution towards the young among single homeless men overall<sup>9</sup>. Recent studies in Los Angeles and Melbourne suggest that mental disorders, including substance dependence, are now at least as common among young as among older men<sup>7,10</sup>. A high proportion of young people in youth-supported housing in Melbourne had severe illness<sup>11</sup>.

Findings from Australia suggest that individuals who are marginally accommodated have mental disorders in proportions similar to those among homeless people more narrowly defined. It appears that disaffiliated people with severe mental disorders are less likely to live on the streets in Australia, where low-cost accommodation is more readily available, than in many US cities.

However, economic conditions in Australia are changing. Areas with cheap accommodation are being eroded by new housing developments, and government policies are restricting the eligibility for and levels of benefits. The demand for public housing is increasing at a faster rate than supply. There is a real danger that each group in the homeless population may be pushed another rung down the accommodation ladder, and more of the most vulnerable people left without shelter. While most homeless people are not mentally ill, those who do have a severe mental disorder tend to be among the highly vulnerable<sup>12</sup>.

The situation for these people is exacerbated by the fact that a reduced provision of institutional care in Australia since the 1960s has not been complemented by adequate provision of appropriate housing and community care for those people with mental disorder who have difficulty coping with everyday life. During the 1980s, the federal government launched a number of policies designed to assist people with disabilities to stay in the community. However, services of this nature tend to facilitate care in the home, not care in the community<sup>13</sup>. Some specialised accommodation options exist for those living outside institutions who are neither living with family or friends nor capable of fully independent living. Such special-purpose accommodation is in short supply, however, and often inappropriate to the needs or realistic preferences of those without housing.

Social and housing policies, and the ways in which services for people with severe mental disorder are organised, are all likely to influence rates of homelessness among men with mental disorders in our communities. Individuals are differently affected according to many aspects of their own background, personality and situation. The needs of a person soon after the onset of an illness and with a close and perhaps affluent family for support,

are different from those of a destitute man alone after several years of episodically worsening disorder. The management and prevention strategies possible will depend on the attitudes and behaviour of those working in and planning the services, the resources provided, and the social policy climate.

## Genesis of homelessness

A critical issue is how people with severe mental disorder become disaffiliated and homeless. Homeless men commonly experience a number of social, health, and criminal problems. Homelessness for any individual may be determined by a combination of broad social trends, family circumstances, and individual attributes<sup>9</sup>.

While wider factors may be involved, attention to risk factors at the individual level may reverse or prevent a drift towards homelessness. Homeless mentally ill men frequently have a history of childhood family separation or institutional care<sup>14</sup>, and often are socially isolated<sup>15</sup>. Co-occurrence of mental disorders and of mental and physical or substance-use disorders may well be an important factor in the genesis of homelessness.

In the relationship between risk factors and homelessness, the direction of causality may be unclear. For instance, drug abuse, social isolation, and mental disorder are all plausible consequences as well as causes of homelessness. In addition, it is usually difficult to date the onset of homelessness for any individual<sup>9</sup>. In the Melbourne study, evidence of severe mental disorder preceded sustained periods of homelessness or marginal accommodation for many respondents, even when residence in these settings was episodic. Only a small number of respondents appeared to have become mentally ill after becoming homeless<sup>16</sup>. The findings support suggestions that the occurrence of one or more severe mental disorders is a risk factor for homelessness and disaffiliation<sup>17</sup>. Homelessness may follow an accumulation of problems, including mental disorder, that severely limit function and choice.

The relatively high prevalence of disorder evident in younger men (see above) may be related to selective factors in the surveys, to changing rates of disorder in men born in different periods, or to recovery or death of older men with a history of mental disorder. Important questions remain, however, about the effects of changing systems of mental health care, and of welfare and housing policies, on the course and outcome of the various disorders, and on the likelihood of individuals living impoverished and isolated lives. We do not know how many of the young men will still be living in these settings in 20 years, and how this could be influenced by provision of various kinds of services.

## Provision and use of mental health services

Good management of severe mental disorder is similar in principle whether or not the patients are homeless; and is likely to contribute to the prevention of homelessness. At the same time, service providers need to be aware of factors particular to the management of homeless people. The provision of a decent place to live is a primary need, complemented by access to appropriate levels of treatment and support.

While mentally ill homeless people exhibit high mobility<sup>18</sup>, the Melbourne study defined a substantial core of relatively stable people<sup>5</sup>, as have studies in the UK.<sup>19</sup>. Both of these features are relevant to service provision. Homeless people presenting to an emergency psychiatric service may be substantially less likely than domiciled people with similar morbidity to be offered specialist mental health care<sup>20</sup>. These observations require replication in Australia and elsewhere. Providers may assume that standard care has little to offer the drifting person for whom homelessness represents some form of actively sought anonymity. This assumption is likely to overlook the lack of choice that many people have in this situation<sup>20</sup>; and to underestimate the influence of the style and organisation of service provision on the accessibility of mental health care to homeless people.

While engagement has been difficult with traditional psychiatric services, homeless men with mental disorders will often accept supportive and relevant mental health programs. People understandably tend to avoid coercive programs<sup>21</sup>. Studies with periodic assessment of individuals over time have reported good clinical and social outcomes for men provided with accommodation and on-site mental health care and day care<sup>22</sup>, and intensive care management based on shelters for the homeless<sup>23</sup>. On the other hand, a mental health day treatment program offered at one site for homeless men in Manhattan was unable to maintain contact or produce a useful outcome for more than a small number of men<sup>24</sup>. It is relevant to note that the majority of 208 long-stay patients discharged from mental hospitals in Sydney and elsewhere in NSW to supported community accommodation between 1984 and 1987 were functioning well and had remained in the accommodation over some years<sup>25</sup>.

State-funded psychiatric hospital services tend to have a high proportion of homeless people among those admitted for acute treatment. In 1991, an Australian researcher interviewed 269 patients newly admitted to the psychiatric wards at Royal Brisbane Hospital, which has a catchment area covering half of the inner city's suburbs. The study found that 27 per cent (50 men and 22 women) had either used a shelter for the homeless, had no fixed address, or had one or more changes of address in the three months before admission. Fourteen per cent of the total (or almost one in five men and almost one in 10 women) had been shelter users or literally homeless<sup>26</sup>.

Studies of service use by single homeless people in the United States have been concerned mainly with *specialist mental health services*. Between 20 per cent and 40 per cent of the people surveyed in these studies have had a past history of psychiatric hospitalisation (compared with 40 per cent of respondents in Melbourne) and another 15 per cent contact with outpatient psychiatric services only. The higher rates of hospitalisation have applied in those studies which consider admissions for drug or alcohol abuse. Very few of the people in the United States with a history of hospital stay have had recent contact with outpatient or community mental health services<sup>27</sup>.

The use of *primary care services* by homeless mentally ill people has received less attention in the US, where the contribution of this service sector is relatively small, but more attention in the UK. The emphasis on primary care appears to facilitate problem solving and provide links with 'mainstream' services<sup>28,29</sup>. In Australia, a survey of Sydney boarding house occupants suggests that the primary care physician is, by a long way, the main carer for many isolated mentally ill people<sup>30</sup>. The respondents in the Melbourne survey of homeless people reported high rates of current contact with primary and mental health services. We do not know the quality and frequency of these contacts, but do know that relatively few men were taking prescription medication<sup>16</sup>. Young people with severe mental disorders, surveyed in supported housing in Melbourne were mostly out of contact with any mental health services<sup>11</sup>.

## Problems and principles for service delivery agencies

Government and non-government health, welfare and accommodation services often have difficulties in dealing with homeless people with mental disorders.

- The services they provide may be unsuitable for many homeless people. For example, a homeless person may have particular difficulties keeping clinic appointments or taking initiatives to contact further sources of support, or may have multiple health and other problems with which the staff have little experience.
- Suitable help or relief for staff may be hard to find. For example, staff working in hostels for the homeless may recognise that disruptive or odd behaviour in an occupant may be associated with mental disorder, but have trouble gaining expert assistance without calling for police help.
- Staff in psychiatric services need an understanding of the setting from which these referrals come, and of the high rates of severe mental disorder and physical illness in homeless people.

## Principles

1. Services may need to adapt to suit homeless people with multiple problems. Agencies may need to develop flexible policies about seeing people outside the agency, or from outside a catchment area. It may be helpful for welfare, accommodation, general health and mental health services to develop regular consultation or referral links.
2. Staff in welfare and accommodation services may be trained to recognise and deal with some of the manifestations of mental disorder. They need a clear understanding about how to obtain advice or how to refer people in crisis to mental health services.

## Mental health service policies

Homelessness among mentally ill men may be seen in large part as a reflection on inadequacies in the delivery of health, welfare and accommodation services to those with chronic mental disorder, many of whom have multiple disabilities and handicaps, and to their families or other informal care givers. Similar considerations apply to homeless people with organic mental disorders or mental retardation. Homeless people who develop mental disorders as a partial consequence of their living conditions also have problems of access to services.

However it is important to recognise that mental disorder is a problem for only part of the population of homeless people. The problem of homelessness will not be solved, for those with or without severe mental disorder, without attention to the social, welfare and housing issues that affect all homeless people. At the same time, it is important to recognise among the homeless those who would benefit from psychiatric treatment, and the barriers to their care that exist.

Leona Bachrach<sup>18</sup> has defined the barriers to care that exist in the US mental health services. Although our services are in general more integrated than those in many parts of the US, the principles apply.

- Admission or eligibility policies often exclude the most disabled members of the population. For instance, hostels or hospital wards may be available only to those judged suitable for rehabilitation.
- These individuals often have extraordinary service needs in number and content. Organised mental health services generally are not prepared to deal with patients' basic subsistence and sanitary needs.
- Most mental health (and welfare) services define their responsibilities geographically. This makes access difficult for individuals with no fixed abode, and for those who move around a lot.
- Service planners and providers may have unrealistic expectations about what homeless people can and should do. Many chronically ill persons need structured treatment settings where they can receive focused and directed care. Community treatment settings lack structure for those that require or could benefit from it. Such structure needs to be distinguished from paternalism; structure may be provided by means of community 'outreach' and day care settings, as well as in hospital wards.
- Social distance between service providers and homeless people may foster the impression that the homeless have more choice than they do in reality. Service providers may be reluctant to intervene actively because of a mistaken view of the degree of choice that a person has, for instance, in keeping an appointment.

Mental health policies need to address these 'internal' issues, but in addition need to consider the relationship of mental health services, government and non-government, to 'external' services and interest groups, including welfare and housing services, primary health care services, and the interests of family and other informal caregivers of persons with long-standing mental disorder.

The planning of mental health services for homeless mentally ill people may helpfully use the general principles applied to mental health service planning. These principles include the provision of access to comprehensive services that offer a variety of service types and settings. The variety of service types and settings, in particular a range of structured and unstructured services in community and hospital settings, allows flexibility according to an individual's requirements. An important addition is the need for continuity of service provision through the range of service types, and particularly for people who do not have a fixed abode in a service catchment area. There is a need for innovative treatment and support services for homeless mentally ill people who have a concurrent substance abuse problem<sup>24,31</sup>.

Services of this nature are labour intensive and therefore costly. The costs are likely to be at least as great for community as for hospital services<sup>32</sup>. Even when intensive care is given by enthusiastic and committed staff with residential care and other facilities outside hospital, psychiatric admissions will always be needed for some individuals<sup>33,34</sup>. Probably a greater proportion of those who need admission will be more disturbed as others can be dealt with outside hospital. This has cost implications<sup>33</sup>.

Studies in the UK emphasise the importance of interdisciplinary work or at least good supervision or peer review in the difficult area of community care of severely mentally ill persons. Psychiatric nurses and social workers working in isolation in the community may not detect significant morbidity nor deal with the range of problems presented<sup>35</sup>. A high rate of over-prescribing for chronically mentally ill people in the community in the UK has been described<sup>36</sup>. These observations support the need for staff training and regular formal reviews of each patient's management, in the hospital or community.

## **Links with other services and housing**

The provision of health services alone is unlikely to alleviate the problems of homeless people with mental disorder. One logical response has been the establishment of specialised service programs with potential to 'engage the disengaged' and provide a range of basic and specialised services<sup>37,27</sup>, including assertive outreach mental health services. The latter have been successful in engaging numbers of people in care and in maintaining adequate levels of housing. Outreach services have developed in areas of Sydney, Melbourne and other cities. Such services have been established as specialised mental health treatment teams for homeless people, and alternately as part of intensive mobile community services for those with severe mental disorder. Assessment is now in progress of how effectively these different approaches serve the varying needs of the local populations. Since 1988, a 24-hour psychiatric outreach service has been in operation in the inner city of Sydney to provide services to residents of refuges for the homeless, targeting residents with serious mental disorders<sup>21</sup>. The experience of this service, as with a similar service established more recently in inner Melbourne (R. Newton, personal communication), is that it provides one effective management strategy in dealing with the complex issues related to treating homeless men with mental disorders. A preliminary study of two mobile community treatment teams in Sydney has found that for the patients treated there was a reduction in the use of hospital beds, an increase in stability of accommodation for inner city patients, and an improvement in daily functioning<sup>38</sup>.

Another and perhaps complementary approach arises from the observations in Sydney, Melbourne, Brisbane and elsewhere that many of the homeless people surveyed do make contact with health services. It is likely that doctors and other professionals in primary health care could have a greater role in management of homeless (and other) people with severe mental disorder than they generally have at the moment. In particular, these practitioners could link with outreach services, to provide access to a range of preventive, crisis and support services in a variety of hospital and community settings. Access to psychiatric treatment in local hospital and community settings, and an adequate range and supply of supported accommodations are the minimum requirements.

However doctors in primary care and support workers in generic services often have little contact with the specialist services, especially in crisis situations and after hours. This reflects the 'poorly developed intersectoral links between mental health and general health, social and disability services present[ing] a range of barriers to continuity of care...Social justice reforms with social and income support, and labour market programs which address the needs of people with disability have only recently recognised the specific needs of people with psychiatric disability'<sup>39</sup>. Information systems are not sufficiently developed to facilitate the continuity and integration of service delivery<sup>39</sup>. The fragmentation of services affects particularly people with dual disabilities. Professionals in mental health services and in drug and alcohol services often lack mutual understanding or training<sup>31</sup>.

These problems have, at best, led to a tendency for people with long-standing or episodic mental disorder to be lost to the system. At worst, the fragmentation of services has enabled people, especially those with dual disabilities, to be excluded from services, each service seeing the provision of assistance as the responsibility of the other. Lack of continuity of care or, at times, any care, is likely to increase the number of people with mental disorder who become homeless or are at risk of homelessness.

Lack of provision or continuity of care not only affect the drift into homelessness, they also make it difficult for someone with mental disorder who has become homeless to escape. There is an acute shortage of exit points for homeless people in general in Australia<sup>40</sup>. The problems are compounded for people with mental disorder by the fact that government and community groups have never fully resolved the question of who has the ultimate responsibility for the accommodation of people with special needs<sup>41</sup>.

Yet a range of supported accommodation is a vital service element. This type of accommodation is provided mainly, in our setting, by community-managed organisations such as the Richmond Fellowship. Recent publications describe alternatives to traditional hospital care: small, highly staffed, specialised and 'non-institutional' hostel or hospital wards. These may have an emphasis on rehabilitation, or may focus on providing high-quality long-term care for those who might otherwise end up in an institution or on the streets<sup>42,43,22</sup>. Provision of this last kind is most seriously lacking in our present system, and is particularly inaccessible to people with 'dual disorders'<sup>31</sup>. The existing provision of commercial special accommodation houses or their equivalent (originally established for the frail elderly) is unsatisfactory in a number of ways. Lack of amenity and activities, and untrained staff, combined with rigid requirements for institutional living, are common.

To the extent that the community-managed housing sector has assumed responsibility for accommodating and supporting 'difficult' tenants, this has tended to be by default, rather than the outcome of negotiation, agreement and careful targeting and planning. Perhaps as a result, no housing sector has been resourced appropriately to undertake this function, and adequate training and career paths for staff have not been provided<sup>44</sup>. When people with mental disorder are accepted by such services, the absence of back-up psychiatric services can create a risk or disruption for either the client or other residents. This can lead to people being barred from accommodation and other services, and means that those with possibly the greatest support needs may be left to absolute homelessness.

Men with mental disorders may only obtain access to particular forms of accommodation, generally those without security of tenure and least likely to provide an environment that can facilitate their exit from homelessness, and therefore their ability to cope with mental disorder. While 'drifting' appears to be associated with some illnesses, it may well be that a partial explanation of this behaviour is service providers' selection process, especially where shared medium-term accommodation is involved, and other tenants have a say in the selection process<sup>41</sup>.

For some homeless people, independent or supported accommodation may be important as a permanent base, with or without flexible community support. For others, the ability

to move about will remain important, with the vital service elements being assertive outreach or 'case management' and the availability of accommodation for varying lengths of stay. The most significant understanding is that many of the most severely disabled mentally ill people may be engaged in services; however, we must proceed with caution and flexibility in designing programs, leaving much room for individual variation in services offered and provided.

Even where access to accommodation is obtained, people with mental disorder do not always receive the support they need to live independently. Coordination between agencies offering generic support and those offering specialist psychiatric support is often poor. It has been noted that a number of service providers are reluctant to acknowledge the probable extent of mental disorder in the homeless population<sup>2</sup>. There is an understandable sensitivity to blaming the victim, and thereby stigmatising an already disenfranchised population<sup>45</sup>. However this outlook, coupled with lack of training, has at times prevented housing workers in the social and community services sector from acknowledging the need of some of their clients for specialist services. At the same time, partly because of the lack of clearly negotiated responsibilities of community-managed housing groups in the overall provision of social services, specialist services frequently ignore community-managed housing groups and generalist support workers who may have contact with their clients, other than to criticise their perceived reluctance to provide accommodation for people with psychiatric or drug-related disabilities.

There is now a greater recognition of the need for more intersectoral linkages. However, there is still a general lack of coordination, and, indeed, of mutual respect, common language and level of understanding between generic service providers and providers of specialist services<sup>46</sup>. An important issue that must be resolved is the extent to which generic service providers are to be given access to clinical information. Then it is urgent to address the issue of training of generic support workers for homeless people. It is important for support workers to be able to recognise those clients in need of specialist services, and to be familiar with the range of specialist services to which they can help clients gain access<sup>47</sup>. A project in north-east Melbourne<sup>48</sup> has demonstrated the value of a concerted effort to link services across sectors with training and shared work, with a resultant change in attitudes of service providers and the service use of homeless young people.

## **The National Mental Health Policy**

The National Mental Health Policy statement in 1992 advocates major changes, including the development of an integrated network of specialist psychiatric services and their delivery within the mainstream system of health care. The policy marks the health sector's movement away from earlier approaches, which aimed to provide everything in life for a segregated group of patients. A community-oriented approach is advocated, including a new relationship between mental health services and the wider housing sector, an increase in the range and amount of supported accommodation, and decentralisation of the 'mainstreamed' mental health services, so that the removal of people from community, family and cultural networks is minimised.

If successfully implemented, these changes could have a profound effect on reducing the vulnerability of people with mental disorder to homelessness. The mainstreaming of health services could help overcome the past marginalisation and stigma of people with mental disorders. Improved community awareness and access to community health services could lead to the tendency to seek help earlier, and thus to better outcomes for some people. The impediments to continuity of care are likely to be reduced, and its acceptability to clients increased. The tendency may be lessened for people with psychiatric disabilities to be concentrated in particular residential locations near the former centralised services. There is likely to be increased support for carers, self-help groups and consumer advocacy, and access to more support for non-mental health workers.

The restructuring of services that is taking place, however, is by no means complete. Further, there are dangers that in implementing these policies, unintended consequences may emerge detrimental to people with mental disorder and at risk of homelessness. A reduction could occur in access to general health services, including drug and alcohol services. In a number of areas, mainstream services themselves are inadequate. In addition, the behaviour patterns of some vulnerable people may contribute to them failing to receive the type of attention they need from busy and unprepared mainstream services. Equally, homeless people may not see the mainstream services available as appropriate to their needs. There is also a danger of an unintended reduction in the relative funding of services required by some men with mental disorder in an economic climate which stresses cost-effectiveness<sup>47</sup>.

## Conclusions

1. Severe mental disorder especially when combined with alcohol or drug dependence or abuse, is a problem for many homeless men in Australia; and appears to be a risk factor contributing to vulnerable men drifting into the homeless state.
2. Recognition of the plight of homeless mentally ill people has been part of the impetus for a national approach to reform of mental health services. However, economic recession and policies of economic rationalism make the necessary reforms difficult to implement and in themselves are likely to result in more mentally ill people becoming homeless and shelterless.
3. Negotiation is required between the community-managed housing groups and the government about the provision of supported housing. Once the extent to which the community sector is to assume this role has been resolved, the sector needs adequate resources, including money, training, information, and sufficient autonomy, to be able to do the job properly.
4. There is a need for more accommodation of varying types. In particular:
  - an increase in the number of single-bedroom units in medium-term supported accommodation projects so that other tenants already under stress do not have to accept responsibility for someone whose behaviour is disruptive or threatening;
  - accommodation for people with the dual disabilities of mental disorder and drug and alcohol dependence, with staff trained in both fields;
  - more projects which provide accommodation specifically for people with challenging behaviour, and have limited expectations of the residents<sup>49</sup>; and
  - better access for mentally ill people to independent public housing.
5. There is also a need to rethink rules and policies on access to accommodation, especially with respect to issues such as drug use by those with mental disorder.
6. The increased availability of multidisciplinary outreach teams from the mental health services is essential. To ensure that the mainstreaming of services does not lead to the reduced accessibility of these services for their clients, generic service providers need to work closely with such teams. The wide availability of mental health crisis services which can provide prompt assessment and support is also essential.
7. Improved coordination between the sectors responsible for housing and supporting people with mental disorder is important. Policies on community-managed housing need to be developed in the light of other social service provision policies. Diverse approaches to the provision of housing are required, matched to local needs.
8. There is a need for a conscious effort to improve the level of understanding between providers of generic support to homeless people, providers of specialist mental health services, and providers of drug and alcohol services. Some consideration, for

example, might be given to secondment of health workers to youth support services, to an extension of the idea of the guidance of youth workers by clinicians in rural areas, or to joint training opportunities for workers in the mental health and drug and alcohol services.

9. The promotion and support of primary medical practitioners in the care of people with serious mental disorder, and recognition of the needs of families and other care givers.
10. Vital to service developments at this point is recognition of the role of community psychiatrists and other key clinicians and support workers in the planning of local service developments.
11. An increased investment in research and service evaluation in this area is required. Services need to be responsive to community needs, and improvements will result from greater understanding of:
  - the factors affecting the course of severe mental disorders, particularly in the face of co-morbidity;
  - the risk factors for homelessness in those with chronic mental disorder. Further understanding in this area requires case control and longitudinal studies of a type not yet attempted. We need to know who among the mentally ill is most at risk and why. Research to yield preventive strategies may need to be even more precise, as determinants of homelessness are likely to be different for men and women, for different age groups, and for people with different diagnoses;
  - careful evaluative studies as new patterns of services are developed in each area. A number of general principles relating to service provision may be defined, but imported service models rarely sit comfortably. The need for services must be assessed in each area in the light of the sociodemographic profile of the population and the pattern of existing services, and then the levels and types of provision evaluated and adjusted.
12. Public education and professional advocacy. Education is required about the scale of the problem, and about the service and policy changes which are likely to help. Professional advocacy, and support for self-help and family support groups, are important in the face of the continuing stigma of mental disorder.

## Acknowledgment

The author thanks Maree Teesson for comments on an earlier version of this paper, and Dr Cecily Neil.

## References

1. Human Rights and Equal Opportunity Commission (HREOC). Our homeless children. Australian Government Publishing Service: Canberra. The Burdekin Report, 1989.
2. Neil CC, Fopp R, McNamara C, Pelling M. Homelessness in Australia: Causes and Consequences. CSIRO: Melbourne. 1992.
3. Scott J. Homelessness and mental illness. *Br J Psychiatry* 1993;162:314-324.
4. Doutney CP, Buhrich N, Virgona A, et al. The prevalence of schizophrenia in a refuge for homeless men. *Aust N Z J Psychiat* 1985;19:233-238.
5. Herrman H, McGorry P, Bennett P, van Riel R, Singh B. Prevalence of severe mental disorders in disaffiliated and homeless people in inner Melbourne. *Am J Psychiatry* 1989;146:1179-1184.
6. Teesson M, Buhrich N. Prevalence of schizophrenia in a refuge for homeless men: a five-year follow-up. *Psychiatric Bulletin* 1990;14:597-600.

7. Koegel P, Burnam A, Farr RK. The prevalence of specific psychiatric disorders among homeless individuals in the inner city of Los Angeles. *Arch Gen Psychiatry* 1988;45:1085-1092.
8. Virgona A, Buhrich N, Teesson M. Prevalence of schizophrenia among women in refuges for the homeless. *Aust N Z J Psychiat* 1993;27:405-410.
9. Susser E, Lovell A, Conover S. Unravelling the causes of homelessness and of its associations with mental illness. In: Cooper B, Helgason T, Epidemiology and the prevention of mental health disorders. London, Routledge, 1988;228-239.
10. Herrman H, McGorry P, Bennett P, Singh B. Age and severe mental disorders in homeless and disaffiliated people in inner Melbourne. *The Med J Aust* 1990;153:197-205.
11. Reilly JJ, Herrman H, Clarke DM, Neil CC, McNamara CL. Psychiatric morbidity and service use among young people in Melbourne with experience of homelessness. *Med J Aust*. In press.
12. Tessler R, Dennis D. A synthesis of NIMH - funded research concerning persons who are homeless and mentally ill. National Institute of Mental Health, Rockville, MD, USA, 1989.
13. Rosenman L. Community care: social or economic policy? . In: Saunders P, Encel D, eds. Social policy in Australia: options for the 1990s. Social Policy Research Centre Reports and Proceedings No. 98, Proceedings of National Social Policy Conference, Sydney, 3-5 July 1991, Vol. 1: Plenary Sessions, 1992.
14. Susser E, Struening EL. Childhood experiences of homeless men. *Am J Psychiatry* 1987;144(12):1599-1601.
15. Thornicroft G, Breakey WR. The COSTAR Programme. 1: Improving social networks of the long-term mentally ill. *Br J Psychiatry* 1991;159:245-249.
16. Herrman H, McGorry P, Bennett P, Varnavides K, Singh B. Use of services by homeless and disaffiliated individuals with severe mental disorders. In: Cooper B, Eastwood R, eds. Primary health care and psychiatric epidemiology, Tavistock/ Routledge, London & N.Y., 1992,143-159.
17. Lamb RH, Lamb DM. Factors contributing to homelessness among the chronically severely mentally ill. *Hosp Community Psychiat* 1990;41(3):301-305.
18. Bachrach LL. Issues in Identifying and treating the homeless mentally ill. In: Bachrach LL.: Leona Bachrach speaks: selected speeches and lectures. New Directions for Mental Health Services. Lamb HR, ed. no.35. Jossey-Pass, San Francisco, 1987.
19. Marshall M, Gath D. What happens to homeless mentally ill people? follow up of residents of Oxford hostels for the homeless. *Br Med J* 1992;304:79-80.
20. Burns TP. Community care and rehabilitation. *Current Opinion in Psychiatry* 1989;2:273-277.
21. Buhrich N, Teesson M, Jayes L. Impact of a psychiatric outreach service for the homeless with schizophrenia. Submitted for publication.
22. Lipton FR, Nutt S, Sabatini A. Housing the homeless mentally ill: a longitudinal study of a treatment approach. *Hosp Community Psychiat* 1988;39:40-45.
23. Goering P, Wasylenki D, Onge MS, Paduchak D, Lancee W. Gender differences among clients of a case management program for the homeless. *Hosp Community Psychiat* 1992;43:160-165.
24. Caton C, Wyatt R, Felix A, Grunberg J, Dominguez B. Follow-up of chronically homeless mentally ill men. *Am J Psychiatry* 1993;150:1639-1642.
25. Andrews G, Teesson M, Stewart G, Hault J. Follow-up of community placement of

- the chronic mentally ill in NSW. *Hosp Community Psychiat* 1990;41:184-188.
26. Quinn J. Thesis submitted to University of Queensland. 1993.
  27. Gelberg L, Linn LS, Leake BD. Mental health, alcohol and drug use, and criminal history among homeless adults. *Am J Psychiatry* 1988;145:191-196.
  28. Powell PV. Qualitative assessment in the evaluation of the Edinburgh primary health care scheme for single hostel dwellers. *Community Med* 1988,10:185-196.
  29. Reuler JB. Health care for the homeless in a national health program. *Am J Public Health* 1989,79:1033-1035.
  30. Harris R, Maley M, Szajnoha S. Chronically mentally ill in boarding houses. A discussion of service utilisation. Department of Community Medicine, University of NSW (unpublished), 1987.
  31. McDermott F, Pyett P. Not welcome anywhere: people who have both a serious psychiatric disorder and problematic drug or alcohol use. Melbourne: Victorian Community Managed Mental Health Services Inc., 1993.
  32. Abrahamson D. Institutionalisation and the long-term course of schizophrenia. *Br J Psychiatry* 1993;162:533-538.
  33. Tyrer P, Ferguson B, Wadsworth J. Liaison psychiatry in general practice: the comprehensive collaborative model. *Acta Psychiatr Scand* 1990;81: 359-363.
  34. Hoult J. Community care of the acutely mentally ill. *Br J Psychiatry* 1986,149:137-144.
  35. Wooff K, Goldberg DP. Further observations on the practice of community care in Salford: differences between community psychiatric nurses and mental health social workers. *Br J Psychiatry* 1988;153:30-37.
  36. Holloway, F. Prescribing for the long-term mentally ill - a study of treatment practices. *Br J Psychiatry* 1988,152:511-515.
  37. Levine IS. Service programs for the homeless mentally ill. In: Lamb HR, The homeless mentally ill. American Psychiatric Association, 1984:173-200.
  38. Teesson M, Hambridge J. Mobile community treatment in inner city and suburban Sydney. *Psychiatric Quarterly* 1992;63:2,119-126.
  39. National Health Strategy. Help Where Help is Needed. Continuity of care for people with chronic mental illness. National Health Strategy Issues Paper No 5, National Health Strategy: Canberra, 1993.
  40. Fopp R. Homelessness: Implications for State Housing Authorities. Ministerial Advisory Committee on Homelessness and Housing: Melbourne, 1992.
  41. Neil CC, Pelling M, Ashley J, McNamara C. Community management of public housing stock in Australia. Paper presented at the ENHR Conference, Budapest, 7-10 September 1993.
  42. Hyde C, Bridges K, Goldberg D, Lawson, K, Sterling C, Faragher B. The evaluation of a hostel ward - a controlled study using modified cost-benefit analysis. *Br J Psychiatry* 1987,151:805-812.
  43. Lehman A, Zastowny T, Kane C, et al. Intensive inpatient treatment of young adult chronic patients. *Psychiatr Q*, Fall 1986-87;58(3):167-179.
  44. Nyland J. The role of funding bodies in in-service training for the non-government sector. 1992. In: Saunders P, Encel D, eds. Social policy in Australia: options for the 1990s. Social Policy Research Centre Reports and Proceedings No. 98. Proceedings of National Social Policy Conference, Sydney, 3rd-4th July, 1991, Volume 3: contributed papers.

45. Bassuk EL, Rubin L, Lauriat A. Is homelessness a mental health problem? *Am J Psychiatry* 1984;141:1546-1550.
46. Sawyer M, Meldrum D, Tonge B, Clark J. Mental health and young people. National Clearinghouse for Youth Studies: Hobart, 1992.
47. Herrman H, Neil CC. In: Bhugra C, ed. Homelessness and Mental Health. Chapter on Lessons from Australia. In press.
48. Fuller A, Pawsey R. The homelessness agencies resource project. *Youth Studies Australia* 1993;12(1):45-47.
49. McDonald P. Confronting the chaos. The Salvation Army Crossroads Housing and Support Network: Melbourne. 1993.

RESERVED

# Separation, divorce and mental health

---

B. Rodgers

NH&MRC Social Psychiatry Research Unit  
The Australian National University, Canberra

---

*Of all the social variables whose relationships with the distribution of psychopathology in the population have been studied, none has been more consistently and powerfully associated with this distribution than marital status.<sup>1</sup>*

## Divorce in Australia

The Australian Bureau of Statistics reported that 45 665 divorces were granted in 1992, the highest annual figure since the record year of 1976 when the Family Law Act came into effect and introduced 'no-fault' divorce throughout Australia<sup>2</sup>. The increase in number of divorces is partly a reflection of the general increase in population size and, more specifically, the number of married people in the population. When the divorce rate is calculated as a proportion of existing marriages, there has been little change since 1977, and the rate for 1992 was slightly less than for 1981 (11.5 divorces per thousand married women compared with 11.9 per thousand). There has, however, been a slow but progressive increase in the rate between 1986 and 1992. The changes that have taken place over recent decades can be summarised as a steady increase in divorce rate starting in the early 1960s, a sharp peak corresponding to the introduction of the Family Law Act, and then a plateau at a level rather higher than the pre-1976 rate. A general increase in divorce rates over this period has been a common feature in developed countries<sup>3,4</sup>.

These figures describe the 'flow' of individuals between married and divorced status, but they do not indicate the numbers in the population at a given time who are divorced, and they exclude separations. The number of currently divorced or separated is an accumulation of those whose marriages have broken down in past years and is depleted by the number who have since remarried. The 1991 Census identified 306 146 divorced and 172 497 separated men (i.e., 7.4 per cent of males aged 15 years or more when combined) and 385 955 divorced and 201 645 separated women (8.8 per cent of females aged 15 years or more)<sup>5</sup>. The figures in Table 1 show a substantial rise over a 30-year period in the percentage of the population that is divorced or separated, for men and for women<sup>5,6,7</sup>. This rise was maintained in recent years when the divorce rate showed little change. Two other notable features are that percentages for women are always somewhat higher than for men, reflecting the greater likelihood of men remarrying, and that the introduction of the Family Law Act has not diminished the numbers of separated men and women.

**Table 1. Numbers of divorced and separated (Australia 1961-91).**

Year		Divorced	Separated	Total population (15 yrs +)	Divorced +separated (%)
1961	Men	38 640	68 172	3 686 057	2.9%
	Women	43 339	78 367	3 645 131	3.3%
1971	Men	61 749	86 337	4 532 154	3.3%
	Women	71 421	97 052	4 553 432	3.7%
1976	Men	96 429	111 021	4 884 468	4.2%
	Women	124 117	136 751	4 973 648	5.2%
1981	Men	177 734	127 567	5 394 929	5.7%
	Women	225 803	149 993	5 524 497	6.8%
1986	Men	248 427	141 924	5 904 292	6.6%
	Women	311 341	167 859	6 061 019	7.9%
1991	Men	306 146	172 497	6 430 171	7.4%
	Women	385 955	201 645	6 654 921	8.8%

## The stress of separation and divorce

Research attempting to quantify the subjective stress of a range of adverse experiences has consistently found that divorce is rated as one of the most distressing of all life events. This applies in Australia, and two studies in Sydney<sup>8</sup> and Canberra<sup>9</sup> identified only three other experiences which were considered more distressing: death of a spouse, death of a child, and imprisonment. Separation because of marital difficulties (not necessarily permanent) ranked lower, but was rated as very distressing nonetheless, on a par with experiences such as having an unwanted pregnancy, stillbirth, abortion or miscarriage, experiencing continuous financial worries, and being made redundant. Other problems with marital relationships were rated as similar to marital separation, including serious arguments with husband or wife, sexual difficulties, and husband or wife starting an affair. Given these findings, it is no surprise to discover symptoms of depression and other problems of psychological and social adjustment in those currently going through (or recently having gone through) separation and divorce. What is perhaps surprising is the view that men are more adversely affected than women.

There is no doubt that men show a strong emotional response to marital breakdown. A study by Jordan<sup>10</sup> of 168 male divorce applicants in Brisbane reported high rates of sleeplessness, headaches, poor memory, stomach ulcers, crying, reduced energy, poor appetite, excess tiredness and tight muscles at the time of separation in comparison with the period before separation. Even before separation, 65 per cent of these men had sought some form of outside help or guidance, including 10 per cent who reported seeking help from a psychiatrist, 19 per cent from a general practitioner and 20 per cent from marriage guidance. This inquiry did not cover professional help received after the separation, but a similar British study<sup>11</sup> reported that 9 per cent of men experienced 'new very severe mental health problems' since their divorce (i.e., they were hospitalised or were unable to work for a considerable period) and a further 24 per cent were classified as having 'new severe mental health problems'. More objectively, 33 per cent used anti-depressants or tranquillisers and 15 per cent used sleeping pills over the period of their divorce. These

studies did not compare men with women, but other research has suggested that husbands have a different initial response to separation which in some respects is more extreme than the response of their wives<sup>4</sup>. Factors likely to be involved in this include men being less often the major decision maker regarding separation, men's lack of awareness of the breakdown of their marriage in many instances, their ignorance of their wives' views on separation, their preference not to separate (81 per cent in the Brisbane study), their greater hope for reconciliation at the time of separation (70 per cent in Brisbane) and subsequently, and the greater likelihood of being separated from their children. An earlier survey in Sydney<sup>4</sup> concluded:

*For both men and women, unsuccessful marriage, separation and divorce are painful and stressful experiences. However, it is the men in this group who present the consistently more negative picture. They were more likely to feel that their standard of living had fallen since separation; to be lonely; to have found the adjustment to separation difficult; to regret the separation and to have wanted (but not expected) a reconciliation; and to be interested in re-marriage. This does suggest that men may suffer more from marriage dissolution than women.*

This study had also observed, however, that women rather than men were more likely to seek help from friends, religious counsel, marriage guidance organisations, doctors and psychiatrists. Bordow<sup>12</sup> has commented on the considerable proportion of men who turn towards less 'interpersonal' sources of comfort, such as their job, hobbies and other interests, and alcohol.

The Australian Institute of Family Studies' (AIFS) *Consequences of Marriage Breakdown Study* has provided further insight into the difference between men and women in the initial period after separation<sup>13</sup>. A sample of divorced men and women in Victoria rated their satisfaction with several areas of life, including personal/emotional life, for their last year of marriage and the first three months of separation. Women reported substantially more dissatisfaction with their personal/emotional life in their last year of marriage than did men. For the first three months of separation, women showed less dissatisfaction and men substantially more than previously, such that the difference between them was reversed. A similar pattern was observed for ratings of satisfaction with life as a whole. However, when husbands and wives were sub-divided into those who made the decision to separate and those whose spouses made the decision, there were similar results for men and women. The important difference was that men more often than women were the 'rejected' partner and it was this rejection which was strongly associated with decreased morale after separation.

## Recovery after divorce

The Brisbane study found similar rates of mental health complaints one to two years after final separation as were reported for the period before separation, and considerably less than at the time of separation<sup>10</sup>. Recovery was also shown by the Victorian study, for men and for women. Satisfaction with personal/emotional life was far higher one to three years after separation than before separation or in the three months after it<sup>13</sup>. A further follow-up of the same sample three years later found additional small increases in satisfaction for both sexes<sup>14</sup>. It must be kept in mind that all these studies necessarily rely on recollections of subjective experiences and are therefore liable to error, although research in the United States carried out after much shorter periods of separation is consistent with the Australian findings<sup>15</sup>. Overall, results indicate that men are far from blind to the difficulties in their marriage before the initiation of the divorce process, but often they are less prepared for the finality of separation and consequently show a stronger acute reaction than women. It must also be acknowledged that considerable individual differences in response, for men and for women, overlay this generalisation.

The possibility that some individuals may not follow the general pattern of recovery after separation was considered by the Brisbane and Victorian studies. In Jordan's sample of

men, poorer outcome was associated with separation being unwanted, reported low marital conflict, attempted reconciliation, low occupational status and living alone (one to two years) after separation<sup>10</sup>. In the AIFS study, the factors predicting lower morale in men were having a pre-school child (at the time of separation), poor post-separation living standards, and not being repartnered<sup>14</sup>. Having a pre-school child and not being repartnered were also factors associated with low morale in women, and so were lack of participation in the separation decision and having had good pre-separation living standards. When this sample was studied again three years later, repartnering was the most important factor associated with improved morale. Although these findings were not based on measures of mental health outcomes specifically, it is likely that they have some relevance to depression.

## Benefits of divorce

As well as the obvious adverse consequences of marital breakdown, it is important to acknowledge the positive aspects which are evident in individual cases. These are apparent in the comments made by men and women after their divorce<sup>4</sup>, particularly after the initial period of turmoil is over, but it is not clear from the studies already discussed whether such subjective improvements translate into a reduction in the level of mental health problems. Larger-scale studies which lack this more subjective information often ignore the issue of whether separation may benefit some individuals, but a few have considered this possibility. They generally support the idea that escape from a previously highly stressful marriage leads to a reduced risk of depression and suggest that this benefit is not seen in the short term but only one or two years or more after separation<sup>16,17</sup>. It is not clear whether these instances of improvement are equally common in men and women, but if marriages characterised by violent behaviour and alcohol abuse are considered the most stressful, then wives rather than husbands would be more likely to benefit from dissolution.

## Services for those going through divorce

If the mental health problems associated with separation and divorce were predominantly concentrated in a short period after the time couples stopped living together, the public health implications would be relatively straightforward. The provision of counselling for those whose marriage had recently broken down would be an appropriate emphasis and this could be strengthened by efforts to detect individual instances where recovery was poorer than anticipated. The quicker divorce process subsequent to the Family Law Act may have brought some benefits by increasing the likelihood of early contact with such services. Existing provision, including that available through the Family Court and voluntary organisations which deal specifically with marital breakdown, goes some way towards meeting requirements, although the reluctance of people to use services is cause for concern. Men especially resist use of marriage guidance before marital breakdown as well as professional help during the period after separation, and there is good reason to promote further the availability of services.

Unfortunately, there is a substantial body of evidence testifying that the relationship of poor mental health with marital breakdown is not confined to a short period after separation.

## Divorce and long-term mental health problems

Large-scale population studies (or epidemiological studies) have consistently reported high rates of mental health problems in the divorced and separated compared with single and married people<sup>1,18</sup>. The quotation at the beginning of this chapter arose from a review of research which encompassed data obtained from psychiatric treatment facilities and

from population surveys. There are no comprehensive studies of the association between mental health problems and marital status in Australia, and the most pertinent information comes from the US. Findings from the large multi-site Epidemiologic Catchment Area (ECA) study were summarised by the statement that 'rates of being currently separated or divorced were at least twice as high for those with almost any active disorder\* as for those without the disorder of interest'<sup>19</sup>. These results are shown in Table 2.

**Table 2. Marital status of those with active disorders\* (US)**

Type of disorder	Divorced/ Separated	Married	Widowed	Never married
No disorder	8%	61%	8%	23%
Schizophrenia	26%	33%	5%	36%
Depressive episode	22%	44%	8%	26%
Panic	22%	51%	6%	22%
Somatisation	21%	28%	26%	25%
Generalised anxiety	20%	49%	5%	25%
Manic episode	20%	39%	5%	37%
Alcohol abuse/dependence	18%	40%	3%	39%
Antisocial personality	18%	44%	2%	35%
Phobia	16%	55%	7%	22%
Obsessive compulsive	16%	52%	7%	25%
Drug abuse/dependence	14%	24%	1%	61%

Taken from Robins, LN & Regier, DA (eds.) *Psychiatric Disorders in America*. New York: Free Press, p. 355.

Although there are no comparable data for Australia, the information available is consistent with this picture. Surveys in rural Victoria<sup>20</sup>, Perth<sup>21</sup> and Canberra<sup>9</sup> using measures of psychological distress which are predictive of depression have found high rates for the divorced/separated, and this was confirmed in a large national sample studied in 1977-78 by the Australian Bureau of Statistics<sup>22</sup>. Hospital treatment data from South Australia (inpatient and outpatients combined) have shown higher incidence rates of depression in the separated and the divorced compared with the single or the currently married<sup>23</sup>. Alcohol consumption is also high in divorced and separated men, but the association between marital status and consumption has been reported to be much weaker in women<sup>22</sup>. In contrast, studies of patients treated in two alcoholism centres in Melbourne showed a similar frequency of divorced status in men and women, and this was far higher than observed in the general population<sup>24, 25</sup>. A study (predominantly of men) in the Hunter region of NSW classified drinking levels using NH&MRC guidelines and found that 25.6 per cent of divorced and separated men were high-risk drinkers, compared with 14.6 per cent of single and widowed men and 6.1 per cent of married men<sup>26</sup>. A measure of problem drinking showed an even stronger relationship with marital status than did consumption level. In one report from Queensland, 57 per cent of male patients in alcohol rehabilitation units were found to be divorced or separated<sup>27</sup>. It is possible that Queensland is not typical of Australia as a whole in this respect, and a parallel study in South Australia gave less extreme results<sup>28</sup>. These associations between mental health problems and marital status should perhaps be seen in a broader context,

\*An active disorder was one which met specified diagnostic criteria at some time in a person's life and for which there was some sign of being present in the 12 months before interview.

as research in many countries (including Australia) has identified the divorced as having a high risk of physical health problems also and a high mortality rate<sup>22,29,30</sup>.

The reasons for the poor health of the divorced and separated are not easy to establish. It is plausible that poor health may lead to divorce or vice versa, or that both may be a consequence of common factors such as marital conflict or poor socioeconomic circumstances. There is evidence to support each of these ideas. In the mental health sphere, it appears that the relative contribution of these components varies according to the type of disorder under consideration. For disorders that typically have an early onset, particularly when they are severe (e.g., schizophrenia and drug abuse and dependence), there is a pattern of those affected being less likely to marry as well as being more likely to divorce if they do marry (see Table 2), indicating that disorders themselves or the personalities and lifestyles linked to disorders interfere with personal relationships.

The area of mental health which has been studied most in this context is depression, and much of this research has been carried out in the US. The preferred research design in this field would be one which followed the same individuals from the time before marriage, through any period of adversity and conflict in marriage, through the period from initial separation to independent living and, when appropriate, through any repartnering. In practice, information has usually been obtained for part of this sequence only or, worse still, was collected at a single point in time. Consequently, some caution is needed in interpreting the findings. To summarise, there is mixed evidence concerning the extent to which depression precedes divorce<sup>31,32</sup>, a better indication that it is more common after divorce than preceding it (even after taking account of the immediate impact of recent separations)<sup>16,33</sup>, and less support for the notion that remarriage improves mental health<sup>34,35</sup>. This finding seems discrepant with the results of the AIFS Victorian study, but it appears that remarriage is more common for those with better mental health initially and it may be that the increased morale of repartnered people is a return to a previous level of life satisfaction. There is additional evidence that financial problems and other stresses of single parenthood are linked to levels of depression<sup>36</sup>. Finally, the higher rate of depression and other neuroses in women compared with men in the general population is also found in the divorced<sup>37,38</sup>.

Less information is available about alcohol consumption or problems associated with drinking through the transitions between unmarried, married, divorced and remarried status. There is a substantial amount of anecdotal information, however, some obtained by systematic means. The consensus view in Australia is that many divorces are caused, wholly or partly, by drinking problems, and that husbands are primarily responsible. The figure of 40 per cent<sup>39</sup> is often given for the proportion of divorces 'associated with the problem of alcoholism', but different studies provide variable figures. One survey of deserted mothers in Victoria found that 'conflict about the husband's drinking' was reported in 43 per cent of cases, although the percentage of chronic alcoholics and heavy drinkers was even higher at 55 per cent<sup>40</sup>. In Burns' study in Sydney, 36 per cent of women mentioned their husband's drinking as a cause of marital breakdown but only 17 per cent of men admitted to this<sup>4</sup>. It was a factor strongly associated with socioeconomic status, being much more common in men from lower occupational levels, and in many instances had been a long-standing problem before separation or even pre-dated marriage. By way of contrast, only 7 per cent of the men in Jordan's study mentioned their drinking as an area of conflict in their former marriage<sup>10</sup>. This is a topic where there is a particular difficulty of under-reporting<sup>41,42</sup> and there is a likelihood of problem drinkers refusing to participate in research studies. An additional feature of problem drinking is its association with other contributors to marital conflict and causes of divorce. It is frequently found in combination with violence directed towards wives, neglect and abuse of children, gambling, and other aspects of poor financial management. Price<sup>27</sup> has discussed the role of drinking in the context of Australian 'mateship', which contains the vestiges of frontiersman days and is characterised by under-involvement with family life. This notion may be more applicable in some geographical areas than others.

This research in the areas of depression and alcohol abuse indicates that mental health problems associated with divorce are often chronic rather than acute. Their origins may lie in the time before divorce and even before marriage, and they endure long after separation. This picture has very different public health implications to those arising from the view of divorce as a short-term stressful event. The issues can be examined further in relation to the more visible currently separated/divorced group and to the less visible groups of those with marriages at risk of breakdown and those who have remarried.

## Public health issues for chronic mental health problems

Efforts to improve the mental health of the currently separated and divorced can adopt a strategy of targeting individuals with the most severe problems or of improving the circumstances of this group as a whole, and these are not mutually exclusive possibilities. The opportunity for targeted intervention may arise when individuals have already come into contact with services around the time of separation, and where there are indications that mental health problems have been present for some time or are unlikely to remit in the short term. In such cases referral to appropriate services for chronic problems (such as alcohol and drug abuse) may be justified. It is further possible that the circumstances surrounding divorce could provide opportunities for a more proactive approach, in that those who have resisted counselling or other treatments may be more accepting of these services when they experience the break up of their family. It must be acknowledged that current information on indicators of poor long-term adjustment after divorce is rudimentary.

The main focus of attention for improving the general lot of the divorced and separated is their financial position, and this primarily involves single-parent families. Most such families in Australia arise from divorce and separation and they have increased as a proportion of the population<sup>43,44,45</sup>. They differ from couple families in many respects, including parents being more often unemployed or not in the labour force, being more likely to live in rented accommodation, and having greater difficulties paying bills and making loan repayments<sup>43,46</sup>. Within one-parent families, lone mothers are less likely to be in paid employment than lone fathers, are more likely to have part-time jobs if they do have paid employment, and are more likely to rent their accommodation, particularly from a government agency<sup>46</sup>. Whatever changes have occurred in attitudes towards the father's role in bringing up children, there has been no significant shift in the proportion of one-parent families headed by lone fathers, and the percentage in 1991 (12.6 per cent) was slightly less than in 1969 (13.4 per cent)<sup>46</sup>. This absence of trend in one-parent families as a whole is probably applicable to those where the parent is divorced or separated<sup>47</sup>, but figures for this are not available. Given the evidence that socioeconomic circumstances are important contributory factors to the mental health of single parents (and lone mothers are particularly vulnerable in this respect), it is important that policies on the financial circumstances of single-parent families should be guided by the part they can play in the prevention of mental health problems.

The image of solo men, whether divorced, separated or never married, is of a group who have low or poor quality social support, limited contact with social services and resistance to help from the mental health professions. This is something of a caricature, but it signals the possibility that recognition of mental health problems may not occur until they are sufficiently serious to cause interference with occupational performance or to require police involvement. These men are at high risk of physical as well as mental health problems<sup>48</sup>.

The public health issues for those with difficult marriages and for the remarried are more problematic because of their less visible nature. One would hope that there are opportunities for referral of clients from marriage counselling services to facilities for

long-term mental health problems if appropriate<sup>49</sup>, and equally that the latter services are aware of the family roles and relationships of their patients and the difficulties that could arise in these. In some cases, therapies involve other family members<sup>50</sup>. The rate of mental health problems in the remarried is disconcerting. They are a relatively neglected group in psychiatric research, although the US ECA study<sup>51</sup> and some other studies<sup>52,53</sup> have highlighted the importance of marital history rather than current status in showing associations with mental health. There appear to be no Australian data on mental health problems in the remarried and they are unidentified in many population surveys of physical and mental health, including the National Health Surveys conducted by the Australian Bureau of Statistics. The numbers of remarried in the population are not directly available from census information, but it is known from marriage registrations that the proportion of new marriages involving a divorced partner increased from 13.9 per cent in 1971 to 32.8 per cent in 1992, and the respective figures for marriages where both partners were previously divorced are 2.3 per cent and 11.3 per cent<sup>54</sup>. Many of these increases occurred during the 1970s and the figures have been relatively stable thereafter. It is likely that the tendency for the divorced to form *de facto* relationships rather than enter into *de jure* marriages has minimised these trends<sup>45</sup>. There is a danger in reading too much into these figures and one must be aware that divorce is now a more accepted feature of society, is seen as a more desirable alternative to bad marriages than previously, and that divorced people are viewed as more attractive potential marriage partners. However, there is still a concern as to what extent the mental health problems known to be associated with divorce are now introduced into new relationships, which may involve stepchildren and children from the new partnership. These problems, if unresolved, may ultimately contribute to the breakdown of second marriages and *de facto* relationships.

## Conclusions

1. Separation and divorce are much more common than in the past but are still perceived as extremely distressing experiences. Men and women show a strong emotional response in the period after separation and often seek the support of others, including the help of professionals concerned with mental health.
2. As a group, men have a poorer short-term reaction to separation than women, linked to their lack of preparedness and to the feeling of being the rejected partner. Women, however, are more likely to seek interpersonal (including professional) help.
3. Most men and women show a recovery in the one to two years after separation, but for some their distress is persistent. In other cases, the escape from a stressful marriage brings an improvement in mental health.
4. Epidemiological studies show that divorce and separation are strongly linked to a broad spectrum of mental health problems. In Australian studies, depression and alcohol abuse have been found to be much more common in the divorced and separated than in the married. Some mental health problems pre-date marital breakdown and may even have been present before marriage. The high risk of mental health problems persists long after divorce and is evident in the remarried.
5. Counselling services for those going through marital separation are available through the Family Court and voluntary organisations, and individuals often choose to make use of regular health services, general practitioners being the most likely point of contact. Some people are reluctant to use such services and this seems more so for men than women. The help available from these sources has an important part to play not only in crisis support, but also in assisting those with long-term mental health problems or at risk of such problems.
6. Single parents, most of whom are divorced or separated, constitute a particularly vulnerable group. Policy on their financial status should be guided by the part it can

play in the prevention of mental health problems. There is no indication yet that lone fathers will become a larger proportion of the single parent population.

7. The substantial increase in numbers of remarriages is a cause for concern in that it may reflect a greater opportunity for introducing long-term mental health problems into new families and step-families, which could contribute in turn to the instability of second marriages.

## References

1. Bloom BL, Asher SJ, White SW. Marital disruption as a stressor: A review and analysis. *Psychol Bull* 1978;85:867-894.
2. Australian Bureau of Statistics. Divorces Australia 1992. Cat. No. 3307.0. Canberra: ABS, 1993.
3. Funder K, Harrison M. Drawing a longbow on marriage and divorce. In: Funder K, Harrison M, Weston R, eds. *Settling down: pathways of parents after divorce*. Melbourne: Australian Institute of Family Studies, 1993:13-32.
4. Burns A. *Breaking up: Separation and divorce in Australia*. Melbourne: Nelson, 1980.
5. Australian Bureau of Statistics. Census of population and housing 1991: Basic community profile. Cat. No. 2722.0. Canberra: ABS, 1993.
6. Australian Bureau of Statistics. Census of population and housing 1986: summary characteristics of persons and dwellings. Cat. No. 2487.0. Canberra: ABS, 1989.
7. Australian Bureau of Statistics. Census of population and housing 1981: summary characteristics of persons and dwellings. Cat. No. 2443.0. Canberra: ABS, 1983.
8. Tennant C, Andrews G. A scale to measure the stress of life events. *Aust N Z J Psychiatry* 1976;10:27-32.
9. Henderson S, Byrne DG, Duncan-Jones P. *Neurosis and the social environment*. Sydney: Academic Press, 1981.
10. Jordan P. *The effects of marital separation on men*. Sydney: Family Court of Australia, Office of the Chief Executive, 1985.
11. Ambrose P, Harper J, Pemberton R. *Surviving divorce: men beyond marriage*. Brighton: Wheatsheaf Books, 1983.
12. Bordow S. *Review of Family Court research*. Sydney: Family Court of Australia, Office of the Chief Executive, 1992.
13. Weston R. Money isn't everything. In: McDonald P, ed. *Settling up: property and income distribution on divorce in Australia*. Sydney: Prentice-Hall, 1986:279-307.
14. Weston R, Funder K. There is more to life than economics. In: Funder K, Harrison M, Weston R, eds. *Settling down: pathways of parents after divorce*. Melbourne: Australian Institute of Family Studies, 1993:210-234.
15. Bloom BL, Caldwell RA. Sex differences in adjustment during the process of marital separation. *J Marriage Fam* 1981;43:693-701.
16. Aseltine RH, Kessler RC. Marital disruption and depression in a community sample. *J Health Soc Behav* 1993;34:237-251.
17. Wheaton B. Life transitions, role histories, and mental health. *Amer Sociol Rev* 1990;55:209-223.
18. Bachrach LL. Marital status and mental disorder: An analytical review. DHEW Pub. No. (ADM) 75-217. Washington: US Government Printing Office, 1975.
19. Robins LN, Locke BZ, Regier DA. An overview of psychiatric disorders in America. In: Robins LN, Regier DA, eds. *Psychiatric disorders in America: the epidemiologic catchment area study*. New York: Free Press, 1991:328-366.

20. Krupinski J, Stoller A, Baikie AG, Graves JE. A community health survey of the rural town of Heyfield, Victoria, Australia. Melbourne: Mental Health Authority, Victoria, 1970.
21. Finlay-Jones RA, Burvill PW. The prevalence of minor psychiatric morbidity in the community. *Psychol Med* 1977;7:475-489.
22. Lee S-H, Smith L, d'Espaignet E, Thomson N. Health differentials for working age Australians. Canberra: Australian Institute of Health, 1987.
23. Heins T. Marital interaction in depression. *Aust N Z J Psychiatry* 1978;12:269-275.
24. Blankfield A. Female alcoholics. II. The expression of alcoholism in relation to gender and age. *Acta Psychiatr Scand* 1990;81:448-452.
25. Wilkinson P, Santamaria JN, Rankin JG, Martin D. Epidemiology of alcoholism: social data and drinking patterns of a sample of Australian alcoholics. *Med J Aust* 1969;1:1020-1025.
26. Webb GR, Redman S, Hennrikus D, Rostas JA, Sanson-Fisher RW. The prevalence and sociodemographic correlates of high-risk and problem drinking at an industrial worksite. *Br J Addict* 1990;85:495-507.
27. Price J. The Queensland 'drinker' and the bad old, new Australia. *Med J Aust* 1987;147:430-432.
28. Price J. Alcohol and mateship in Australia: An historical perspective. In: International Congress on alcohol, other drugs and the family. Sydney: Alcohol & Drug Foundation, NSW, 1988:209-213.
29. Macintyre S. The patterning of health by social position in contemporary Britain: directions for sociological research. *Soc Sci Med* 1986;23:393-415.
30. Morgan M. Marital status, health, illness and service use. *Soc Sci Med* 1980;14A:633-643.
31. Merikangas KR. Divorce and assortative mating among depressed patients. *Am J Psychiatry* 1984;141:74-76.
32. Menaghan EG. Depressive affect and subsequent divorce: a panel analysis. *J Fam Iss* 1985;6:295-306.
33. Menaghan EG, Lieberman MA. Changes in depression following divorce: A panel study. *J Marriage Fam* 1986;48:319-328.
34. Booth A, Amato PR. Divorce and psychological stress. *J Health Soc Behav* 1991;32:396-407.
35. Spanier GB, Furstenberg FF. Remarriage after divorce: a longitudinal analysis of well-being. *J Marriage Fam* 1982;44:709-720.
36. Rodgers B. Socioeconomic status, employment and neurosis. *Soc Psychiatry Psychiatr Epidemiol* 1991;26:104-114.
37. Kessler RC, McRae JA. A note on the relationships of sex and marital status to psychological distress. In: Greenley JR, ed. *Research in community and mental health*. JAI Press, 1984:109-130. (vol 4).
38. Fox JW. Gove's specific sex-role theory of mental illness: A research note. *J Health Soc Behav* 1980;21:260-267.
39. Santamaria JN. The social implications of alcoholism. *Med J Aust* 1972;2:523-528.
40. Krupinski J, Yule V. Family conflict and family disruption. In: Krupinski J, Stoller A, eds. *The family in Australia: social, demographic and psychological aspects*. 2nd ed. Sydney: Pergamon Press, 1978:250-265.
41. Baddeley A. The limitations of human memory: implications for the design of retrospective surveys. In: Moss L, Goldstein H, eds. *The recall method in social*

- surveys. London: University of London Institute of Education, 1979:13-27.
42. Duffy JC, Waterton JJ. Under-reporting of alcohol consumption in sample surveys: The effect of computer interviewing in fieldwork. *Br J Addict* 1984;79:303-308.
  43. Australian Bureau of Statistics. Australia's families: selected findings from the survey of families in Australia 1992. Cat. No. 4418.0. Canberra: ABS, 1993.
  44. Australian Bureau of Statistics. Labour force status and other characteristics of families Australia. Cat. No. 6224.0. Canberra: ABS, 1993.
  45. Australian Bureau of Statistics. Social indicators Number 5. Cat. No. 4101.0. Canberra: ABS, 1992.
  46. Australian Bureau of Statistics. Australia's one parent families. Cat. No. 1385.0. Canberra: ABS, 1991.
  47. Bordow S. An analysis of defended custody judgements. Sydney: Family Court of Australia, Office of the Chief Executive, 1992.
  48. Riessman CK, Gerstel N. Marital dissolution and health: Do males or females have greater risk. *Soc Sci Med* 1985;20:627-635.
  49. Halford WK, Osgarby SM. Alcohol abuse in clients presenting with marital problems. *J Fam Psychol* 1993;6:1-11.
  50. Halford WK. Marriage and the prevention of psychiatric disorder. In: Raphael B, Burrows GD, eds. *Handbook of preventive psychiatry*. In press.
  51. Robins LN, Regier DA, eds. *Psychiatric disorders in America*. New York: Free Press, 1991.
  52. Rodgers B, Mann SA. The reliability and validity of PSE assessments by lay interviewers: a national population survey. *Psychol Med* 1986;16:689-700.
  53. Warheit GJ, Holzer CE III, Bell RA, Arey SA. Sex, marital status, and mental health: a reappraisal. *Soc Forces* 1976;55:459-470.
  54. Australian Bureau of Statistics. *Marriages Australia 1992*. Cat. No. 3306.0. Canberra: ABS, 1993.

# Male sexuality and mental health

---

R. Over and G. Phillips

School of Behavioural and Social Sciences and Humanities  
University of Ballarat

---

There have been substantial changes in the conceptualisation and measurement of human sexuality in the 40 years since the now-classic Kinsey survey of American men<sup>1</sup>. In viewing sexuality as the expression of biological drive, Kinsey sought to identify through interview the frequency with which American men had engaged over their lifetime in different forms of orgasmic-oriented behaviours. There still are large-scale surveys aimed primarily at describing sexuality within a national population by reference primarily to measures such as frequency of intercourse. For example, 20,000 men and women recruited on a national probability basis were recently surveyed in Britain<sup>2</sup>. In advocating an Australian survey, Western<sup>3</sup> argued that the objective should be not so much a statistical summary of who does what, how often, and with whom, but analysis of sexual activities and attitudes within a developmental and sociocultural perspective.

Many approaches<sup>4</sup> to studying sexuality have emerged since Kinsey. Further, the focus in contemporary scholarship has shifted from description to interpretation. The manner in which research methodologies are used often reflects the way in which investigators conceptualise sexuality. For example, laboratory-based assessment of penile tumescence as an index of sexual arousal involves commitment to a genitocentric model of sexuality, and a similar perspective often is adopted in clinical studies undertaken within a biomedical perspective. An alternative approach is to treat sexual arousal as a social construction rather than simply as a biologically determined response. The concern is then directly with a person's sexual identity—sexual cognitions, sexual emotions, and the social context in which, for example, sexual arousal occurs, is identified, and is labelled—than with physiological change *per se*. Contemporary approaches to the study of sexuality are not well integrated, and there is limited dialogue (or even recognition of each other's positions) between investigators who work within different traditions or who are committed to a biological determinist (essentialist) position as opposed to a social constructionist orientation. Reference instead needs to be made to a range of perspectives in considering relationships between male sexuality and mental health.

## Conceptual and methodological issues

Most information about human sexuality, however defined or interpreted, is obtained from surveys, questionnaires and similar self-report measures, although other measures also can be used. Issues such as validity and reliability need to be considered in interpreting self-report data. Sampling is important, as people who volunteer to participate in research on sexuality typically are not representative of the population as a whole. For example, male homosexuality has generally been studied by surveying men directly affiliated with the gay community. In contrast, Bennett, Chapman, and Bray<sup>5</sup>, in studying AIDS-related sexual practices, recruited men in western Sydney at ambiguous locales such as beats and bars. Reliability in measurement is a primary issue. McLaws, Oldenburg, Ross, and Cooper<sup>6</sup>, in a study based primarily on male prostitutes in Sydney, pointed to the unreliability of diary records of sexual activity. As self-report measures

(relating to behaviour and not simply subjective states) are rarely open to verification, substantial scope exists for unintended as well as intended bias and distortion. There is an extensive literature<sup>7</sup> indicating that reports are sensitive to a range of measurement factors, including the wording of questions, the order in which questions are asked, the context in which participants were recruited, the mode in which data are collected and whether anonymity is maintained. Participants in surveys are often asked to recall past events or experiences. Interpreting retrospective reports is particularly problematic, since, apart from the problem of faulty memory, there may be inbuilt bias so that the past is recalled in ways that are consistent with a person's current status and lifestyle, as well as stereotypic belief systems<sup>8</sup>. These methodological problems need to be kept in mind in interpreting the evidence cited in the commentary that follows.

Although there are many other contexts in which male sexuality and mental health can be considered, the focus here will be on research (published by Australian authors where possible) into psychosexual development, adult sexual orientation, sexuality as studied in the context of HIV-risk behaviours, sexuality and old age, sexuality and disability, sexual dysfunctions, and sexual offending. Even within this restricted set of topics, there are Australian studies (such as the survey by McCabe and Collins<sup>9</sup> covering dating, relationships, and sex, and research into adolescent sexuality by Moore and Rosenthal<sup>10</sup>) that can be no more than mentioned.

## Psychosexual development

For ethical as well as logistic reasons, there has been limited direct investigations of sexuality during childhood (e.g., sexual fantasy and sexual experimentation before puberty). An exception is the study of Goldman and Goldman<sup>11</sup>, which assessed the sexual thinking of children aged 5 to 15 years in Australia, North America, Britain, and Sweden. Sexual knowledge (e.g., 'how babies are made') and sexual vocabulary changed with age in parallel with the cognitive development stages identified by Piaget. Goldman and Goldman noted that, in the absence of appropriate sex education, children often devise mythological explanations for biological and sexual processes (such as conception, childbirth, menstruation, puberty). Australian children demonstrated a two-year developmental delay in sexual knowledge relative to Swedish age peers. This was attributed to an inadequate level of sex education at school and in the home, as well as cultural differences in sexual values.

Identity formation involves addressing the question 'Who am I?'. Ways in which a child or adolescent addresses this question, which arises developmentally in non-sexual (e.g., family affiliation, vocational aspirations) as well as sexual contexts (e.g., gender identity, sexual orientation), can have important implications for mental health. In relation to gender identity, children demonstrate an integrated sense of being a male or a female throughout their life only when they have achieved the cognitive capacity to recognise that objects maintain identity with transformation (e.g., a boy grows into a man, a male is still a male despite changes in clothing and hairstyle)<sup>11,12</sup>. Clinical studies<sup>13</sup> have shown that children will experience gender identity confusion, with a range of psychological adjustment problems, if they receive inconsistent information about whether they are a boy or a girl. Development of a stable, integrated gender identity involves consistency between a child's sense of self, circumstances in the child's life, and feedback gained through transactions with others. Problems in identity development and management arise, for example, if there are discrepancies between a child's genitals and other body characteristics and whether the child is treated by others as a boy or girl<sup>13</sup>.

Gagnon and Simon<sup>14</sup>, in an influential analysis of psychosexual development, placed substantial importance on the role of childhood masturbation in the development of sexual scripts. In viewing puberty as a period marked by rehearsal of adult roles, they claimed that masturbation provides sexual potency to thoughts and feelings. Instead of considering masturbation as harmful to mental health, as was the widely held position

several decades earlier, Gagnon and Simon, in common with most modern sexologists, identified masturbation not only as a source of pleasure and a means of sexual expression but as the context in which adult sexual scripts are formed and rehearsed. A substantially higher frequency of boys than girls masturbate during adolescence<sup>15</sup>. Gagnon and Simon argued that boys acquire sexual agency in their make-believe scripts by regulating sexual arousal during fantasy through masturbation. In contrast, normative sex roles (passivity) for girls result in romantic rather than sexual make-believe agendas. For women, an association has been demonstrated between inhibited sexual arousal as an adult and not having masturbated in childhood or adolescence. In fact, encouraging a woman to experience and control sexual arousal through masturbation is a central part of therapy for inhibited sexual arousal. Although masturbation taboos no longer are as strong in Western cultures, the influence of masturbation on the development of male sexuality and on mental health is unclear. For example, a recent survey<sup>16</sup> found that, contrary to the claim by Gagnon and Simon, the sexual adjustment of young men was unrelated to whether respondents had masturbated during childhood or adolescence.

Many childhood behaviours are sex-typed, with some (e.g., rough-and-tumble play) being normative for boys and others (e.g., playing with dolls) normative for girls. A question of interest is whether engaging in gender nonconforming behaviours leads a boy, when challenged by the question 'Who are you?' to construct homosexual rather than heterosexual identity. Bailey and Zucker<sup>17</sup> reviewed research, including an Australian study<sup>18</sup>, showing that a boyhood characterised by gender-conforming behaviours is predictive of heterosexuality as an adult, while being homosexual as an adult is linked with childhood gender nonconformity as a boy. However, the level of association between childhood experience and adult sexual orientation is by no means complete, as homosexual men often do not report a gender-nonconforming childhood and many gender-nonconforming boys are heterosexual as adults. The relationship between gender conformity and sexual orientation changes developmentally, as heterosexual men and homosexual men do not differ overall on sex role measures (masculinity-femininity)<sup>17,18</sup>. The transition from engaging in gender-nonconforming behaviours as a boy (the extreme case being the pejoratively termed 'sissy' boy syndrome) to being heterosexual or homosexual as an adult must thus involve a process of defeminisation.

Models of the development of sexual orientation refer to homosexuality in identity terms (the person's sense of self) rather than sexual behaviours *per se*. In outlining a model she later tested with an Australian sample, Cass<sup>19</sup> distinguished six stages in homosexual identity development: identity confusion, identity comparison, identity tolerance, identity acceptance, identity pride, identity synthesis. The context for the first stage, identity confusion, could be challenges a boy experiences through engaging in gender-nonconforming behaviours. Instead of foreclosing by conforming to gender norms, the child may seek to answer the question 'Who am I?' by searching for an appropriate reference system (identity comparison) and forms of affiliation (identity tolerance and identity acceptance). Cass noted a number of identity management strategies, ranging from concealment and 'passing' through 'coming out' to affiliation and pride. Although the stages outlined by Cass are viewed as hierarchical, the model recognises that identity development can proceed slowly or rapidly, progression can terminate at any stage, and the person can retreat to earlier stages or reject a homosexual identity altogether. Further, homosexual identity is not necessarily associated with specific sexual practices.

Ross<sup>20</sup> claimed from analysis of self-report data from gay men in four cultures that Australian culture is homophobic in ways that inhibit the overt development and expression of homosexual identity and gay lifestyle. He argued that Australian males, through being aware from an early age of the stigmatised nature of homosexuality, are more likely than age peers in countries such as Sweden to conceal feelings of same-sex attraction and to achieve contact with other homosexual men through covert activities rather through open identification and affiliation with a visible and supportive gay

community. These claims about homosexual identity development in Australia were based on a sample that was limited in size and probably not representative. Further, Ross completed his survey in the early 1980s. If social values relating to homosexuality change over time, the manner in which Australian adolescents develop and express homosexual identity may be quite different now (and in the future) than it was in the past.

## Adult sexual orientation

Homosexuality was classified as a sociopathic personality disorder in the first edition of the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-I) and as a non-psychotic mental disorder (along with fetishism, paedophilia, transvestism, exhibitionism, voyeurism, sadism, and masochism) in DSM-II. It was not until 1980 (DSM-III) that this classification was removed<sup>21</sup>. Concealment and secrecy ('double lives') were the norm when homosexuality was defined as a disorder. Substantial pressure was then placed on homosexual men to undergo therapy, often involving aversive conditioning, designed to suppress same-sex attraction<sup>22</sup>. The DSM-I and DSM-II classifications were based on claims that homosexuality is pathological in the sense of being associated with mental health problems. However, the data cited in support of this claim typically came from inappropriate samples (e.g., psychiatric patients, prisoners). Studies across a number of cultures have instead indicated that, although differences on specific measures may be found in particular cultures, overall there are no differences on mental health measures between homosexual men and heterosexual men<sup>23</sup>. The implication is that differences found within a culture reflect the values of a culture (e.g., the extent to which given activities or a particular status are stigmatised) and the manner in which these values impinge on the lives of individuals, and are not an inevitable or universal byproduct of being homosexual as opposed to heterosexual.

In Western countries there have been substantial shifts over the past 20 years in societal attitudes and values relating to homosexuality. For example, some governments now sanction same-sex marriages and grant entitlements equivalent to those accorded to heterosexual de facto relationships. Politically motivated groups such as ACT-UP have used visibility as a tool to produce social change through actions such as 'outing' and the use of previously pejorative descriptors such as 'queer' to describe themselves. In the 1990s, difficulties experienced by gay men are more likely to be viewed as stemming from concealment than disclosure of sexual orientation. Recent studies reviewed by Phillips<sup>24</sup> indicate that secrecy by gay men about their sexuality is associated with personal and social problems, feelings of estrangement, alienation, powerlessness, incompetence, guilt, anxiety, low levels of self-esteem, health-related complaints, and negative homosexual imagery. In contrast, self-disclosure is accompanied by increased personal integrity, greater intimacy, more satisfying social interactions, heightened positive self-image, and better overall psychological adjustment. Being homosexual is now far from a universal secret within the family, social, and professional networks of gay men. Stigma and rejection consequent upon openness has, however, created a disclosure hierarchy. Gay men are more likely to confide in siblings and in the mother before the father, while disclosure generally is least to employers, work colleagues, and distant relatives.

The seven-point Kinsey scale classifies sexual orientation on the basis of sexual behaviour (K-0 is exclusively heterosexual, K-1 to K-5 bisexual, and K-6 exclusively homosexual). However, it is widely acknowledged that sexual orientation needs also to be described by reference to characteristics such as sexual attraction, sexual fantasy, sexual identification, disclosure relating to sexuality, and social affiliation. The different measures are not necessarily correlated. For example, some men who engage exclusively in sex with men (and hence are categorised as homosexual on the Kinsey scale) are not same-sex exclusive on other sexuality measures. For this reason 'homosexual identity' is now often used as a descriptor in addition to 'homosexual orientation'. Associated with this shift there has been reference to homosexualities (and not simply to homosexuality), as well as attempts

to capture diversity among men who exclusively have sex with other men through the development of taxonomies. For example, Phillips<sup>24</sup> distinguished three categories of gay men (all K-6 on the Kinsey scale) through cluster analysis based on responses to homosexual identity questions from the scales developed by Cass. One group ('acculturated gay men') was identity accepting, lifestyle identified, and disclosure accepting, another group ('assimilated gay men') was identity accepting, lifestyle assimilated, disclosure indifferent, and a third group ('constrained gay men') identity tolerating, lifestyle constrained, disclosure restrictive. The men with a constrained lifestyle were less likely to think of themselves as confident, competent, and skilled sexual partners, and were more likely to be depressed, disappointed and unhappy about their sexual experiences. Further, a constrained lifestyle was associated with being more fearful about issues of personal safety, such as apprehension by the police, being robbed or bashed, and contracting AIDS. In contrast to the level of attention given to diversity among homosexual men, there have not been explicit analysis of heterosexualities and distinctions between heterosexual men based on stages in heterosexual identity development.

## Sexuality and HIV-risk behaviours

The AIDS crisis has led to substantial funding of research concerned with HIV-risk behaviours. Although the overt focus in preventive programs is on risky behaviours rather than on specific risk groups, substantially more attention has been given to the sexual practices of homosexual and bisexual men than heterosexual men. Issues examined through survey have included the degree of physical and emotional significance attached to behaviours such as anal intercourse, knowledge of HIV-risk behaviours, self-reported changes in sexual practices over time, contexts in which HIV-risk behaviours are more likely to occur, and the manner in which sexuality is expressed within and outside an on-going relationship<sup>25,26</sup>.

Ross<sup>27</sup> has claimed that the AIDS crisis has led the Australian community to become more homophobic through a process of attributing guilt by association (in these terms, risk behaviours are associated with specific groups, AIDS is referred to as a homosexual disease, and men are blamed for being homosexual). He suggested that prejudice and discrimination based on such processes are having pervasive effects on the mental health of gay men. In assessing 80 homosexual men on the General Health Questionnaire and the Gay Affect and Life Events Scale, Ross<sup>28</sup> found that reported levels of somatic symptoms, anxiety, insomnia, and depression were associated with responses given to questions bearing on AIDS and HIV risk. He suggested that Australian gay men overall are experiencing states analogous to a post-traumatic stress reaction, with attitudes within the Australian community as a whole heightening rather than alleviating the level of stress. However, these claims were made on the basis of limited data.

The AIDS crisis has led to the study of processes involved in coping with HIV infection. Pakenham, Dadds, and Terry<sup>29</sup> found for a Brisbane sample of men at different stages of HIV infection that health-related measures (such as number of symptoms) were related to level of social support while psychological adjustment (such as degree of distress) was linked with coping strategies. Whereas fatalism as a coping style had negative consequences on adjustment, positive coping (optimism, control, action) was beneficial. Having a partner was associated with poorer adjustment and a greater number of symptoms, possibly because coping with illness within a relationship imposes stress through the need to accommodate to new roles (e.g., care giver) and to adjust priorities. It seems unlikely that such would inevitably be so. Feeney and Raphael<sup>30</sup> have pointed to advantages in considering management issues within gay and heterosexual relationships by direct reference to attachment style.

## Sexuality in old age

Despite the age shift occurring in the Australian population, there has not been systematic study of ageing and male sexuality. Cross-sectional comparisons are likely to be of limited value, as young men and old men are from cohorts with different sexual values and histories (e.g., attitudes to monogamy and sexual behaviours such as masturbation and oral-genital interaction). Measures of not only sexual practices but also sexual satisfaction will thus reflect cohort rather than ageing alone. Ageing and sexuality also need to be considered in relation to factors such as health status and partner availability. The shift in divorce rate, serial marriage, longer life expectancy, improvements in health, and changed attitudes about ageing and sex seem likely to result in future patterns of sexuality in old age being unlike those documented over the past few decades. Present knowledge about mental health and adjustment issues relating to sexuality in old age may provide only a limited basis for predicting and understanding the future. In particular, changing community attitudes to homosexuality make it likely that future cohorts of aged gay men will be different from older gay men in the past.

Surveys of North American men from the time of Kinsey<sup>1</sup> have consistently demonstrated from young adulthood onwards a decline in frequency of expression across a range of genitocentric measures (e.g., intercourse, masturbation, sexual fantasy). Masters and Johnson<sup>31</sup> took recordings while older men were engaging in masturbation or intercourse in the laboratory. In a section titled 'Geriatric Sexual Response', Masters and Johnson noted that with age there is a decrease in latency of sexual arousal, reduced capacity to sustain erection, less-frequent ejaculation and slower recovery after resolution. Age differences also are found in nocturnal penile tumescence, with the duration and rigidity of REM-induced erection substantially less in old age. However, studies<sup>32</sup> which have related sexuality measures across physiological and psychological domains indicate that healthy older men generally do not report sexual frustration, low levels of sexual satisfaction or sexual adjustment problems despite a reduction with age in sexual desire and arousability and less frequent engagement in orgasmic-oriented sexual behaviours. Health is, however, a primary regulative factor, as with ageing there is increased likelihood of dysfunction (e.g., erectile dysfunction) associated with disease as well as with lifestyle (e.g., alcoholism). Whether ageing and factors such as health create major problems in sexual adjustment depends on whether the person and/or his partner seek to meet unattainable performance criteria in relation to desire, erection, and orgasm. In contrast to performance pressure, there is the risk of apathy. The emphasis in the Kinsey survey on decline in sexual expression with age resulted in elderly people being stereotyped as asexual and without sexual needs. Instead there has been recognition that Kinsey targeted primarily genitally based sexual expression. A broader view of sexuality encompasses intimacy, communication, sharing, sensual pleasuring and satisfaction in contexts other than or additional to intercourse. The focus shifts from frequency of orgasm and sexual performance *per se* to sexual interaction as part of communication and transaction. Sex manuals have incorporated this change in orientation.

The basis for age-grading in aspects of male sexuality such as penile tumescence is yet to be identified. By emphasising the reproductive basis for sexual drive, essentialist models imply that the human male is biologically programmed to be most active sexually over a particular range within the life span. The focus in scripting theory is instead on conformity with culturally determined normative roles. There has been substantial dispute whether, for example, higher levels of promiscuity overall among men than women, and the propensity for men as they age to seek younger women rather than age peers as sexual partners reflect basic reproductive drives rather than socially acquired scripts<sup>33</sup>. There are substantial differences in sexual expression among the elderly (just as there are among the young), and sexual desire, arousal, and engagement need to be considered with reference not just to age but a range of psychosocial factors. Advantages of considering sexuality in old age within a lifetime developmental perspective are only

now being recognised. So far there has been limited systematic study of continuities in sexuality from childhood through adolescence to adulthood and old age.

## Disability and sexuality

Community and professional attitudes to intellectual disability and sexuality have shifted substantially over the past 20 years. Policy changes such as deinstitutionalisation have raised issues of sexual rights and responsibilities in contexts such as sex education and counselling, safe sexual practices and vulnerability to sexual exploitation. In offering practical advice to Australian parents and health professionals on matters such as sex education, fertility and contraception, changing inappropriate sexual behaviours, and sexual relationships, Fegan and Rauch<sup>34</sup> emphasise the need to consider sexuality and intellectual disability in a broad psychosocial context and a developmental framework, rather than simply by reference to reproductive behaviours.

Many forms of acute and chronic disability have major consequences for sexual functioning. Schover and Jensen<sup>35</sup> provide a comprehensive analysis of assessment and management issues in male and female sexuality relating to chronic physical disabilities such as arthritis, cancer, cardiovascular disease, chronic obstructive pulmonary disease, chronic pain, diabetes, end-stage renal disease, alcoholism, and psychiatric conditions including schizophrenia and major affective disorders. In employing a biopsychosocial model, Schover and Jensen relate sexual expression and satisfaction to broad range of interpersonal and social processes (e.g., development and maintenance of intimacy and communication, 'lovemaking') rather than solely genital interaction. However, in considering penile tumescence and disability, they also cover hormonal, medication, and prosthetic management strategies.

A group of particular interest in considering chronic disability and male sexual function are the spinal cord injured (SCI). Men are five times more likely to experience traumatic spinal cord injury than women, with risk peaking in early adulthood. Injury management has improved such that life expectancy now approaches normal levels. Depending on the site and extent of damage, injury to the spinal cord can have dramatic effects on aspects of sexual functioning such as erection and fertility. Many SCI men were sexually experienced at the time of injury, but not then a parent. The impact of injury on fertility is often a matter of great concern to SCI men. One direction of research at the Austin Hospital, Melbourne, has involved using electroejaculation to collect semen from SCI men within days of injury (before there is reduction in sperm concentration and motility)<sup>36</sup>. Capacity to engage in intercourse is also an issue. As penile tumescence is regulated by relexogenic neural circuits (sacral segments 2 to 4) and psychogenic neural circuits (thoracolumbar segments T12 to L3), erectile capabilities after SCI will depend upon the nature of damage and the nature of stimulation. Self-report is not always a valid indicator of whether erection is retained after injury. Kennedy and Over<sup>37</sup> measured penile tumescence while SCI men viewed erotic film, listened to erotic text or engaged in erotic fantasy. Some men demonstrated tumescence despite claiming they had lost the capacity for psychogenic erection, possibly because they used preinjury levels as the criterion in deciding how to label physiological states. Other men who were not aroused physiologically nevertheless reported levels of subjective sexual arousal with the same build-up over time and differences between stimulation modes as established with non-SCI men. Such data are inconsistent with claims once made that SCI men without erections are asexual.

As seen, for example, in programs at the Austin Hospital<sup>38</sup>, the focus in rehabilitation after SCI extends well beyond management of physical functioning. The objective instead is to encourage adaptation and adjustment so that the person will lead a satisfying and fulfilling life, and experience minimum disadvantage through physical disability. Sex education and rehabilitation programs for SCI men and their partners thus emphasise intimacy and communication, and encourage exploration of sensual and romantic paths

to sexual satisfaction. Couples who cannot engage in penile-vaginal intercourse are advised to achieve sexual arousal and satisfaction through other activities, none of which is labelled as inferior to intercourse. Practical issues (e.g., relating to continency) also are covered. Sex education and counselling programs typically are positively endorsed by participants<sup>39</sup>, but the extent that attitudes translate to practice needs to be considered. Whereas centres for treatment of SCI such as the Austin Hospital offer comprehensive rehabilitative programs, it is still the case in at least some parts of the Us that SCI men and their partners receive limited or no sexual counselling<sup>40</sup>. There is a dearth of information on long-term adaptation to SCI, including sexual expression and sexual satisfaction.

## Sexual dysfunctions

Male sexual problems specified in the Diagnostic and Statistic Manual (DSM) of the American Psychiatric Association include hypoactive sexual desire, erectile dysfunction, and premature ejaculation. Incidence and prevalence rates depend upon how dysfunction is defined (e.g., relative to age norms), whether problems are distinguished on the basis of being primary or secondary, lifelong or acquired, global or specific, and whether consequences need to be taken into consideration (is inability to achieve or maintain erection a dysfunction if neither the man nor his partner experiences concern?). Although rates have been established in several other countries<sup>41</sup>, the extent to which Australian men experience different forms of sexual dysfunction is not known.

There is long-standing debate over whether sexual problems are more appropriately conceptualised and treated as relationship problems than as problems of the individual. As an example, hypoactive sexual desire is defined in DSM in terms of low sexual interest and an absence of sexual fantasy. However, people with these attributes are unlikely to experience concern or distress if they avoid contexts, such as marriage, where a partner may impose sexual demands. Hypoactive desire can in these terms be considered a problem of desire discrepancy, and a therapeutic goal may be as much to reduce the expectations of the demanding partner as to increase the sexual interest of the person classified as hypoactive. Clients who present for sex therapy typically do so in the context of problems occurring within a sexual relationship, and often because the relationship itself is endangered. Further, clinicians are interested not simply in mechanical problems of sexual functioning but in the interpersonal context in which the problems are grounded. In contrast with research in other Western countries (see, for example, articles in *Archives of Sexual Behavior* and the *Journal of Sex Research*) there has not been systematic study of mental health aspects of sexual dysfunction among Australian men.

There are no Australian data on treatment of sexual problems (e.g., the contexts in which treatment is sought, nature of presenting problems, types of treatment available, and professional qualifications of persons providing treatment). The extent to which Australian men gain access to well-defined, readily implemented, and adequately evaluated interventions available for management of dysfunctions such as premature ejaculation is uncertain. Many health professionals probably have limited knowledge of and practical experience in sex therapy. Sex therapy as undertaken by psychologists often is based on cognitive-behavioural principles<sup>42</sup> and incorporates features of the Masters and Johnson programs. McCabe<sup>43</sup>, who operates a sexual assessment clinic at Deakin University, has described an intervention devised along these lines for treatment of male hypoactive sexual desire. The objective is to restore sexual interest through communication exercises, sensate focus experience and guided fantasy. Although outcomes were referenced by a case study, the longer-term effects of participation were not assessed through experimental design.

## Sexual offending

Identifying the prevalence of child sexual abuse in Australia, and comparing Australian with overseas levels, is bound up with definitional and sampling issues. In examining substantiated cases dealt with by a South Australian child protection society, Winefield, Harvey, and Bradley<sup>44</sup> identified primary classifications as physical abuse 48 per cent, sexual abuse 32 per cent, neglect 17 per cent, and emotional abuse 3 per cent. As was also found through analysis of cases prosecuted in NSW in 1982<sup>45</sup>, girls outnumber boys by more than two to one among child sexual abuse victims. In contrast, perpetrators almost universally are men. Further data on incidence have come from retrospective reports provided by adults. Goldman and Goldman<sup>46</sup>, in a survey of 991 Victorian tertiary students in social science disciplines, found that 29 per cent of women and 9 per cent of men reported having been when a child sexually abused by an adult. In the case of male victims, 43 per cent of offences involved the child masturbating an adult or the child being masturbated by an adult, 15 per cent intercourse, 10 per cent simulated intercourse and 10 per cent genital exposure by an adult. In 14 per cent of cases, force was used, and for 49 per cent of respondents the offence had occurred more than once. There are major methodological issues in assessing longer-term effects of sexual abuse as a child, and research to date, although showing that adults who experienced sexual abuse in childhood often have continuing mental health problems, needs to be interpreted cautiously<sup>47</sup>. Since data are correlational, there are major problems in establishing a causal link between childhood abuse *per se* and functioning as an adult. Most studies have been of women abused in childhood, and it is unclear whether outcomes are similar for sexually abused boys and girls. The limited Australian research on outcome has noted the high level of emotional disturbance associated with sexual abuse, in contrast to physical abuse, six months after the offence was detected<sup>44</sup>. The protracted legal process (delays between investigation, laying charges, committal, trial and sentence) can have adverse consequences for the victim, particularly as perpetrators typically are family members, friends of the family, or neighbours<sup>45</sup>.

Although rape is generally a crime of sexual violence by men against women, increasing attention is being given to rape of men by men<sup>48</sup>. An Australian survey<sup>49</sup> in 1992 yielded 2762 responses from people who had been raped, including 97 responses (3.8 per cent) from men. As legal definitions of sexual assault in the past often referred only to women as victims, there probably has been substantial underreporting of male rape. Several recent reviews<sup>50,51</sup> have compared men and women in terms of the contexts in which being raped occurs, as well as psychosocial consequences. The general finding is that adverse short-term and long-term effects of being raped are similar for men and women. With men there also is the possibility that sexual violation impinges on identity, particularly masculinity. Poropat and Rosevear<sup>50</sup> noted the fragmentary nature of Australian evidence on male sexual assault. The PhD research on rape of men by men currently being conducted by Crome at Deakin University will provide important information.

Rape was traditionally conceptualised as a sexually motivated act. A primary objective in treatment was to modify deviant sexual arousal by associating sexual arousal with 'consent' cues in place of 'non-consent' cues. Therapeutic outcomes were generally assessed by comparing penile erection levels elicited by consent and non-consent cues before and after treatment. However, this approach has questionable validity<sup>52</sup>. Instead of constituting a homogeneous group, rapists differ on trait dimensions including level of aggression, sexualisation, antisocial personality, and sadism as well as in terms of situational factors (e.g., alcohol intake). Taxonomies have been developed to distinguish subgroups among rapists; for example, Prentky and Knight<sup>53</sup> identified opportunistic, pervasively angry, sadistic, sexual non-sadistic and vindictive rapists. An advantage of adopting a taxonomic approach (and recognising that men given the same classification under the legal system are diverse) is that therapeutic programs can be specifically targeted. Current taxonomies deal exclusively with men who rape women. The question

of whether rape of men by men can be conceptualised within the same framework needs to be addressed. A further issue is whether there is continuity between rape and other forms of sexual coercion. In surveys in Australia<sup>54,55</sup> and other countries, a number of men who have never been charged with sexual offences report episodes of sexual coercion (e.g., forcing an acquaintance or date to engage in sexual activities unwillingly), claim they would rape a woman if certain they would not be caught, or indicate they engage frequently in power-based sexual fantasy. There is a large literature on psychosexual correlates of male sexual coerciveness<sup>55</sup>.

## Final comments

Instead of identifying definitive relationships between male sexuality and mental health, a review of Australian-based research reveals limitations in current knowledge.

Investigation of HIV-risk behaviours has been heavily funded over the past 10 years, but there has been limited support for research in other areas of sexuality. Outside the AIDS context, no bodies within Australia specifically fund sexuality research. Nor is there a strongly visible or well integrated sexology profession.

The Kinsey survey of 1948<sup>1</sup> was titled 'Sexual Behavior in the Human Male' as though the data being collected were independent of social context (time and place). In terms of this perspective, there would be ready translation of findings from one country to another. It may be that sexuality in Australia matches closely patterns and processes in the US, where most research is undertaken, and therapeutic interventions developed and evaluated in the US can readily be applied in Australia. One challenge is to identify aspects of Australian life that have a distinctive impact on sexuality. In challenging claims that there is universality in sexual motivation and expression, several authors<sup>56,57</sup> have pointed to Western and non-Western differences. Factors affecting sexuality within a culture include gender stratification and roles, social sanctions and taboos, and practices bound up with religion, legal processes, and the family. It is difficult to consider the mental health aspects of sexuality without reference to these factors. If North American research translates well to the Australian setting, it may be because Australian cultural values overall match North American cultural values. A question of interest, of course, is to determine the extent to which there is ready translation. The data base at present is not sufficient to answer this question.

A theme throughout the commentary has been that sexuality should be studied within a lifespan developmental perspective, and in relation to cohort and period of measurement and not simply ageing. Such an approach permits baselines and reference points to be established, and allows correlates of stability and change to be identified. Relationships between mental health and sexuality need to be examined within this type of approach rather than through 'single-shot' surveys. No attempt has so far been made to establish an investigative program of this scope in Australia. The likelihood therefore is that sexuality will continue to be studied in Australia in the fragmented manner that it has in the past.

## References

1. Kinsey AC, Pomeroy WB, Martin CE. Sexual behavior in the human male. Saunders: Philadelphia, 1948.
2. Wellings K, Field J, Johnson AM, Wadsworth J. Sexual behaviour in Britain. Penguin: London, 1994.
3. Western JS. Human sexuality in Australia: The quest for information. In: Connell RW, Dowsett GW, eds. Rethinking sex: Social theory and sexuality research. Melbourne University Press: Melbourne, 1992;131-143.
4. Connell RW, Dowsett GW. Rethinking sex: Social theory and sexuality research. Melbourne University Press: Melbourne, 1992.

5. Bennett G, Chapman S, Bray F. Sex and beats: AIDS-related sexual practices in a sample of homosexual and bisexual men in the western area of Sydney. *Med J Aust* 1989;151:309-314.
6. McLaws ML, Oldenburg B, Ross MW, Cooper DA. Sexual behavior in AIDS-related research: Reliability and validity of recall and diary measures. *J Sex Res* 1990;27:265-281.
7. Catania JA, Gibson DR, Chitwood DD, Coates TJ. Methodological problems in AIDS behavioral research: Influences on measurement error and participation bias in studies of sexual behavior. *Psychol Bull* 1990;108:339-362.
8. Ross MW. Retrospective distortion in homosexual research. *Arch Sex Behav* 1980;9:523-531.
9. McCabe MP, Collins JK. Dating, relating, and sex: A guide to adolescent intimacy and sexuality. Horowitz Grahame: Sydney, 1990.
10. Moore S, Rosenthal D. Sexuality in adolescence. Routledge: London, 1993.
11. Goldman R, Goldman J. Children's sexual thinking. Routledge & Kegan Paul: London, 1982.
12. Marcus D E, Overton W F. The development of cognitive gender constancy and sex role preference. *Child Devel* 1978;49:434-444.
13. Money J, Ehrhardt A A. Man and woman: Boy and girl. Baltimore: Johns Hopkins Press, 1972.
14. Gagnon J H, Simon W. Sexual conduct: The social sources of human sexuality. Chicago: Aldine, 1973.
15. Oliver M B, Hyde J S. Gender differences in sexuality: A meta-analysis. *Psychol Bull* 1993;114:29-51.
16. Leitenberg H, Detzer M J, Srebnik D. Gender differences in masturbation and the relation of masturbation experience in preadolescence and/or early adolescence to sexual behavior and sexual adjustment in young adulthood. *Arch Sex Behavior* 1993;22:87-98.
17. Bailey J M, Zucker K J. Childhood sex-typed behavior and sexual orientation: A conceptual analysis and quantitative review. *Devel Psych* 1995;31:43-55.
18. Phillips G, Over R. Adult sexual orientation in relation to memories of childhood gender conforming and gender nonconforming behaviors. *Arch Sex Behavior* 1992;21:543-558.
19. Cass V. Homosexual identity formation: A theoretical model. *J Homosex* 1979;4:219-235.
20. Ross M W. Gay youth in four cultures: A comparative study. *J Homosex* 1989;17:299-314.
21. Bayer R. Homosexuality and American psychiatry: The politics of diagnosis. Princeton University Press: Princeton, 1987.
22. Haldeman DC. The practice and ethics of sexual orientation conversion therapy. *J Consult Clin Psychol* 1994;62:221-227.
23. Ross MW., Paulsen JA, Stalstrom OW. Homosexuality and mental health: A cross-cultural review. *J Homosexual* 1988;15:131-152.
24. Phillips G. Male homosexualities: A taxonomy based on sexual identity measures. PhD thesis under examination, La Trobe University, 1995.
25. Connell RW, Dowsett GW, Kippax S, Sinnott V, Rodden P, Berg R, Baxter D, Watson L. Danger and context: Unsafe anal sexual practice among homosexual and bisexual men in the AIDS crisis. *Aust N Z J Sociol* 1990;26:187-208.

26. Gold RS, Skinner MJ, Ross MW. Unprotected anal intercourse in HIV-infected and non-HIV-infected gay men. *J Sex Res* 1994;31:59-77.
27. Ross MW. AIDS and the pursuit of happiness: Some problems associated with psychological discrimination. *Aust J Soc Issues* 1988;23:103-111.
28. Ross MW. The relationship between life events and mental health in homosexual men. *J Clin Psychol* 1990;46:402-411.
29. Pakenham KI, Dadds MR, Terry DJ. Relationships between adjustment to HIV and both social support and coping. *J Consult Clin Psychol* 1994;62:1194-1203.
30. Feeney JA, Raphael, B. Adult attachments and sexual implications for understanding risk behaviours for HIV infection. *Aust N Z J Psychiat* 1992;26:399-407.
31. Masters WH, Johnson VE. *Human sexual response*. Boston: Little, Brown, 1966.
32. Schiavi RC, Schreineruegel P, Mandeli J, Schanger H, Cohen E. Healthy aging and male sexual function. *Amer J Psychiatry* 1990;147:766-771.
33. Kendrick DT, Keefe RC. Age preferences in mates reflect sex differences in human reproductive strategies. *Behav Brain Sci* 1989;15:75-133.
34. Fegan L, Rauch, A. *Sexuality and people with intellectual disability*. MacLennan and Petty: Sydney, 1993.
35. Schover LS, Jensen SB. *Sexuality and chronic illness: A comprehensive approach*. Guilford Press: New York, 1988.
36. Mallidis C, Lim TC, Hill ST, Skinner DJ, Brown DJ, Johnston WIH, Gordon Baker HW. Collection of semen from men in acute phase of spinal cord injury. *Lancet* 1994;143:1072-1073.
37. Kennedy S, Over R. Psychophysiological assessment of male sexual arousal following spinal cord injury. *Arch Sex Behav* 1990;19:15-27.
38. Brown DJ. Spinal cord injuries: The last decade and the next. *Paraplegia* 1992;30:77-82.
39. Melnyk R, Montgomery R, Over R. Attitude change following a sexual counseling program for the spinal cord injured. *Arch Phys Med Rehabil* 1979;60:601-605.
40. Alexander CJ, Sipski ML, Findley TW. Sexual activities, desire, and satisfaction in males pre- and post-spinal cord injury. *Arch Sex Behav* 1993;22:217-228.
41. Spector IP, Carey MP. Incidence and prevalence of the sexual dysfunctions: A critical review of the empirical literature. *Arch Sex Behav* 1990;19:389-408.
42. Spence SH. *Psychosexual therapy: A cognitive-behavioural approach*. Chapman and Hall: London, 1991.
43. McCabe MP. A program for the treatment of inhibited sexual desire in men. *Psychotherapy* 1992;29:288-296.
44. Winefield HR, Harvey EJ, Bradley PW. The impact on families of reported child abuse or neglect. *Aust J Soc Issues* 1993;28:245-262.
45. Cashmore J, Horsky M. The prosecution of child sexual assault. *Aust N Z J Criminol* 1988; 21:241-252.
46. Goldman R, Goldman J. The prevalence and nature of child abuse in Australia. *Aust J Sex Marriage Fam* 1988;9:94-106.
47. Alexander PC. Special section: Adult survivors of childhood sexual abuse. *J Consult Clin Psychol* 1992;60:165-212.
48. Struckman-Johnson C, Struckman-Johnson D. Men pressured and forced into sexual experience. *Arch Sex Behav* 1994;23:93-114.
49. Eastal PW. Survivors of sexual assault: A national survey. In: Eastal PW, ed.

- Without consenting: Confronting adult sexual violence. Australian Institute of Criminology: Canberra, 1993;73-93.
50. Poropat P, Rosevear W. Sexual assault of males. In: Eastaerl PW, ed. Without consenting: Confronting adult sexual violence. Australian Institute of Criminology: Canberra, 1993;219- 235.
  51. Crome S, McCabe MP. Effects on men and women of being raped. *J Family Studies* 1995;16 (in press).
  52. Hall GCN, Hirschman R. Toward a theory of sexual aggression: A quadripartite model. *J Consult Clin Psychol* 1991;59:662-669.
  53. Prentky RA, Knight RA. Identifying critical dimensions for discriminating among rapists. *J Consult Clin Psychol* 1991;59:643-661.
  54. Eastaerl PW. Without consent: Confronting adult sexual violence. Australian Institute of Criminology: Canberra, 1993.
  55. McConaghy N, Zamir R, Manicavasagar V. Non-sexist sexual experiences survey and scale of attraction to sexual aggression. *Aust N Z J Psychiat* 1993;27:686-693.
  56. Lavee Y. Western and non-Western human sexuality: Implications for clinical practice. *J Sex Mar Ther* 1991;17:203-213.
  57. Voigt H. Enriching the sexual experience of couples: The Asian traditions and sexual counseling. *J Sex Mar Ther* 1991;17:214-219.

# Mental health of men of non-English-speaking background

---

I. H. Minas, S. Klimidis and G. W. Stuart  
Victorian Transcultural Psychiatry Unit  
St. Vincent's Hospital, Melbourne

---

There are about 3.25 million overseas-born Australians, of whom two million were born in non-English-speaking countries, with about equal proportions of males and females. Most information about the mental health of non-English-speaking background (NESB) immigrants that is available is not broken down by gender. When it is, it is generally for the purpose of focusing on the specific mental health problems of NESB women. (This focus on NESB women is justified in that immigrant women are in many respects substantially more disadvantaged than immigrant men.) A consequence of this is that little is known about the specific problems of NESB men. Indeed, in the world literature, as reviewed by the Canadian Task Force on Mental Health Issues Affecting Immigrants and Refugees<sup>1</sup>, there is a dearth of information about factors leading to poor mental health in immigrant men.

Below we review preliminary results available from research conducted in Australia which examines whether NESB males constitute a group at risk for mental health problems and, if so, what factors might contribute to such risk.

## Prevalence of mental disorder in NESB men

There have been no major, methodologically adequate Australian studies of prevalence of mental disorder among immigrants or, for that matter, in the general community. Information concerning prevalence comes from a variety of sources, each of which has significant problems which cannot be detailed here.

The National Health Survey, periodically conducted by the Australian Bureau of Statistics (most recently in 1989-90), is a study of health complaints and health-related actions in a large probability sample (more than 50,000) of the Australian community. Figures 1 and 2 summarise some of the relevant findings from an analysis of the National Health Survey data.

Figure 1 shows the percentage of each ethnic group over the age of 14 years that had experienced, and had taken some health-related action as a result of, depression or 'anxiety' ('nerves, tension, emotional problems') in the two weeks before interview.

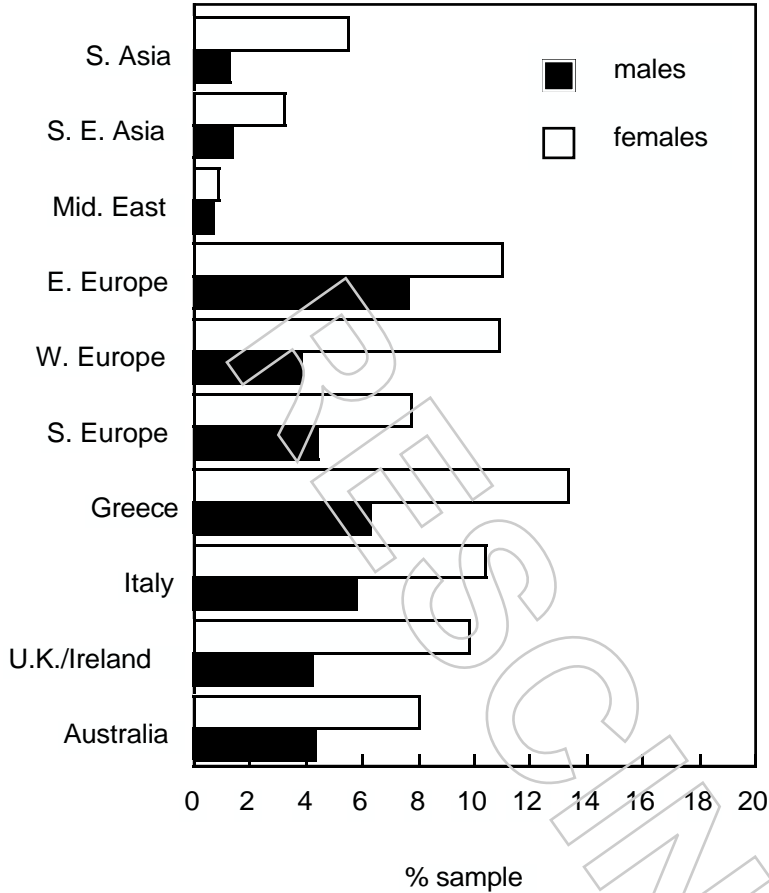
**Figure 1. Per cent of sample reporting either depression or anxiety (National Health Survey)**

RESEARCH FINDINGS

The rate of these disorders is higher for males born in Greece, Italy and Eastern Europe compared with English-speaking immigrants and the Australian-born, but generally lower than for women from the same country of birth, except for the South and South-east Asian born, where the gender pattern is reversed.

Figure 2 shows the percentage of each country of birth group using psychotropic medication (anti-anxiety drugs, anti-depressants or sleeping drugs) in the past two weeks.

**Figure 2. Percent of sample using psychotropic medications in the two weeks before interview (National Health Survey)**



Again, there are higher rates for Italian, Greek and Eastern European males, compared with their English-speaking counterparts. In relation to use of psychotropics, rates are consistently higher for women from all groups. Also apparent in Figures 1 and 2 are the very low rates of diagnosis and treatment of mental disorder (at least as defined in the National Health Survey) among Asian men.

One possible explanation for the different rates observed is the age profiles of the different country of birth communities, which are very different, the median age among Asian groups being less, and the median age of the European (particularly the Eastern European) groups substantially greater, than the median age of the Australian-born<sup>2,3</sup>. Analyses correcting for different age profiles across the groups returned results essentially the same as those shown in Figures 1 and 2.

The findings from the National Health Survey are consistent with those from our recent study of consultations with Victorian general medical practitioners. The study asked general practitioners to code minimal information about patients seen on a single day in September 1993. Some of the results for males from selected ethnic groups are summarised in Table 1.

**Table 1. Summary of findings on mental health problem indices for male patients attending general medical practitioners (Source: Victorian Transcultural Psychiatry Unit, Census of mental health service use project, unpublished data)**

---

---

---

It is evident from Table 1 that the prevalence of mental disorder in this sample of general practice attenders was higher among the Greek-born than among other NESB groups. This group was also among the highest in their use of antidepressant and anxiolytic medication. Anxiolytic medication taking was also relatively high among those born in the former Yugoslav republics, who dominate the 'Southern Europe' category of the National Health Survey. The same pattern of low prevalence and low use of psychotropic medication among Asian groups is evident in this sample of Vietnam-born general practice attenders as was evident in the National Health Survey data. For comparison, we have included in Table 1 rates of use of analgesics, which are high in all NESB groups, including the Vietnamese. One reason for the low report of mental health problems or use of psychotropic medications but relatively high use of analgesics among Asian groups, may be the reluctance of patients from these cultures to accept and to report mental health problems<sup>4</sup>. Mental disorder in many of the Asian cultures, from clinical and anecdotal accounts, appears to carry a severe social stigma<sup>5</sup>. There also is a strong tendency some NESB groups, including those from South-east Asia, to present with physical complaints when their problems would be construed by Western clinicians as being psychological in origin<sup>4,6,7</sup>.

Direct studies of NESB community samples are rare in Australia. Although these studies have the best ability to provide valid information about the rates of mental disorder and the factors contributing to disorder, they are costly and require specialised research techniques. In one such study of 631 adolescents in Victorian schools, comparing Australian-born adolescents with Australian-born parents, second generation Australian adolescents, immigrant adolescents, and Vietnamese refugee adolescents, we failed to find evidence that immigrant and refugee youth (males or females) had higher levels of mental health problems (Social Anxiety, Anxiety State, Depressive State) than the native-born controls. The analyses took into account within and between gender comparisons<sup>8</sup>.

At the other end of the age distribution however, preliminary results from an ongoing study comparing persons aged 60 and over from a number of ethnic backgrounds suggest higher rates of disorder in NESB community members than in the Australian-born. The General Health Questionnaire was designed to detect the presence of probable mental disorder in non-patient populations. Scoring above a certain threshold suggests that there is diagnosable mental disorder present. Using this instrument as a screen for probable mental disorder, we found that Macedonian men were 1.6 times more likely than the

Australian-born to score in the probable disorder range. Italian men were 2.7 times more likely than the Australian-born to score in the probable disorder range. However neither of these studies attempted to establish whether the General Health Questionnaire was a valid measure in these cultural groups. There is, on the other hand, evidence that the General Health Questionnaire is a valid instrument when used in the Turkish-born<sup>9</sup>. We sampled 444 randomly selected Turkish-born adults in Melbourne, and a further sample of Turkish psychiatric patients. Males drawn from the community sample that scored on the General Health Questionnaire in the range of probable mental disorder were found to have comparable General Health Questionnaire scores to diagnosed psychiatric patients. The rate of probable mental disorder among Turkish community males was 14 per cent, approximately the rate expected from general community surveys.

## Patterns of mental health service utilisation

McDonald<sup>10</sup> studied admissions to psychiatric hospitals and general hospital (private and public) treatment facilities in NSW over a two-year period (1988-1990). This study indicated that mental health services utilisation rates for NESB males and females were at 66 and 65 per cent, respectively, of the corresponding Australian rates. Admission to general hospital facilities for a mental health problem was even lower, 45 per cent for NESB males and 43 per cent for NESB females, relative to the corresponding Australian rates. Such a pattern of underuse of mental health services by NESB men (and women) has been reported in a number of utilisation studies, and in similar studies of rates of use by ethnic minorities in the USA<sup>7</sup>.

As well as the fact that NESB males have lower contact rates with mental health service agencies, they have lower rates of use of treatment modalities that are language-based, such as various forms of psychotherapy, family and group therapies and rehabilitation programs<sup>11</sup>. This suggests that, as well as having less access to mental health service agencies, NESB males also have less access to the appropriate forms of treatment when they do make contact with such agencies. Although there is insufficient space to consider the possible reasons for such a pattern of underuse, they may include lack of information about available services; reduced access to services for reasons of language, etc; greater stigma attached to mental disorder and psychiatric treatment by many NESB communities; and the nature of the services being less acceptable to those communities.

Among the consequences of underuse and reduced access to appropriate treatment are:

- substantial numbers of NESB men in the community with unrecognised and untreated mental disorder; and
- poorer outcomes of psychiatric treatment for those who do receive treatment.

This situation constitutes a serious failure of the health system to meet its responsibilities to all Australians. It is a situation which has a negative impact on the physical and mental health of the family of the person with untreated mental disorder and, through the development of perhaps avoidable chronicity and disability, is associated with substantial direct and indirect economic cost to the community at large.

## Factors contributing to risk for mental disorder in NESB men

What may be more important than merely demonstrating differential rates of mental disorder among NESB males is to explore the possible factors contributing to the development of such problems. Social, demographic as well as psychological factors which increase the risk for mental health problems may differ substantially across ethnic groups. Table 2 summarises some of the characteristics of elderly people who scored in the probable mental disorder range on the General Health Questionnaire from the study reported above.

Possible risk factors suggested by this preliminary analysis include the presence of physical illness or disability, poor social support, low self-esteem, dissatisfaction with retirement, poor coping skills and a negative attitude towards ageing. Many of these factors appear to be common to all samples but there are also factors specific to some groups — having current financial problems was a characteristic of Australian-born males with high scores on the General Health Questionnaire. Poor English-language proficiency and limited acculturation were also an important characteristic of Italians (males or females) with probable mental disorder.

Based on the results of the study of ethnic elderly, lack of social contact and reduced quality of social supports appear to be an important factor in elderly people with mental disorder, regardless of ethnicity. However, among Turkish males, there was no difference in level of social contact between patients in treatment and community members who scored high or low on the General Health Questionnaire. Indeed, patients reported significantly higher satisfaction with social supports than community members, a pattern inconsistent with that which is often found in English-speaking communities.

**Table 2. Rates of probable disorder and summary of factors characterising high scorers on the General Health Questionnaire (six symptoms or more present) from three ethnic backgrounds (Source: Victorian Transcultural Psychiatry Unit, Ethnic Aged Project, unpublished data)**

---

---

---

---

---

RESERVED

---

KEY TO TABLE: o = No difference between high General Health Questionnaire scorers and the remaining General Health Questionnaire groups (low and middle range scores) on the variable  
yes = Significant difference between high General Health Questionnaire scorers and the remaining groups  
trend = Significant F-ratio but no differences between groups on Scheffe post-hoc contrasts  
n/a = Not applicable

NOTE: Non-discriminating factors included education level, qualifications, socioeconomic status of main employment, current work status (almost all were retired), length of retirement, marital status, 'social' coping strategy, 'avoidance' coping strategy, satisfaction with Australian society.

It would appear that possible risk factors for mental health problems, such as the much-researched factor of *poor social support*<sup>12</sup> need to be validated in different cultural groups. Nevertheless, the Turkish community health study suggested other factors not often considered in the general literature, factors that are peculiar to immigrant groups. For example, migration brings with it major changes in responsibilities and family roles. In our study, male Turkish psychiatric patients were found to report a greater level of post-migration changes in roles and responsibilities than males who were members of the community. Such changes were viewed as more negative by male psychiatric patients and by male community members suffering high levels of symptoms of mental disorder relative to other male community members. Also, male psychiatric patients more frequently reported experiencing racial discrimination than male members of the general Turkish community. Male Turkish psychiatric patients were characterised by a low level of acculturation, although this factor did not discriminate between low and high scoring General Health Questionnaire groups of males from the general Turkish community.

The study of risk factors for mental disorder in Australia's immigrant groups is in its infancy. Studies of such factors need to consider pre-migration, migration and post-migration periods. For example, pre-migratory experiences are important in relation to the psychological adjustment of refugee populations, many of whom have experienced exposure to highly traumatic events<sup>13</sup>. Similarly, the act of migration is often urgent and fraught with danger for many refugees. Post-migration factors have been discussed above including personal exposure to discrimination; reduced socioeconomic status; reduced social networks and changes in the manner by which social networks operate; and the language barrier; among others.

## Conclusions

On the basis of available evidence, it would appear that the prevalence of mental disorder among NESB men from different cultural groups is variable. However, there are significant difficulties in interpreting the results of studies such as the National Health Survey, which cannot be accepted at face value. The first arises from the fact that there are substantial differences in the way in which different cultural groups conceive of, and express, mental disorder<sup>14</sup>. There will therefore be systematic differences in the ways in which questions, such as those in the National Health Survey, will be understood and responded to. There are also differences in the likelihood that mental disorder will be expressed through primarily psychological or physical symptoms. For example, the prevalence among South-east Asian groups appears to be low. However, the rate of prescription of analgesics in this groups is high. Is much of what would be understood as psychological distress by Western groups being presented to GPs as physical symptoms? Another source of problems in interpreting such survey results is in the different propensity of various cultural groups to disclose to a stranger conducting a survey very private information on a matter which is highly stigmatised in the community.

Such problems suggest that, in investigating prevalence in community samples, the survey method is not equally applicable to all cultural groups. Research methods which take such factors into account must be used. Further problems of research method warrant mention. To illustrate with only two examples:-

1. The most fundamental issue in epidemiological work, that of securing an appropriate sample, presents difficulties when working with NESB communities, in that many of the accepted techniques for sampling (e.g., random selection of names from the electoral roll) are not applicable to NESB communities.
2. The research instruments which are used have almost invariably not been validated in NESB populations.

To gain an understanding of the factors that contribute to vulnerability to the development of mental disorder in NESB populations it is necessary to devise and apply research methods which are appropriate to the task.

1. It is necessary to include in the study possibly relevant variables from each phase of the migration and settlement process, such as pre-migration circumstances, the process of migration itself (e.g., long stay in refugee camps) and the resettlement period.
2. Possibly relevant cultural variables (e.g., beliefs about health and illness, health-related practices, values) have not been sufficiently well defined for routine inclusion in such studies.
3. There is a need also for studies which are informed by ethnographic methods to gain an understanding of issues such as varying prevalence in different NESB groups and differences in pathways to care and patterns of service utilisation. Methods for creatively combining quantitative and qualitative research designs are required rather than continuing the debate about the relative merits of the two approaches.
4. It is necessary to move from cross-sectional to longitudinal research designs<sup>15,16</sup>. Cross-sectional studies, such as those referred to above, are useful in generating causal hypotheses, but are of little value in testing them.

A major gap in the research literature on NESB populations is in evaluation of the effectiveness of mental health treatment modalities and models of service organisation. Such studies are essential if it is to become possible to develop innovative treatment strategies and service structures which will meet the needs of NESB men and women suffering from mental disorder.

Finally a word about why there is so little high-quality research on the mental health of Australia's NESB population, despite its size. The first reason has to do with the conceptual and practical difficulties in conducting such research, alluded to above. The second has to do with the low priority accorded to social research as compared with biomedical research. The third, and perhaps the most important, has to do with the marginal place occupied by these groups in Australian society. NESB communities have substantially greater levels of unemployment and poverty<sup>17</sup> and substantially lower median income for those who are employed<sup>18</sup>. Issues such as low socioeconomic power and, particularly for the small and recently arrived communities, poor English proficiency, mean that the problems of these groups do not receive the attention they warrant from research funding, educational and service organisations.

### **Acknowledgment**

We are grateful to the Victorian Department of Health and Community Services for granting access to the National Health Survey, 1989-90, database.

### **References**

1. Canadian Task Force on Mental Health Issues Affecting Immigrants and Refugees. Review of the literature on migrant mental health. Canada: Ministry of Supply and Services, 1988.
2. Jupp J. Two hundred years of immigration. In Reid J, Trompf P. (eds.) The health of immigrant Australia: a social perspective. Marrickville: Harcourt Brace Jovanovich, 1990.
3. Thomas T, Balnaves M. New Land, Last Home: The Vietnamese elderly and the family migration program. Canberra: Australian Government Publishing Service, 1993.
4. Kleinman A. Patients and healers in the context of culture. Berkeley: University of California Press, 1980.
5. Lien O, Rice P. Concepts of mental illness of Vietnamese and the attitude toward psychiatric service. Medical Journal of the Vietnamese Medical Association Canada 1992;115:69-77.

6. Minas IH. Mental health in a culturally diverse society. In: Reid J, Trompf P, eds. *The health of immigrant Australia: a social perspective*. Marrickville: Harcourt Brace Jovanovich, 1990.
7. Sue D, Sue S. Cultural factors in the clinical assessment of Asian Americans. *J Consult Clin Psychol* 1987;55:479-487.
8. Klimidis S, Stuart GW, Minas IH, Ata AW. Immigrant status and gender effects on psychopathology and self-concept in adolescents: a test of the migration-morbidity hypothesis. *Compr Psychiat*, 1994; 35:393-404.
9. Stuart GW, Klimidis S, Minas IH, Tuncer C. The factor structure of the Turkish version of the General Health Questionnaire. *Int J Soc Psychiatry* 1993;39:274-284.
10. McDonald R. NSW Hospitalization of NESB migrants with mental disorders: a preliminary report. Unpublished Report from the Hunter Area Migrant Health Service, NSW, 1991.
11. Ridoutt L, Filis A. Mental health services and non-English-speaking background consumers. Sydney: Strategic Health Research Consultants, 1992.
12. Holahan CJ, Moos RH. Social support and psychological distress: a longitudinal analysis. *J Abnormal Psychol* 1981;90:365-370.
13. Minas IH, Klimidis S. Cultural issues in post-traumatic stress disorder. In: Watts R, Horne DJdeL, eds. *Coping with trauma: the Victim and the helper*. Melbourne: Academic Press of Australia, 1994.
14. Kleinman A. *Rethinking psychiatry: From cultural category to personal experience*. New York: The Free Press, 1988.
15. Scott WA, Scott R. Some predictors of migrant adaptation available at selection time. *Aust Psychol* 1985;20:313-343.
16. Krupinski J, Burrows G. eds. *The price of freedom: Young Indochinese refugees in Australia*. Sydney: Pergamon Press, 1986.
17. Wooden M, Holton R, Hugo G, Sloan J. *Australian immigration: A survey of the issues*. Canberra: Australian Government Publishing Service, 1990.
18. Moss I. *State of the nation: A report on people of non-English-speaking background*. Canberra: Australian Government Publishing Service, 1993.

# The mental health of Aboriginal communities

---

J. H. McKendrick and M. Thorpe

Department of Psychiatry, University of Melbourne  
The Victorian Aboriginal Health Service, Melbourne

---

## Introduction

### Historical factors

Aboriginal people have inhabited Australia for at least 60,000 years<sup>1</sup>. Australia is unique among former British colonies in that no treaty was made with the indigenous people recognising their title to the land, of which they were dispossessed. Aboriginal people were not recognised as Australian citizens until 1967. Changes have occurred among all Australian Aboriginal groups since European settlement but none has escaped the traumatic effects of cultural conflict. After European settlement, many Aboriginal people were forced to live on settlements or mission stations, often far from their traditional 'country'. Community and family groups were disrupted and cultural practices discouraged. Every Aboriginal group in Australia has experienced the removal of children to compounds, institutions and non-Aboriginal homes as a result of assimilationist policies. The history of Aboriginal peoples since European contact more than 200 years ago has been marked by major losses of land, family, health and life which continue to affect the lives of all Aboriginal people.

### Culture and the family

In Australian Aboriginal societies, spirituality and the practice of medicine and law have always been part of everyday life. The mental health of Aboriginal groups cannot be separated from the physical, spiritual, social and cultural. Despite the hardships, Aboriginal communities throughout Australia have retained their cultural identity. The family is the most important unit in Aboriginal societies. Families are large and not restricted to the nuclear group. It is not uncommon for an Aboriginal person to have close contact with more than 100 family members. Child rearing is usually shared by the extended family and community elders who ensure the continuation of the culture by teaching its rich oral history to the young people. Aboriginal people begin their cultural education early in childhood, learning about their relatives, their obligations to family and community and respect for the elders. They are taught the history of their people, and learn to respect and love their 'country' (the land of their ancestors). Aboriginal extended families provide a buffer against racial discrimination, exclusion and disappointment, and engender a strong sense of pride in Aboriginal identity and culture.

The roles of men and women in Aboriginal society have always been different, rather than superior or inferior<sup>2</sup>. The most elaborate and sacred ceremonies are the domain of initiated men, while women have their own important rituals. In the economic and social spheres, Aboriginal men and women traditionally worked together, both sexes maintaining their independence. The mission stations and reserves which followed on European settlement were under the control of white managers, often missionaries.

Despite this, Aboriginal women were able to maintain their roles in family and economic matters. The introduction of christianity and western education effectively diminished the position of Aboriginal men as spiritual leaders and teachers of young men on the missions and reserves. Consequently, many Aboriginal men have lost status and self esteem, while women often play a leadership role in families and communities.

## Sociodemographic factors

A long history of abuse and neglect has resulted in Aboriginal people being the most disadvantaged group in Australia. High unemployment rates and low family incomes ensure that most Aboriginal people live in poverty. The cycle of poverty is exacerbated and perpetuated by the lack of opportunity for educational advancement and resultant poor literacy and numeracy skills. Thus many Aboriginal men are excluded from meaningful participation in the wider society in addition to having lost important roles in their Aboriginal cultures.

## Health

The standard of health of Aboriginal people is much below that of the wider Australian population. The average life expectancy is more than 20 years less than that of the general population. Illnesses occur earlier and are more severe in Aboriginal populations. Again, Aboriginal men are more severely affected. The main documented causes of premature morbidity and mortality among Aboriginal people include diabetes, cardiovascular disorders, infections, respiratory disorders, perinatal complications, accidents and the effects of excessive alcohol use.

The major positive change in Australian Aboriginal communities over the past 20 years has been the establishment of health, legal and child-care services run by local Aboriginal communities and staffed by Aboriginal people. Poverty and deprivation remain, but health and self esteem have improved with the success of these organisations. Aboriginal cultures have a world view which is holistic, in that the social, religious, cultural, psychological and physical aspects of living are not seen as separate entities, but essential parts of the whole. Health is seen as encompassing all these aspects of life, and is not just the well being of the individual but of the entire community:

*'This is the whole-of-life view and it also includes the cyclical concept of life-death-life'<sup>3</sup>*

## Mental health

### A. General issues

It is important to adopt a holistic approach to the mental health of Aboriginal communities. The Aboriginal population of Australia is not homogenous, and so the cultural context of Aboriginal mental health varies. However, a number of mental health issues are common to most Aboriginal groups.

Aboriginal communities are grappling with the interrelated problems of :

- high rates of mental disorder combined with poor general health and extreme socioeconomic deprivation,
- paucity of good-quality data about the extent and nature of mental disorders,
- underuse of mainstream mental health services and
- the provision of culturally appropriate, high-quality, accessible mental health services.

Concern about the effects of high levels of stress in Aboriginal communities has been increasing over the past 20 years. A high proportion of the patients seen by Aboriginal health workers and doctors working for Aboriginal community medical services have mental disorders or are significantly psychologically distressed<sup>4,5,6,7,8</sup>. Depression, anxiety,

heavy psychoactive substance use, and high risk behaviours are identified as common problems by health workers and community members<sup>4,5,6,7,8</sup>. The high levels of mental disorders occur in the setting of extreme socioeconomic deprivation, poor physical health and overt racism. Loss is an everyday experience for most Aboriginal people, who still mourn the loss of their traditional land. Other losses which began with European settlement continue, including removal of Aboriginal children from their families, loss of health, loss of self esteem and frequent deaths of relatives and friends at an early age<sup>4,5,6,9</sup>. Despite high levels of mental disorders, Aboriginal people do not use mainstream psychiatric services. They do not feel comfortable using the services, do not trust them and do not believe they receive good treatment<sup>4,5,6,10</sup>.

Aboriginal men are less likely to use mental health services than Aboriginal women, even services specifically developed for Aboriginal people. Analysis of trends among patients of the Victorian Aboriginal Mental Health Network<sup>11,12</sup>, during its first six years of operation (1987-1993) showed that 75 per cent of outpatients were women, while the majority of inpatients were men. Women tended to present early, with less severe disorders. In contrast, the first presentation of male patients was often an involuntary admission to the acute psychiatric ward, with a severe mental disorder and associated substance use disorder.

Baseline information about the nature of mental disorders among Aboriginal people, derived from culturally sensitive research, is required if effective, efficient, accessible, culturally appropriate mental health programs are to be developed by Aboriginal communities.

## **B. Research**

### **(i) Methodological issues**

The interest of late 19th and early 20th century psychiatrists in Australian Aboriginal people was limited to their supposed link with prehistory. The unique social and cultural organisation was not understood, and thought to be of only historical value. In the 1950s and '60s, psychiatrists began to visit remote communities to study mental disorders among Aboriginal people. During short field trips researchers, who did not speak Aboriginal languages, used a predominantly etic approach in attempting to understand mental disorders among Aboriginal communities, where little or no English was spoken, by applying Western categories. Heavy reliance was placed on informants, usually non-Aboriginal station managers, graziers and missionaries. These studies have been criticised and their findings questioned.

Recent studies of mental health and disorders in Aboriginal communities have applied the principles of medical anthropology. The Pintupi of Central Australia have a rich lexicon for the expression of sadness, anxiety and anger<sup>13,14</sup>. Earlier researchers had assumed Aboriginal people lacked the vocabulary to express such feelings and so did not experience them. It is likely that ignorance of Aboriginal languages and reliance on non-Aboriginal informants may have resulted in overestimates of rates of personality disorder (particularly antisocial personality disorder among men) and underestimates of the frequency of depression and anxiety.

An anthropologist experienced in working with Central Australian Aboriginal people travelled to several Central Australian Aboriginal communities to ask the residents what sorts of behaviours were a serious problem in their communities<sup>7</sup>. Western mental health concepts were not used unless mentioned by the respondent and local Aboriginal cultural consultants worked on the project in each community. The cultural consultants facilitated appropriate dialogue between the researcher, community leaders and respondents. It was found that, in general, the major concerns of the Aboriginal communities differed greatly from those of the agencies providing services to those communities.

Over the past 12 years, several mental health research projects have been conducted through the Victorian Aboriginal Health Service and the Victorian Aboriginal Mental

Health Network (VAMHN)<sup>4,5,8</sup>. Aboriginal cultural consultants are actively involved in all projects and local idioms of psychological distress used.

## (ii) Research findings

Aboriginal men seem to be at greater risk of mental disorder than women. Although Aboriginal men are less likely to use health services, research studies have consistently found higher rates of mental disorder and substance-use disorder among men. A brief overview of relevant research is presented here.

A survey of the health of the Aboriginal community of Bourke during the early 1970s found 37 per cent of men and 28 per cent of women to have a mental disorder<sup>15</sup>. Fifty three per cent of men were heavy drinkers (consuming more than 80g of alcohol a day), but only three per cent of women. A high proportion of women stated they took non-narcotic analgesics when feeling down. In the author's view, substance abuse is an attempt by people living under conditions of extreme poverty and deprivation to relieve some of the tension and stress in their lives.

In related papers, the problem of suicide among Aboriginal people in the Kimberley region is addressed<sup>16,17</sup>. Examination of official Broomshire records from 1957 to 1986 revealed an increase in suicides, mainly among young Aboriginal men, over this time<sup>16</sup>. A second paper<sup>17</sup> describes a study of Aboriginal people held in the Broome 'lock up'. Respondents (70 per cent men) were interviewed in the lockup the morning after they had been detained, usually for drunkenness or alcohol-related offences. The author concluded that a high proportion of the young men interviewed, particularly heavy drinkers and those with recent loss or disruption of an interpersonal relationship, were at risk of suicide.

Health workers from the Redfern Aboriginal Medical Service<sup>18</sup> in a critique of these studies caution against a concentration on deaths in custody. According to them :

*Aboriginal suicide in custody should not be understood simply as the manifestation of individual psychopathology. If suicide is increasing, those that die represent the tip of the iceberg of Aboriginal community distress.*<sup>18</sup>

Drinking patterns among 516 Aboriginal adults resident in the Kimberley region of Western Australia were examined in 1989<sup>19</sup>. Survey respondents were severely socially and economically disadvantaged. The sample was found to be divided between abstainers from alcohol, and heavy drinkers, who drank in excess of levels defined as harmful by the National Health and Medical Research Council. Seventy six per cent of men and 46 per cent of women were drinkers. Young men were the heaviest drinkers, while women were less likely than men to be drinkers across age groups. In contrast with the previous two studies, drinking was only weakly associated with thoughts of suicide or self harm. More than 50 per cent of the sample had been incarcerated in the police lockup, with rates for young men who were drinkers being very high.

In 1986, the first steps were taken in the development of Australia's first mental health program specifically for Aboriginal people, the Victorian Aboriginal Mental Health Network (VAMHN)<sup>11,12</sup>. Mental health research and service development occurred in parallel. Aboriginal cultural consultants were involved at all levels of the project, which was conducted in two stages. In stage one, a random sample of Aboriginal adults attending a general practitioner at the Victorian Aboriginal Health Service in Fitzroy was interviewed to determine the patterns of psychological distress in the group<sup>4,5</sup>. All respondents were interviewed by a psychiatrist with many years' experience working with Aboriginal people. In this study, the term psychological distress was used in place of mental disorder as the clinical psychiatric assessment took into account a broad range of diagnostic concepts including local Aboriginal idioms of psychological distress. The findings supported clinical experience. Sixty three per cent of the sample were assessed as suffering significant psychological distress, usually depression. The sample was similar to the wider Victorian Aboriginal community in being young and severely

socioeconomically disadvantaged. One third of respondents had been brought up outside their Aboriginal communities. There was a high rate of heavy alcohol use in the sample, especially among men and nearly all respondents were current smokers. Men had a higher rate of psychological distress than women. This baseline information was used in the establishment of the VAMHN, the first Aboriginal community-based mental health program in Australia<sup>11,12</sup>. Stage two of the research, supported by a National Health and Medical Research Council grant, was conducted three years later to examine the course of psychological distress<sup>8</sup>. The social situation of Aboriginal people who are faced with chronic life stresses and frequent losses, including deaths of close relatives and friends, suggests that much of the psychological distress they experience may run a chronic or remitting, relapsing course. Eighty five per cent of the original respondents were reinterviewed. Ninety per cent of respondents were significantly psychologically distressed at some time during the follow-up period. Sixty two per cent of respondents were significantly psychologically distressed for most of the study period (three years). Depression was by far the most common type of distress irrespective of age or sex. Depression in men was commonly associated with a substance-use disorder. Men, respondents in the 30- to 39-year age group, those not in paid employment, those whose childhood carer was not Aboriginal, those with a forensic history and heavy users of psychoactive substances had the highest rates of long standing psychological distress. It is encouraging that those who grew up with their Aboriginal families and those with a strong sense of their Aboriginal identity were more likely to have been well throughout the study.

Studies of other urban Aboriginal groups in Sydney and Adelaide<sup>6,9</sup> have consistently found high rates of mental disorder, most commonly depression or anxiety, among respondents.

In Sydney, the Aboriginal Medical Service, Redfern, conducted a survey of mental health needs in Aboriginal communities throughout NSW during 1990-1991<sup>6</sup>. During the survey, meetings were held with interested members of Aboriginal communities. A survey of the mental disorders presenting to two Aboriginal medical services in NSW was conducted. Diagnoses were based on the clinical assessment of general practitioners during a consultation. The most commonly presenting mental disorders were found to be substance use problems (75 per cent of mental disorders); stress related (47 per cent); depression (21 per cent); and anxiety (15 per cent). Psychotic disorders were infrequently diagnosed. Substance abuse was the major mental disorder. Fifty eight per cent of visits for drug use problems were alcohol related, 15 per cent were related to intravenous drug use, and 10 per cent were polydrug related. Fifty six per cent of drug-related visits were of men. Most alcohol-related problems occurred among men, while women were more likely to use pills. Intravenous and polydrug users tended to be younger men. In this study, the best predictors of mental disorder were childhood neglect, separation from parents and institutionalisation. The authors concluded that mental health problems are common among Aboriginal patients attending primary care health practitioners, and that most of such problems are associated with real-life difficulties. The Adelaide study group (88 heads of household living in government-owned accommodation) was severely socioeconomically disadvantaged, and violence was an everyday experience<sup>9</sup>. Many had been brought up in institutions or non-Aboriginal foster homes. Twenty one per cent of the sample (44 per cent of men) had been in jail, more than half for minor offences such as non-payment of fines. Forty two per cent of respondents assessed themselves as having at least one major health problem. Stress-related problems and drug and alcohol abuse were common. Thirty one per cent of respondents reported having serious thoughts of suicide. Despite high rates of health problems, respondents did not use mainstream health services.

Despite differences in methodology and the groups studied, some general conclusions can be drawn about mental disorders in Aboriginal communities. High rates of mental disorders have been found in association with sociocultural disruption and poverty.

Comparisons between earlier and more recent studies suggest there have been few changes in the mental health of Aboriginal people over the past 20 to 30 years. Factors, including continuing losses, removal from Aboriginal communities during childhood, poverty, lack of educational opportunity, racial discrimination, frequent contact with police, cultural exclusion and the experience of violence are associated with high rates of mental disorder.

## Summary

The evidence supports the views of Aboriginal community leaders and health workers that mental disorders are major public health issues for Aboriginal communities, and that psychological distress, usually depression, is common and often runs a chronic or remitting/relapsing course. Aboriginal men have high rates of mental disorder, often associated with a substance use disorder. The changed status of many Aboriginal men since European colonisation with exclusion, loss of cultural roles and resultant low self esteem probably contributes to this picture. However, most of the factors found to be associated with mental disorders in Aboriginal communities affect Aboriginal men and women, including ongoing losses, removal of children and disruption of families.

Aboriginal people do not use mainstream mental health services. Aboriginal men are less likely to use mental health services than women, often presenting late with severe illness. It is clear that a major priority in public health policy must be the development of good quality, culturally appropriate, accessible, mental health programs in Aboriginal communities. Prevention and early detection of mental disorders are necessary to avoid chronicity. The ways in which Aboriginal people view and explain the problems need to be understood and accepted as valid. Furthermore, Aboriginal community mental health programs must operate beside programs having a focus directed towards wider social and environmental improvements.

Inappropriate and inadequate mental health care was cited in the final report of the Royal Commission into Aboriginal Deaths in Custody (RCADIC) as a major contributing factor to imprisonment and death of many of the cases investigated (most of which were men). The recommendations of the final report stress the importance of Aboriginal communities having control over their own health and mental health services<sup>20</sup>. The VAMHN is a culturally sensitive, Aboriginal community-based model of mental health care delivery for Aboriginal people. There has been an increased demand for its services in each of the past seven years, despite limited resources. An important aspect of such a program is flexibility and the ability to monitor and respond to changing community expectations and needs.

An important recent advance in Aboriginal mental health is a three-year project currently underway in rural Victoria. The National Health and Medical Research Council-funded research is examining idioms of psychological distress, the patterns of psychological distress and service use in the local Aboriginal population. The project is being conducted through the area Aboriginal medical service, in cooperation with the University of Melbourne Department of Psychiatry and the Victorian Aboriginal Health Service. The aim of the project is to develop a model mental health program which can be modified for use in Aboriginal communities throughout Australia<sup>21</sup>.

## References

1. Flood J. *Archaeology of the dreamtime*. University of Hawaii Press, Honolulu, 1983.
2. Gale F. *Woman's role in Aboriginal society*. Australian Institute of Aboriginal Studies. Canberra, 1978.
3. The National Aboriginal Health Strategy Working Party. *A national Aboriginal health strategy*. Australian Government Printer. Canberra, 1989.

4. McKendrick JH. A psychosocial survey of an urban Aboriginal general practice population. (DPM Thesis) Melbourne. The University of Melbourne, 1987.
5. McKendrick JH, Cutter T, McKenzie A, Chiu E. The pattern of psychiatric morbidity in a Victorian urban Aboriginal general practice population. *Aust N Z J Psychiat* 1992;26:40-47.
6. Aboriginal Medical Services, Redfern. NSW Aboriginal mental health report: dedicated to our children - our future. William H Homer. Sydney, 1991.
7. Dunlop S. All that Rama Rama Mob. Aboriginal disturbed behaviour in Central Australia. Central Australian Aboriginal Congress, Alice Springs, 1988.
8. McKendrick JH. Patterns of Psychological distress and implications for mental health service delivery in an urban Aboriginal general practice population. Doctor of Medicine Thesis, Univeristy of Melbourne, 1993.
9. Radford AJ, Harris RD, Brice GA, Van der Byl M, Monten H, Matters D, Neeson M, Bryan L, Hassan R. Social health among urban Aboriginal heads of households in Adelaide, with particular reference to suicide attempt. *Aboriginal Health Information Bulletin* 1991;15:20-25.
10. Nathan P. A home away from home. PIT Press, 1979
11. McKendrick JH, Thorpe M, Cutter TN, Austin G, Roberts W, Duke M, Chiu E. A unique and pioneering mental health service for Victorian Aboriginal people. *Aboriginal Health Bulletin*, May 1990;13:17-21.
12. McKendrick JH, Thorpe M, Cutter TN, Austin G, Roberts W, Duke M, Chiu E. A unique mental health network for Victorian Aboriginal people. *Med J Aust* 1990;153:349-351.
13. Morice R. Psychiatric diagnosis in a transcultural setting: The importance of lexical categories. *Br J Psychiatry* 1978;132:87-95.
14. Morice R. Personality disorder in transcultural perspective. *Aust N Z J Psychiat* 1979;13:293-300.
15. Kamien M. The dark people of Bourke. New Jersey. USA: Humanities Press, 1978.
16. Hunter EM. On Gordian knots and nooses: Aboriginal suicide in the Kimberley. *Aust N Z J Psychiat* 1988;22:264-271.
17. Hunter EM. Aboriginal suicides in custody: a view from the Kimberley. *Aust N Z J Psychiat* 1988;22:273- 282.
18. Fagan P, Swann P. Commentary on the other sections of the Report raising matters of relevance to Aboriginal people, culture and health. In Greeley and Gladstone n.d.: 130-149.
19. Hunter E, Hall W, Spargo W. The distribution and correlates of alcohol consumption in a remote Aboriginal population. Monograph No.12 NDARC, 1991.
20. Royal Commission into Aboriginal deaths in Custody. Final report. Australian Government Printer. Canberra, 1991.
21. McKendrick JH, Thorpe M, Herrman H, Briggs P, Bennett P, Minas H. Psychological distress and service utilisation in a rural Victorian Aboriginal population. NHMRC Three Year Project Grant 1993-1996.

# **Section 4**

**Effects of men on the  
mental health of others**

# Effects of fathers on the mental health of their children

---

A. F. Jorm

NH&MRC Social Psychiatry Research Unit  
The Australian National University, Canberra

---

The influence of the mother on the mental health of her child has long been a popular theme among mental health professionals and has spawned a vast body of research. By contrast, the influence of the father has been relatively neglected and the available knowledge base is limited<sup>1</sup>. For example, a review of recent research on the effects of parents on the mental health of their children found that 51 per cent of studies examined the effects of both parents and 48 per cent examined the effects of only the mother, compared with 1 per cent which examined the effects of only the father<sup>2</sup>.

This chapter examines the available data on the impact of fathers on mental health, placing particular emphasis on Australian research. This impact can involve the immediate effects on the child while growing up and in the father's care, as well as the longer-term effects in adulthood.

## The effects of father absence

While most children grow up with both a mother and a father, it is not uncommon to lose a parent due to death or to separation or divorce of the parents. Where separation or divorce are the cause, it is most common for the child to live with the mother rather than the father. A basic question is whether the absence of the father has any ill-effects on the mental health of the child and, if so, whether this effect is lessened where an alternative father figure is present.

Research into the psychological effects of loss of a parent through death or divorce has often produced conflicting findings, with some researchers claiming negative effects on the child and others claiming no effect. One way of getting a clearer picture of the evidence is to pool data from a large number of studies using a statistical procedure known as *meta-analysis*. A recent meta-analysis of the effects of divorce on children found negative effects on school achievement, conduct, psychological adjustment, self-concept, social adjustment, mother-child relations and father-child relations<sup>3</sup>. However, the effects were fairly small. Furthermore, the effects varied depending on whether the mother or the father had custody of the children. Boys tended to be worse off when the mother had custody and girls where the father had custody. The same meta-analysis showed that children who lost a parent through death also had adverse effects, although these were even smaller than for children after divorce. Parental remarriage does not solve the problems of losing a parent, because children living with a step-parent also tended to have negative effects. However, the effects of a stepfather were different for boys and girls. Step-fathers tended to improve the psychological well-being of boys, but tended to decrease it for girls. This is similar to what is found for fathers versus mothers as custodial parents.

The long-term psychological effects of parental loss have also been studied in adults. A

recent meta-analysis of studies looking at the long-term effects of parental divorce on adult children found that they tended to be worse in psychological adjustment, conduct and use of mental health services, and were themselves more likely to experience family breakdown<sup>4</sup>. The long-term effects of death of a parent have also been extensively studied, particularly in relation to risk for depression, but the consensus of opinion is that this does not have any long-term effect on mental health<sup>5</sup>.

Putting this evidence together, we can conclude that absence of the father, whether through death or divorce, tends to have an adverse effect (although a small one) on the mental health of his children. The adverse effects may be greater for sons than for daughters. Although most of the evidence on mental health effects of father absence comes from overseas research, similar effects are apparent in Australian studies<sup>6</sup>.

## Parental conflict

Although absence of the father does tend to have a small effect on his children's mental health, a more important influence is the quality of the interactions within the family, whatever its composition. It has been found that children in high-conflict families tend to have poorer psychological adjustment, conduct and self-concept than children in low-conflict families. Indeed, children from intact families where there is high conflict tend to have worse mental health than children from divorced families<sup>3</sup>.

A problem in assessing the effects of parental conflict on children's mental health is that it is unclear which is the cause and which the effect. Does parent conflict cause poor mental health in the children, or vice versa? One way of sorting this out is to examine parental conflict and child mental health problems over time to see which comes first. An American study found that marital conflict and lack of communication measured at the time of the child's birth predicted childhood disturbance some years later<sup>7</sup>. This finding supports the idea that parental conflict is a cause of the child's problems.

## Fathering style

Parents differ in how they interact with their children, and this may have an influence on the child's mental health. Researchers have investigated different styles of parenting by giving questionnaires to adolescent or adult children asking how they were treated when they were young. These questionnaires ask the children to rate their parents on characteristics such as 'Spoke to me in a warm and friendly voice' and 'Let me decide things for myself'. Such questionnaires have been used to measure two dimensions of parenting: *Care* (with parents varying from very caring at one extreme to rejecting at the other) and *Control* (ranging from encouraging of dependency to encouraging of independence and autonomy). There has been particular interest in parents who are low on the care dimension and high on the control dimension. Such parents have been described as exercising 'affectionless control' over their children.

In Australian and overseas research, people who suffer from depression or anxiety disorders are more likely to describe their parents as low in care and high in control<sup>8,9</sup>. Affectionless control appears to be a risk factor for anxiety and depression whether this parenting style is used by the father or the mother. However, there is some evidence that children are most affected when their same-sex parent shows affectionless control, that is, boys are most affected by the parenting style of their father and girls by their mother<sup>8</sup>.

Style of parenting can also influence the development of conduct disorder in children. The following parenting factors have been found to increase the risk for conduct disorder: lack of parental supervision, low parent-child involvement, parental rejection, marital conflict, parent deviance, harsh discipline, poor parental health, large family size and abusive parental behaviour<sup>10</sup>.

# Child abuse

Child abuse represents the extreme of adverse parenting and is here divided into physical and sexual abuse.

## Physical abuse

Physical abuse involves non-accidental injury to a child which is due to the actions of an adult. Parents are usually the perpetrators of physical abuse, but most research shows that mothers are more often perpetrators than fathers<sup>11</sup>. The reason for the greater frequency of child abuse by mothers is probably that they are typically more involved in child care than fathers. They are therefore more exposed to the frustrations of child care and have more opportunity for abuse<sup>12</sup>.

The immediate health consequences of physical abuse are self-evident and in the extreme can result in the death of the child<sup>11</sup>. The longer-term mental health effects have been investigated in a Sydney study which followed up a group of physically abused children an average of five and a half years later<sup>13</sup>. These children were found to have more antisocial and neurotic behaviour problems, poorer self-concepts, lower intelligence, language and reading skills, and were more serious and introverted in personality. The much larger body of overseas research shows that physical abuse has long-term consequences which are seen in adulthood<sup>14</sup>. Children who have been physically abused are more likely as adults to be violent, to be substance abusers and to suffer emotional problems such as anxiety and depression.

A Melbourne study looking at risk factors for physical abuse found a number of characteristics of the parents, the child and the family situation which increase risk for abuse<sup>15</sup>. Fathers and mothers of abused children tended to be younger and are more likely to have themselves been abused as a child. The abused children were more likely to have been separated from their mother in the first year of the child's life and were more often described by their parents as aggressive. The relationship between the parents tended to be poor and the family was more likely to have had stressful life events in the year before the abuse.

## Sexual abuse

Sexual abuse of children has been defined in terms of a discrepancy in age between the victim and the abuser<sup>16</sup>. A person who is sufficiently older than the child is likely to be in a position of power where they can coerce the child to cooperate. An Australian survey of sexual abuse has been carried out using a questionnaire distributed to nearly 1000 social science students<sup>16</sup>. This survey found that 28 per cent of females and 9 per cent of males reported childhood sexual experiences with much older persons. Although 90 per cent of abusers were male, it was uncommon for children to be sexually abused by their father. Only 2.2 per cent of females and 0.3 per cent of males reported a sexual experience with their father or stepfather. (This survey did not report results separately for fathers and stepfathers). Although sexual abuse by fathers was uncommon, it was reported to be more traumatic than abuse by any other category of person.

Results from a community survey in New Zealand confirm that sexual abuse by fathers is uncommon. This survey of a randomly selected sample of New Zealand women found that 10 per cent reported childhood sexual abuse<sup>17</sup>. However, of 36 women in the survey who gave an account of their abuse, only two implicated their natural fathers and four their stepfathers.

There is a substantial body of evidence showing major effects of sexual abuse on the mental health of children<sup>18</sup>. The most frequently reported problems are fears, post-traumatic stress disorder, behaviour problems, sexualised behaviours and poor self-esteem. However, different children react in different ways and there is no one mental health problem which is found in the majority of sexually abused children. There is evidence that the harm is greater when the perpetrator is someone close to the victim, such as the father or stepfather.

The effects of childhood sexual abuse are also seen in adulthood. Women who have been sexually abused as children are more likely to suffer from depression, anxiety, self-destructive behaviour, substance abuse, poor self-esteem, feelings of isolation and stigma, difficulty in trusting others, and sexual maladjustment<sup>19</sup>.

A recent New Zealand community survey of the mental health effects of childhood sexual abuse found that sexual abuse often occurs with other kinds of disadvantage<sup>20</sup>. The sexually abused women were more likely to come from broken homes, from families with a lot of conflict and to have parents who were uncaring and overcontrolling. They were also more likely to have experienced physical abuse.

## Mental disorders in the father

The mental health of the father is an important influence on the mental health of his children. It has been found that children whose fathers have a mental disorder are at increased risk of mental health problems<sup>2</sup>. This increased risk applies across a range of mental disorders in the father:

**Alcohol and substance abuse.** Children of fathers who are alcohol or substance abusers are at increased risk of a number of mental health problems including hyperactivity, conduct disorder, alcohol/substance abuse, depression and anxiety.

**Depression.** Children of depressed fathers are themselves at increased risk of depression as well as other emotional and behavioural problems.

**Schizophrenia.** Children of schizophrenic fathers are at increased risk of neurological, emotional and behavioural difficulties.

Children of fathers with other mental disorders, such as antisocial personality disorder and anxiety disorders, may also be at increased risk, but the amount of research on the issue is small<sup>2</sup>.

The reasons for the increased risk in children are not known, but are likely to be complex. Genetic factors may be important because they are known to play a role in all mental disorders. However, there are no doubt environmental influences as well, with mental disorders in the father affecting parenting practices and disrupting family interactions. The prevention and effective treatment of mental disorders in men is therefore important not only for their own well-being but also for their children's.

Mental disorders in the mother can also have adverse effects on a child's mental health. These effects have been most thoroughly studied in depressed mothers. However, where the mother suffers from depression, the father can play a role in buffering any adverse effects. A recent American study found that adolescent children who had good communication and little conflict with their father were protected from the ill effects of having a depressed mother<sup>21</sup>.

## Conclusions

Knowledge about the effects of fathers on mental health is much more limited than for mothers. However, there is evidence that fathers have the potential to enhance or harm the mental health of their children, and the effects extend into adult life. Some evidence suggests that fathers may be particularly important to the mental health of their sons, but there is still dispute about this issue<sup>22</sup>. Children are more likely to have good mental health when their fathers are actively involved in their care, treat them affectionately, are not overly controlling, where the father and mother have a harmonious relationship, and where the father himself has good mental health. Conversely, children are likely to have poorer mental health when their fathers are absent, are uncaring and overcontrolling, use harsh discipline or abuse the child, where there is conflict between the father and mother, and where the father himself suffers from a mental disorder. Because of their important role, fathers are a potential point of intervention for improving the mental health of children as well as the long-term mental health of the adult population.

## Acknowledgment

Bryan Rodgers and Betty Kitchener provided helpful comments which led to improvements in this chapter.

## References

1. Phares V. Where's poppa? The relative lack of attention to the role of fathers in child and adolescent psychopathology. *Amer Psychol* 1992;47:656-664.
2. Phares V, Compas BE. The role of fathers in child and adolescent psychopathology: Make room for daddy. *Psychol Bull* 1992;111:387-412.
3. Amato PR, Keith B. Parental divorce and the well-being of children: A meta-analysis. *Psychol Bull* 1991;110:26-46.
4. Amato PR, Keith B. Parental divorce and adult well-being: A meta-analysis. *J Marriage Fam* 1991;53:43-58.
5. Tennant C. Parental loss in childhood: Its effect in adult life. *Arch Gen Psychiatry* 1988;45:1045-50.
6. Raphael B, Cubis J, Dunne M, Lewin T, Kelly B. The impact of parental loss on adolescents' psychological characteristics. *Adolescence* 1990;25:689-700.
7. Howes P, Markman HJ. Marital quality and child functioning: A longitudinal investigation. *Child Dev* 1989;60:1044-51.
8. Gerlsma C, Emmelkamp PMG, Arrindell WA. Anxiety, depression, and perception of early parenting: A meta-analysis. *Clin Psychol Rev* 1990;10:251-77.
9. Parker G. Early environment. In: Paykel ES, ed. *Handbook of affective disorders*. New York: Guilford Press, 1992:171-83.
10. Saunders MR, Markie-Dadds C. Toward a technology of prevention of disruptive behaviour disorders: The role of behavioural family intervention. *Behav Change* 1992;9:186-200.
11. De Silva S, Oates RK. Child homicide the extreme of child abuse. *Med J Aust* 1993;158:300-1.
12. Belsky, J. Etiology of child maltreatment: A developmental-ecological analysis. *Psychol Bull* 1993;114:413-34.
13. Oates K. *Child abuse and neglect: What happens eventually?* New York: Brunner/Mazel, 1986.
14. Malinosky-Rummell R, Hansen DJ. Long-term consequences of childhood physical abuse. *Psychol Bull* 1993;114:68-79.
15. Smith JAS, Adler RG. Children hospitalized with child abuse and neglect: A case-control study. *Child Abuse Negl* 1991;15:437-45.
16. Goldman RJ, Goldman JDG. The prevalence and nature of child sexual abuse in Australia. *Aust J Sex Marriage Fam* 1988;9:94-106.
17. Mullen PE, Romans-Clarkson SE, Walton VA, Herbison GP. Impact of sexual and physical abuse on women's mental health. *Lancet* 1988;1:841-45.
18. Kendall-Tackett KA, Williams LM, Finkelhor D. Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychol Bull* 1993;113:164-80.
19. Browne A, Finkelhor D. Impact of child sexual abuse: A review of the research. *Psychol Bull* 1986;99:66-77.
20. Mullen PE, Martin JL, Anderson JC, Romans SE, Herbison GP. Childhood sexual abuse and mental health in adult life. *Br J Psychiatry* 1993;163:721-32.
21. Tannenbaum L, Forehand R. Maternal depressive mood: the role of the father in

preventing adolescent problem behaviors. *Behav Res Ther* 1994;32:321-325.

22. Downey DB, Powell B. Do children in single-parent households fare better living with same-sex parents? *J Marriage Fam* 1993;55:55-71.

RESCINDED

# Effects of husbands on the mental health of their wives

---

K. Wilhelm  
School of Psychiatry  
University of New South Wales

---

Marriage seems to confer greater psychological benefits on husbands than on wives<sup>1,2,3,4,5</sup>. Possible explanations include:

- Men are more likely to occupy 'fixed' roles (where one has role obligations that are not easily rescheduled) and women 'nurturant' roles (where one's role requires one to be responsive to the needs of others), with the implication that the fixed roles are afforded more value and provide protection of personal time and the nurturant roles, less value and more intrusion into personal time.
- Women have either fewer roles if involved in home duties or more role strain if endeavouring to work and to parent and that 'neither working *per se* nor happiness with job and/or marriage makes married women as healthy as comparable men'<sup>4</sup>.
- Motherhood may have biological or sociological consequences leading to depression
- Only the more physically and psychologically healthy men marry.
- There is ongoing reciprocal negative interaction between spouses which becomes more evident over the duration of the marriage<sup>5</sup>.

Whatever the explanation, the finding that wives derive less benefit from marriage than their husbands leads us to consider the effect that husbands may have on the psychological well-being of their wives.

## What factors influence this effect?

### Type of marriage

At one end of the spectrum is the marriage between partners with the traditional sex roles (between the full-time housewife and the breadwinner) and, at the other end, the more egalitarian marriage, where partners are 'equal but different'<sup>6</sup>. The traditional female sex-role stereotype was thought to inhibit competitive, aggressive behaviour in women<sup>5</sup> and to engender a position of a 'helpless style of coping'<sup>3</sup> which was fertile soil for the onset of psychological symptoms. Such wives sublimated their aggressive drives by encouraging competitive and acquisitive behaviour in their husbands, who in turn relied on their wives for emotional support and maintenance of marital stability<sup>5</sup>. They were dependent on their husbands' goodwill and those who saw their husbands as caring and protective were less likely to succumb to psychiatric disorder<sup>7</sup>. Being a housewife had a negative impact on health (as measured by such behaviours as days in bed and consumption of tranquillisers) only when the marriage was dysfunctional<sup>8</sup>.

### The employment status of spouses

Marriages can be differentiated by the attitude taken by a husband towards a working

wife<sup>9</sup>. She may be a coprovider (where both spouses were seen to contribute equally), a secondary provider (where the wife's income was seen as not vital to the family's economic well-being) or an ambivalent coprovider (where the family was dependent on the wife's income but uneasy about accepting this economic reality). Coproviders had the lowest levels of depression and the least role overload. Ambivalent coproviders reported the lowest marital satisfaction and highest levels of negative interaction, while wives of primary providers reported more role overload and depression. Husbands of coproviders and ambivalent providers spent significantly more time in household tasks than husbands who saw themselves as the main provider. Thus the symbolic meaning attached to work determined the degree to which husbands supported their wives (both in practical and emotional terms) to work outside the home. The concept of value attached to the different working patterns has important implications for the quality of family life and how the children in the different families are socialised to regard work and sex roles<sup>8,9</sup>.

Long-term employed women were better able to cope with stress associated with an unstable marriage than women in transitional work or housewives, and this effect was greatest for blue-collar marriages<sup>8,10</sup>. However, the presence of an unemployed husband had a compounding effect on any other marital problems and a greater negative effect on the wife's psychological well-being than a wife's unemployment had on her husband's<sup>3</sup>. Indeed, being unemployed was the main characteristic that rendered men more psychologically vulnerable than comparable married women.

## Psychological impairment in the spouses

It is also important to consider whether there is prior psychological impairment in either or both spouses. Such psychological impairment may be episodic (e.g., a psychotic illness such as schizophrenia or bipolar disorder) or reflect ongoing impairment (e.g., a neurotic disorder such as chronic anxiety and/or depression or severe personality traits which influence the person's social and work functioning).

### (i) Impairment in the husband

#### *Husbands with a psychotic illness*

Men with schizophrenia tended to marry less often than other men and most had developed overt schizophrenia only after marriage<sup>11</sup>, but their wives reported feeling useful and fulfilled in caring for them. The wives had often done more of the courting and had seen their future husbands' passivity as a desirable trait or interest in vague philosophical themes as a mark of superior intelligence (whereas both were often symptoms of the schizophrenic process). However, if the husband's clinical state deteriorated, some wives became more critical and hostile, leading to further exacerbation of their husband's condition rather than necessarily causing psychological disorder in their wives. In psychotic disorders, a wife was able to maintain some emotional objectivity because her husband's behaviour when he was unwell was so clearly distinct from his usual behaviour as to be seen as due to the illness<sup>11</sup>.

#### *Husbands with neurotic depression*

This is not the case for non-psychotic disorders (such as anxiety and depressive disorders) where behaviours that are part of the disorder are not as different from normal experience or the person's normal functioning.

The effect of a depressed person on their spouse has been extensively studied<sup>1,5,12,13,14,16,17,18,19,20</sup>. When compared with controls (husbands in marriages where neither partner was depressed), depressed husbands demonstrated less affection towards their wives and had less involvement with household chores and child care<sup>15</sup>. They also tried to exert more dominance and allowed less cooperative decision-making, thereby increasing marital friction<sup>13,15,17,18</sup>.

While men in general tend to spend less time than their wives in nurturing confiding

social contacts away from their immediate family<sup>19</sup>, the social network of depressed husbands significantly constricted over time, so that their wives were expected to increase their involvement with them. The wives consequently became more socially isolated and increasingly tended to resemble their husbands<sup>14</sup>. Hafner<sup>5</sup> has drawn attention to the increasingly sex-role-stereotyped positions taken up by each spouse, when one or both partners were depressed. This situation tended to reinforce the 'stuck' position of both spouses with an increase in feelings of helplessness and disempowerment in the wives. After marital therapy, the communication patterns in the patient groups became more like those of nondepressed controls<sup>20</sup>, with the caveat that underlying relationship issues needed to be addressed if improvements were to be maintained<sup>5,15</sup>.

#### *Husbands with dementia*

A study of a different kind of impairment supports these findings. Wives who were carers of dementing husbands were found to experience more distress and psychological impairment (in terms of anxiety and depression) than husband / carers of dementing wives<sup>21</sup>. The effects were particularly strong if the dementing spouse was aggressive, very demanding or constantly asking questions. The differential effect on wives was partly because wives tended to be 'care givers' whereas husbands and children were more often 'care managers'. The resilience of vulnerable care givers was increased by involvement in a care givers' program aimed at increasing their level of knowledge about both the illness and available resources, plus development of coping skills and personal resources<sup>22</sup>.

#### *Physically abusive husbands*

Ganley<sup>23</sup> has described four types of marital violence: (i) physical violence, such as pushing, slapping or use of a weapon; (ii) sexual violence, such as forced sex or physical attacks involving breasts or genitals; (iii) psychological violence, such as threats or forcing the victim to perform degrading acts; and (iv) destruction of property or pets. He stated that 'the power of psychological battering comes directly from the physical/sexual violence that has already occurred. The offender is successful because she [the victim] knows from experience that he is capable of backing up the psychological battering with physical assaults'. Ganley concluded that 'all forms of violence are psychologically devastating to the victim' and suggested that the presence of psychological battering should alert others to the possibility that physical violence was also taking place. There was evidence that such violence was commoner in marriages involving mixed races or religions or incompatibility in the status between the partners<sup>24</sup>. Mills<sup>25</sup> asked whether poor self esteem led to abuse or vice versa. She concluded that severe physical abuse led to poor self esteem and noted that physical abusing wives did not have the same effect on the self esteem of their husbands as abusing husbands did on their wives.

When the psychological profiles of maritally distressed couples were compared<sup>26</sup> in terms of whether the husband was violent, the abused wives reported higher levels of anxiety, fatigue and confusion than did the nonabused wives. For husbands, the only difference was that violent distressed husbands were more likely to drink heavily than nonviolent ones. When violent husbands remarried, about two thirds were noted to be likely to physically abuse their new spouse and the authors advocated some analysis of factors that may prevent such violence recurring in the other third of remarriages.

## **(ii) Impairment in the wife**

#### *Wives with a psychotic illness*

Dupont and Grunebaum<sup>27</sup> suggested that paranoid women selected husbands who were passive and socially isolated and readily participated in their wives' bizarre beliefs and behaviour, to the extent that these husbands would agree to demands from their wives that were clearly delusional. These husbands did not confront their wives and thereby indirectly encouraged the psychotic symptoms. These husbands saw themselves in the role of the devoted and self-sacrificing breadwinners caring for a sick wife, thus

epitomising the stereotyped sex roles that have been suggested to maintain the disease process<sup>5</sup>.

In bipolar affective disorder, when the bipolar spouse was well, there was no difference between the marital interactions of bipolar and normal couples<sup>28</sup>. However, in my clinical experience, if a wife with bipolar disorder has married at a time when she exhibited increased flirtatiousness and sexual disinhibition (which was symptomatic of a manic episode), husbands can encourage poor compliance with mood stabilising medication to regain the 'highs' in their wives.

#### *Wives with depression*

There is a constant finding that the presence of a highly critical husband led to maladaptive coping, poorer psychological adjustment and increased risk of relapse in the sick wife whether the impairment is psychological<sup>29</sup> (particularly depression), or physical (such as rheumatoid arthritis<sup>30</sup> or dementia<sup>21</sup>). It is important here to establish whether the critical response is a characteristic personality trait or uncharacteristic, perhaps indicating an episode of impairment (such as depression) in the husband. In investigating whether the effect was specifically caused by depression or due to any illness, two research groups have found that depressed wives reported less emotional support and more criticism from their husbands<sup>30</sup> and more marital distress<sup>16</sup> in general than wives who were physically ill (with such diseases as rheumatoid arthritis or cardiac disease).

Observers of the family interactions of depressed wives<sup>31</sup> have noted that the depressed effect in the wife tended to decrease aggressive outbursts in her husband (at least in the short term). This raised the possibility that some wives may exhibit depressive behaviour in an attempt to diminish aggressive behaviour by their husbands. This may be a useful short-term strategy, but could backfire in the medium to long term.

Coyne's group<sup>12</sup> has eloquently described the feelings of tiredness, hopelessness, lack of interest in social life and worrying that are engendered in the spouses of depressed people. They noted that depressed women were hostile towards their husbands and children<sup>32</sup>, although not towards their therapists. If these couples attempted to remedy the situation alone, both partners became more depressed as a result of mutual feelings of inadequacy and inability to deal with the problems.

For depressed wives, either the presence of a caring husband or separation from an uncaring spouse was the best predictor of long term reduction in depressive symptoms. By contrast, wives who stayed with uncaring husbands tended to have persisting depression<sup>33</sup>.

#### *Postpartum depression*

While factors such as obstetric events are important in the development of postpartum depression<sup>34</sup>, levels of depression and personality dysfunction (particularly high interpersonal sensitivity) in the wife before the last trimester are obviously implicated<sup>35</sup>. There is considerable evidence that wives who have a more supportive partner fared better and showed less evidence of depression and anxiety than those who do not<sup>36,37</sup>. The combination of a husband who expresses high levels of criticism towards his wife and a wife with poor self esteem and high interpersonal sensitivity appears to pose particular problems<sup>35,37</sup>. However, working wives report that perception of good emotional support from their husbands does not necessarily equate with high levels of concrete practical help<sup>38</sup>. Programs targeting new mothers who are vulnerable to depression because they have anxious personalities or are socially isolated<sup>40</sup> have successfully lowered postpartum impairment.

For women, the weeks immediately after the birth are the time of highest vulnerability to depression. For men, the transition is slower and they were more prone to stress at around six months after the birth, when they are more fully aware of the impact of the new baby on themselves and their marriage<sup>41</sup>. Husbands also continue to rely on their wives as their primary source of support<sup>19,43</sup>, at a time when their wives are preoccupied

with a new baby. There is a potential conflict of interests if the new mother requires more emotional support from her husband when he may be coming to terms with being a new father. Cox<sup>44</sup> has suggested that contemporary urban couples are prone to postpartum depression because of a lack of built-in social rituals and roles for the couple and their social support network, leaving a social support hiatus at a time when their emotional resources are already stretched.

A Melbourne study<sup>44,45</sup> of 272 families in a multi-ethnic suburb showed that the quality of marital relationships was still an important factor in maternal depression four years after the birth of the child and was of equal importance in Australian-born and immigrant wives. Lack of satisfactory support from their husbands made these mothers more vulnerable to the stresses of child rearing and life events and the preschool children of these depressed mothers had more behavioural problems than those of non-depressed mothers.

#### *The effect of therapeutic intervention*

The use of husbands as therapists has been advocated for wives with such anxiety disorders as panic disorder with agoraphobia<sup>5,46,47</sup>. Therapy was more likely to be successful when the marriage was previously satisfactory. Two kinds of unsatisfactory marriage are likely to lead to a relapse of symptoms in the wife<sup>46</sup>. First, the 'compulsory' marriage, where couples had little affection for each other but felt bound to stay, and marriages where the husband protected his wife from recognising or changing her symptoms because of his own interpersonal difficulties. Here, the husband became symptomatic as his wife improved, leading to a relapse in the wife to maintain the status quo<sup>5</sup>. However, another group<sup>47</sup> found that the wife's female friends were more effective cotherapists than the husband, but particularly so in the marriages where the husband-therapist was depressed.

In depressed female outpatients, the symptomatic recovery preceded the recovery of full social functioning by many months<sup>48</sup> and wives with preceding marital difficulties were depressed longer than those without<sup>49</sup>. Corney<sup>49</sup> also found that wives with 'acute or chronic' depression and major marital difficulties derived the most benefit from social work intervention while, paradoxically, those with an uncomplicated depression derived much less benefit. This may indicate that the presence of a husband who was a 'good enough' confidant promoted social recovery in the uncomplicated cases while also demonstrating the importance of a dysfunctional marriage in promoting chronicity. Corney speculated that the social worker took the place of a confidant for the wives who were in a dysfunctional marriage.

## **Is sauce for the goose also good for the gander?**

The psychologist Michael Argyle<sup>50</sup> has examined the 'rules' expected in various relationships and stated: 'Marriage is quite different from all other relationships: it is a very intense relationship, it is a sexual relationship, it embraces many aspects of life, and it is usually intended to be permanent.' He noted that many of the 'rules' are common to both sexes (e.g., showing emotional support, being faithful, keeping confidences, being tolerant of the other and creating a harmonious home atmosphere), while some are specific to the wife (e.g., not nagging, showing anger when appropriate) and some to the husband (e.g., showing an interest, being responsible for household repairs). He stated that women are said to be more expressive than men (they smile more, and are better communicators of feelings, whether sent or received) and that in happy marriages, the wife is a good decoder of messages, and in disturbed marriages, 'husbands were poor senders and receivers of emotions to wives, via non-verbal cues'. The interpersonal differences extend beyond the marital dyad as wives invest more emotional input in and attach greater value to their wider social network and tend not to place such reliance on

the marital relationship as the sole source of intimacy as their husbands<sup>19</sup>. This differential use of social support seems to become greater over time<sup>42</sup> and is influenced by the degree of dysfunction in the husband<sup>5,14,15,16</sup>.

## The good news

Little has been said about good marital relationships. Vaillant's long-term follow-up of a group of American college graduates<sup>51</sup> found that 'how a man described his marriage over the years predicted his career success, the relative maturity of his defences and his own perception of his happiness as effectively as did the more obvious fact of his having been labelled or not labelled mentally ill', and that 'there was probably no single longitudinal variable that predicted mental health as clearly as a man's capacity to remain happily married over time'.

The finding<sup>10</sup> that the presence of a confiding relationship with a husband or lover is a powerful protective factor to the onset of depression in wives faced with stressful life events is now well accepted. It is supported by a Canadian group's findings<sup>52</sup> that satisfactory levels of intimacy in marital relationships were related with fewer nonpsychotic emotional disorders, psychosomatic symptoms and overinvolved family relationships. The presence of a husband who provides such a relationship is powerful in allowing their wives to repair the effects of earlier adversity such as being raised in an orphanage<sup>53</sup> or death of a mother during childhood<sup>54</sup>. Vaillant<sup>51</sup> writes that 'marriage...seemed to be one means that the men had for repairing poor childhoods', so that the same powerful reparative effect is important for married men.

## The bad news

There are two types of negative effects that husbands can have on the psychological health of their wives. First, there are acts of omission, where the absence of a supportive spouse and a reparative backup social support system of friends or extended family leads to increased psychological distress. This may be due to physical absence (e.g., long working hours) or the husband being emotionally detached, or because the husband is himself impaired (e.g., by psychological or physical illness).

Second, there are the results of acts of commission ranging from assaultive behaviour to the more insidious effects of long-standing depression. In cases where comparisons were made, husbands consistently had greater power to affect their wives' psychological well-being than the reverse. This difference between psychological well-being was greatest between employed husbands in functional marriages and housewives in dysfunctional marriages<sup>3</sup>. There was evidence that these effects increased with the duration of the marriage<sup>14</sup> and for those in working class settings<sup>8,10</sup>. The direct effects can be due to actual physical abuse, or critical comments undermining confidence and self esteem. Simply asking the question 'how critical is your spouse of you?' was said to be a good predictor of depressive relapse in wives<sup>55</sup>. There is also the more subtle effect of being 'let down' by a core tie (e.g., husband or lover) at a time of crisis which also rendered women (especially those with poor self esteem) vulnerable to depression<sup>56</sup>.

However, the wives themselves make a contribution. Women have been socialised to 'do good and feel bad'<sup>57</sup>, that is, to take on nurturant roles but blame themselves for any untoward consequences, whether or not it was appropriate. Women have different communication and coping styles from men<sup>58,59,60</sup> and there is a need to evaluate both partners and determine which problems are his, hers and theirs in the marriage<sup>41</sup>. It is important to view impaired spouses in their interpersonal context, to determine the quality of the marital interaction and whether there are interpersonal factors predating the episode or are maintaining the impairment, and to provide skills required for day-to-day functioning for both spouses<sup>61</sup>.

If female vulnerability to depression and self-doubt is linked with 'the cost of caring' for others<sup>58</sup>, there is insufficient emphasis on the 'costs of non-caring' in males, where deficits

in social skills may predict future alcohol abuse<sup>59</sup> and, arguably, increased criticism of their wives and violence. However, appropriate assertiveness and outward expression of stress may be emotionally adaptive for men<sup>60</sup>.

These issues continue for the whole of the marital life cycle. A study of marital contributions to psychological well-being in later life<sup>62</sup> states that changes in the husband's well-being are more likely to determine the overall emotional tone in the marriage and 'if change occurs, it is likely to be negative for the women if she has been married for a longer time', with couples who lacked adequate income being the most vulnerable. These fundamental differences in social style for husbands and wives have tended to put the onus on wives to try to understand the emotional communications of their husbands. Perhaps instead we need to encourage husbands to become better communicators within their families, with the corollary that we encourage their wives to be more assertive and less 'thin-skinned'<sup>35,57,63</sup>. Techniques such as a form of Behavioural Family Therapy used by a Brisbane group<sup>64</sup> have been shown to improve marital communication and bring about positive cognitive change with subsequent improvement in marital satisfaction for both sexes. These skills can be maintained, with reinforcement, over a five year follow-up period<sup>65</sup>.

More men are coping with such roles as being single parents and economic coproviders (on equal or inferior economic footing with their wives)<sup>9</sup> as part of changing social roles for men in contemporary society. Indeed, a recent cover story in *Time* magazine<sup>66</sup> discussed how husbands should deal with the expectation of being a nurturer as well as a breadwinner. The extent of the change is determined by the type of marriage and sex roles of the partners involved. Husbands who are androgynous in sex role type (i.e., rate high for characteristics of both masculinity and femininity) have been said to be better adapted to cope with these changing expectations<sup>5,6,60,67</sup>.

## Potentially useful strategies

Vaillant<sup>51</sup> concluded that at age 30 and 50, the Worst Outcome men in his longitudinal study were far less likely to have mastered 'the task of intimacy' and to take responsibility for other adults or their own children, while the opposite was true for the Best Outcome men. Specific programs targeting vulnerable spouses during periods of transition (such as early parenthood and in a range of disorders from physical abuse to dementia) seem to be effective<sup>5,22,23,40</sup> but husbands and wives may require different priorities in mastering intimacy. For example, in social skills training, husbands may require greater emphasis on skills that would help them widen their social network, communicate effectively with their immediate family and find alternative modes of expression for angry and impulsive feelings, whereas their wives may need more attention to promotion of assertiveness and self esteem. Husbands and wives may both benefit from greater understanding about their differences in communication styles<sup>68</sup>. There are now support groups for abusive husbands with increasing involvement from other males (including attempts at a more understanding approach from the police force). It is also interesting to note that women who were childhood victims of abuse considered that education and support for the male perpetrators was more important than punishment<sup>69</sup>. Unemployment has been shown to be an important risk factor, so that programs promoting the acquisition of new social skills and work and leisure opportunities should be targeted at recently retrenched and retired men.

Clearihan<sup>70</sup> has recently commented that 'the concept of men's health as a medical entity appears still in its infancy' and highlighted risk-taking behaviour, ignoring health warnings and denial of their own emotional and physical problems as key issues, with accidents and assaultive behaviour towards their families as important consequences. He said that we needed to ask ourselves what constituted the basis of masculinity and suggested that current concepts (which implied alienation from their wives, children and other men) required review. He also considered that lessons were to be learnt from the women's movement in terms of shaping health and social policies that require some

gender-specific approaches. Perhaps by paying more attention to the particular social needs of men we may effect some direct improvements in psychological well-being, rates of alcohol abuse and assaultiveness, thus also indirectly addressing the needs of their wives and children.

## Acknowledgment

Associate Professor P. Mitchell, Dr Karen Arnold and Ms Kerrie Eyers provided helpful comments on the chapter.

## References

1. Heins T. Marital interaction in depression. *Aust N Z J Psychiat* 1978;12:269-275.
2. Cleary PD, Mechanic D. Sex differences in psychological distress among married people. *J Health Soc Behavior* 1983;24:111-121.
3. Radloff L. Sex differences in depression: the effects of occupation and marital status. *Sex Roles* 1975;1:249-265.
4. Gove WR, Hughes M, Briggs Style C. Does marriage have positive effects on the psychological well-being of the individual? *J Health Soc Behavior* 1983;24:122-131.
5. Hafner RJ. *Marriage & Mental Illness: A sex roles perspective*. R. Julian Hafner ed. New York: Guildford Press 1986.
6. Antill JK, Cotton S, Tindale S. Egalitarian or traditional: correlates of the perception of an ideal marriage. *Aust J Psychol* 1983;35:243-255.
7. Tennant C, Bebbington P, Hurry J. Female vulnerability to neurosis: the influence of social roles. *Aust N Z J Psychiat* 1982;16:135-140.
8. Welch S, Booth A. Employment and health among married women with children. *Sex Roles* 1977;3:385-397.
9. Perry-Jenkins M, Seery B, Crouter AC. Linkages between women's provider-role attitudes, psychological well-being and family relationships. *Psychol Women Quart* 1992;16:311-329.
10. Brown GW, Harris T. *Social origins of depression: a study of psychiatric disorder in women*. London: Tavistock Publications 1978.
11. Palansky K, Johnston R. Mate selection in schizophrenia. *Acta Psychiatr Scand* 1967;43:397-409.
12. Coyne JC, Kessler RC, Tal M, Turnbull J, Wortman CB, Greden JL. Living with a depressed person. *J Consult Clin Psychol* 1987;55:347-352.
13. Kreitman N, Collins J, Nelson B, Troop J. Neurosis and marital interaction: I. Personality and symptoms. *Br J Psychiatry* 1970;117:33-46.
14. Kreitman N. The patient's spouse. *Br J Psychiatry* 1964;110:159-173.
15. Collins J, Kreitman N, Nelson B, Troop J. Neurosis and marital interaction: family roles and functions. *Br J Psychiatry* 1971;119:233-242.
16. Bouras N, Vanger P, Bridges PK. Marital problems in chronically depressed and physically ill patients and their spouses. *Compr Psychiat* 1986;27:127-130.
17. Kreitman N, Collins J, Nelson B, Troop J. Neurosis and marital interaction. IV. Manifest psychological interaction. *Br J Psychiatry* 1971;119:243-252.
18. Hinchliffe M, Hooper D, Roberts FJ, Vaughan PW. A study of the interaction between depressed patients and their spouses. *Br J Psychiatry* 1975;126:164-172.
19. Brugha TS, Bebbington PE, MacCarthy B, Sturt E, Wykes T, Potter J. Gender, social support and recovery from depressive disorders: a prospective clinical study. *Psychol Med* 1990;20:147-156.

20. Schmalings KB, Jacobson NS. Marital interaction and depression. *J Abnormal Psychol* 1990;99:229-236.
21. Brodaty H, Griffin D, Hadzi-Pavlovic D. A survey of dementia carers: doctors' communications, problem behaviours and institutional care. *Aust N Z J Psychiatry* 1990;24:362-370.
22. Brodaty H, Gresham M. Effects of a training programme to reduce stress in carers of patients with dementia. *Br Med J* 1989;299:1375-1379.
23. Ganley AL. Counselling programs for men who batter: elements of effective programs. *Response* 1981;4:3-4.
24. Rosenbaum A, O'Leary KD. Marital violence: characteristics of abusive couples. *J Consult Clin Psychol* 1981;49:63-71.
25. Mills T. Victimization and self-esteem: on equating husband abuse and wife abuse. *Victimology* 1984;9:254-261.
26. Russell MN, Lipov E, Phillips N, White B. Psychological profiles of violent and nonviolent maritally distressed couples. *Psychotherapy* 1989;26:81-86.
27. Dupont RL, Grunebaum H. Willing victims: the husbands of paranoid women. *Am J Psychiatry* 1968;125:151-159.
28. Frank E, Targum SD, Cershon, et al. A comparison of nonpatient and bipolar patient-well spouse couples. *Am J Psychiatry* 1981;138:764-768.
29. Gotlib IH, Whiffen VE. Depression and marital functioning: an examination of specificity and gender differences. *J Abnormal Psychol* 1989;98:23-30.
30. Manne SL, Zautra AJ. Spouse criticism and support: their association with coping and psychological adjustment among women with rheumatoid arthritis. *J Personal Soc Psychol* 1989;56:608-617.
31. Hops H, Biglan A, Sherman L, Arthur J, Friedman L, Osteen V. Home observations of family interactions of depressed women. *J Consult Clin Psychol* 1987;55:341-346.
32. Kahn J, Coyne JC, Margolin G. Depression and marital disagreement: the social construction of despair. *J Soc Person Relat* 1985;2:447-461.
33. Hickie I, Parker G. The impact of an uncaring partner on improvement in non-melancholic depression. *J Affective Disord* 1992;25:147-160.
34. O'Hara MW, Neunaber DJ, Zekoski EM. Prospective study of postpartum depression: prevalence, course and predictive factors. *J Abnormal Psychol* 1984;93:158-171.
35. Boyce P, Hickie I, Parker G. Parents, partners or personality? Risk factors for postnatal depression. *J Affective Disord* 1991;21:245-255.
36. Cox JL, Murray D, Chapman G. A controlled study of the onset, duration and prevalence of postnatal depression. *Br J Psychiatry* 1993;163:27-31.
37. Marks MN, Wieck A, Seymour A, Checkley SA, Kumar R. Women whose mental illnesses recur after childbirth and partner's levels of expressed emotion during late pregnancy. *Br J Psychiatry* 1992;161:211-216.
38. Gray EB, Lovejoy MC, Piotrkowski CS, Bond JT. Husband supportiveness and the well-being of employed mothers of infants. *J Contemp Human Services* 1990;71:332-341.
39. Barnett B, Parker G. Professional and non-professional intervention for highly anxious primiparous mothers. *Br J Psychiatry* 1985;146:287-293.
40. Cox AD. Befriending young mothers. *Br J Psychiatry* 1993;163:6-18.
41. Cowan CP, Cowan PA, Heming G, et al. Transitions to parenthood: his, hers, and theirs. *J Fam Iss* 1985;6:451-481.

42. Wilhelm K. Sex differences in depression. Sydney, NSW: University of NSW. Thesis.
43. Cox JL. Childbirth as a life event: sociocultural aspects of postnatal depression. *Acta Psychiatr Scand* 1990;79:75-83.
44. Williams H, Carmichael A. Depression in mothers in a multi-ethnic urban industrial municipality in Melbourne: aetiological factors and effects on infants and preschool children. *J Clin Psychol Psychiat* 1983;26:277-285.
45. Williams H, Carmichael A. Depression in mothers and behaviour problems with their preschool children. *J Paediatr Child Health* 1991;27:76-82.
46. Milton F, Hafner J. The outcome of behavior therapy for agoraphobia in relation to marital adjustment. *Arch Gen Psychiatry* 1979;36:807-811.
47. Oatley K., Hodgson D. Influence of husbands on the outcome of their agoraphobic wives' therapy. *Br J Psychiatry* 1987;150:380-386.
48. Rounsaville BJ, Prusoff BA, Weissman MM. The course of marital disputes in depressed women: a 48-month follow-up study. *Compr Psychiat* 1980;21:111-117.
49. Corney RH. Marital problems and treatment outcome in depressed women: a clinical trial of social work intervention. *Br J Psychiatry* 1987;151:652-659.
50. Argyle M, Henderson M. *The anatomy of relationships*. Penguin Books: England, 1985.
51. Vaillant GE. *Adaptation to life*. Little, Brown & Company: London, 1977
52. Waring EM, Chelune GJ. Marital intimacy and self-disclosure. *J Clin Psychol* 1983;39:183-190.
53. Quinton D, Rutter M, Liddle C. Institutional rearing, parenting difficulties and marital support. *Psychol Med* 1984;14:107-124.
54. Parker, G. Hadzi-Pavlovic D. Modification of levels of depression in mother - bereaved women by parental and marital relationships. *Psychol Med* 1984;14:125-135.
55. Hooley JM, Teasdale JD. Predictors of relapse in unipolar depressives: expressed emotion, marital distress, and perceived criticism. *J Abnormal Psychol* 1989;98:229-235.
56. Brown GW, Andrews B, Harris T, Adler Z, Bridge L. Social support, self-esteem and depression. *Psychol Med* 1986;16:813-831.
57. Miller JB. *Toward a new psychology of women*. Penguin Books: England, 1976.
58. Richman JA, Raskin VD, Gaines C. Gender roles, social support, and postpartum depressive symptomatology: the benefits of caring. *J Nerv Ment Dis* 1991;179:139-147.
59. Richman JA, Rospenda KM. Gender roles and alcohol abuse: costs of noncaring for future physicians. *J Nerv Ment Dis* 1992;180:619-626.
60. Wilhelm K, Parker G. Sex differences in depressiogenic risk factors and coping strategies in a socially homogeneous group. *Acta Psychiatr Scand* 1993;88:205-211.
61. Weissman MM, Akiskal HS. The role of psychotherapy in chronic depressions: a proposal. *Compr Psychiat* 1984;25:23-26.
62. Ferraro K, Wan TH. Marital contributions to well-being in later life: an examination of Bernard's thesis. *Am Behav Sci* 1986;29:423-437.
63. Boyce P. Personality dysfunction, marital problems and postnatal depression. In: *Prevention of depression after child birth*. Cox J, Holden J, eds. Garhill Press: Sydney, 1993.
64. Halford WK, Sanders MR. Dyadic behaviours and requests for change in Australian

- maritally distressed and non distressed couples. *Aust J Psychol* 1988;40:45-52.
65. Halford WK, Sanders MR, Behrens BC. A comparison of the generalisation of behavioral marital therapy and enhanced behavioral marital therapy. *J Consult Clin Psychol* 1993;61:51-60.
  66. Button J. Man: not by breadwinning alone. *Time* 1993;July:36-44.
  67. Antill JK. Sex role complementarity versus similarity in married couples. *J Personal Soc Psychol* 1983;45:145-155.
  68. Markman HJ, Renick MJ, Floyd FJ, Stanley SM, Clements M. Preventing marital distress through communication and conflict management training: a 4 and 5 year follow-up. *J Consult Clin Psychol* 1993;61:70-77.
  69. Martin JL, O'Shea ML, Romans SE, Anderson JC, Mullen PE. Attitudes to reducing violence towards women: punishment or prevention? *N Z Med J* 1993;106:115-117.
  70. Clearihan L. Men's health: myth and reality. *Aust Fam Physician* 1993;22:1317.

