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# THE HEALTH OF THE PEOPLE IN AGRICULTURE AND ITS INTERDEPENDENCE WITH THE HEALTH OF RURAL COMMUNITIES

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This article describes the factors that are driving change in Australian agriculture, how they affect the health of the agricultural population and of rural communities as a whole.

## BACKGROUND

Australian agriculture comprises a large number of discrete rural industries. While there are some similarities between these industries (such as outdoor work, the use of mobile plant and equipment, and often the structure of a family business), there are many differences between their production processes and enterprise arrangements. For example, the production processes and labour arrangements of a dairy enterprise contrast markedly with those of a cotton or vegetable enterprise.

Further, agriculture industries are in constant change and, while these changes affect the social wellbeing and health of people in those industries, constant change also affects the social and economic position of the wider rural community. A number of factors have been identified as driving change and the restructuring of the agricultural sector in Australia, with flow-on effects on associated rural

communities.<sup>1</sup> These are largely the effects of global changes. As the Australian agricultural sector is primarily supplying overseas markets, farmers tend to be ‘price takers’: that is, they have little capacity to influence the prices that they receive for their products. Because Australia does not provide government subsidy to mitigate the direct economic effect of global market fluctuations, farming enterprises must absorb these effects.

The factors driving change in Australian agriculture are listed in Table 1.<sup>2,3</sup> The cumulative effect of these factors is an ongoing reduction in the number of farming enterprises across Australia, as demonstrated in Table 2. Production indices in Australian agriculture are shown in Figure 1.<sup>4</sup>

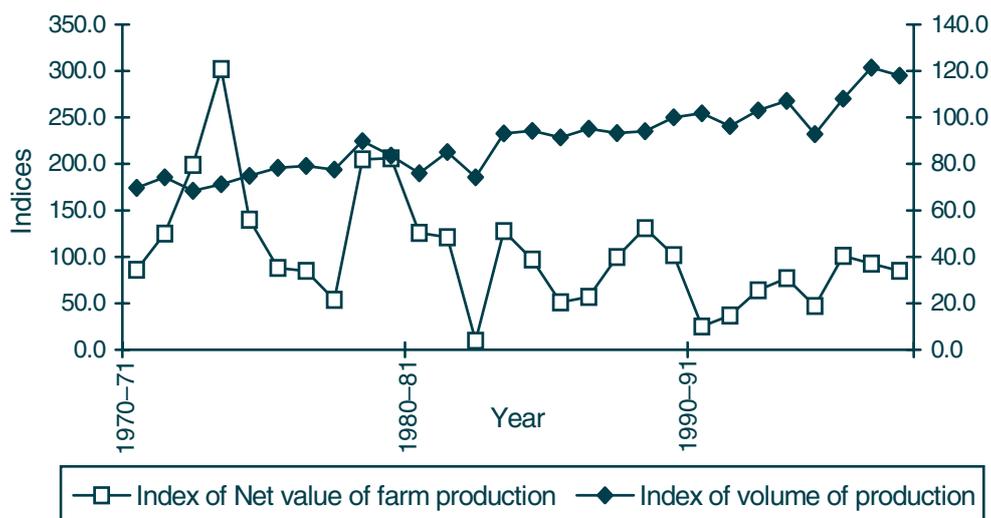
## THE HEALTH OF THE FARMING POPULATION

Not surprisingly, the health status of men and women engaged in agriculture—that is, farmers and agricultural workers—is being affected by these pressures, and by a reduction in farm income. The health of the farming population is the subject of several studies at the Australian Centre for Agricultural Health and Safety.

There is early evidence from death data that Australian farmers experience higher death rates than the Australian male population. A paper presented at the National Rural Public Health Conference in 1997 reported that the age standardised death rate for male farmers aged 15–65 in

**FIGURE 1**

**PRODUCTION INDICES IN AUSTRALIAN AGRICULTURE BY FISCAL YEARS, 1970–1998**



Data Source: Australian Bureau of Agricultural and Resource Economics, 1998.<sup>4</sup>

the period 1990–1993 was 39 per cent greater than the working age male population.<sup>5</sup> Table 3 indicates that excessive higher rates of deaths of male farmers are associated with circulatory disease, neoplasms and injury.

Table 4 indicates that death rates are highest in the Northern Territory, New South Wales, Victoria and South Australia. At this stage, similar data is not immediately available for females, due to lack of valid denominator data, nor for agricultural workers. This is the subject of further investigation.

Rates of death due to injury for male farmers and farm managers are excessively high. The National Occupational Health and Safety Commission has undertaken a study of work related deaths for the period 1989 to 1992,<sup>6</sup> and has made a preliminary report of deaths in the agriculture industry. In the period 1982–1984 there were 19 deaths per 100,000 workers in agriculture, in the period 1989–1992 the rate was 20 deaths per 100,000. These rates for work-related deaths on farms rank among the highest among Australian industries, with deaths from heavy machinery—such as tractors, machinery, aircraft and farm vehicles—being among the leading agents of injury. In addition to these deaths, there are high numbers of bystander deaths and deaths of children on farms: for example, many toddlers die as a result of drowning in farm dams or other bodies of water.<sup>7</sup>

Male farmers die on roads at double the rate of the Australian male population.<sup>8</sup> A study undertaken by the Australian Centre for Agricultural Health and Safety in association with the Australian Transport Safety Bureau has reported key factors associated with road fatalities in the farming community.<sup>9</sup> The study examined road traffic deaths of male farm managers and agricultural workers for the years 1988, 1990, 1992, 1994 and 1996. Female death records inadequately defined female farm managers and farm workers and were excluded from the analysis. Characteristics of the crash circumstances included: a majority of single vehicle crashes, mostly within 50 kilometres of home; low seatbelt usage; and between 31 and 46 per cent were associated with high blood alcohol levels. The role that fatigue may have played could not be examined.

**TABLE 1**

**FACTORS DRIVING CHANGE IN AUSTRALIAN AGRICULTURE**

**Technological advances**

- Farm production technology, for example: mechanisation, chemical and biological control of insects.
- Communications, including telephone, computer, internet.

**Economic factors affecting the farm business**

- The volume of Australian farm production is increasing, but the real value of the Australian farm production has not grown with the growth of production (Figure 1).<sup>4</sup>
- Australian farmers face continual pressure from falling Terms of Trade: that is, increasing input costs and declining product prices.
- While it remains an important contributor to the Australian economy, the overall importance of agriculture to the economy is declining, with the growth of other sectors.
- Changing demands and prices for commodities produced—the 1990s saw major drop in wool prices, marked fluctuation in beef and grain prices.
- Changing demands for quality standards to be met for products.
- Industry policies: for example, dairy deregulation resulting in a sudden drop in milk prices.
- Environmental factors are increasing in importance for sustainability of the farm enterprise.

**Social factors affecting the farm family**

- Young people leaving the farm for higher education.
- Increasing feelings of loss of control over many factors, including government policies relating to taxation, environment, access to inputs (for example: water, pesticides).
- Lack of services, such as banking, retailing.

**Ongoing pressures for restructuring of farm businesses**<sup>2,3</sup>

- Cost-cutting on farm business and personal expenses.
- Diversification of commodities produced.
- Intensification and changes to input level use: for example, fertilisers, more cropping.
- Increasing farm size.
- Changes to marketing methods, transportation, to respond more efficiently to market demands.
- Changes in farm financial arrangements and business organisation.
- Seeking off-farm income for one or both partners.
- Bartering of goods and services with other enterprises.
- In some cases, leaving the farm.

**TABLE 2**

**NUMBERS OF AUSTRALIAN FARMING (AGRICULTURAL ESTABLISHMENTS) UNITS WITH AN ESTIMATED VALUE AGRICULTURAL OUTPUT OF \$5,000**

Year	Qld	NSW	Vic	Tas	SA	WA	NT	ACT	Total
No. farms 1986	33,745	51,728	43,931	5,199	18,739	16,004	267	103	169,716
No. farms 1996	31,371	41,578	36,146	4,464	15,562	13,640	221	95	143,211
Number Decrease	2,374	10,150	7,785	735	3,177	2,364	46	8	26,505
Per cent reduction	7.0	19.6	17.7	14.1	17.0	14.8	17.2	7.8	15.6

Source: Australian Bureau of Statistics.<sup>16</sup>

**TABLE 3****STANDARDISED MORTALITY RATIOS MALE FARMERS–FARM MANAGERS BY FIVE BROAD DISEASE GROUPS 1990–1993 (INDIRECT METHOD)**

Cause of death	Standardised mortality ratio	95% CI L	95% CI U
Circulatory disease	162	151	173
Neoplasms (Cancer)	120	112	128
Respiratory disease	84	65	103
Injuries and poisonings	224	205	243
Other causes	86	74	98
<b>All causes</b>	<b>139</b>	<b>134</b>	<b>144</b>

Source: Fragar et al. 1997 <sup>5</sup>**TABLE 4****STANDARDISED MORTALITY RATIOS MALE FARMERS–FARM MANAGERS, ALL CAUSES BY STATE, 1990–1993 (INDIRECT METHOD)**

State	Standardised mortality ratio	95% CI L	95% CI U
New South Wales	149	139	159
Victoria	149	138	160
Queensland	118	107	129
South Australia	149	132	166
Western Australia	121	105	137
Tasmania	131	100	162
Northern Territory	158	40	276
<b>Australia</b>	<b>139</b>	<b>134</b>	<b>144</b>

Source: Fragar et al. 1997 <sup>5</sup>

Deaths through suicide of male farmers and farm workers is also around double that of the Australian male population, and is the subject of a study by Page and Fragar.<sup>10</sup> There is a widespread view among the agricultural population that many suicides of farmers are directly related to the economic circumstances of their farm business, and this relationship is being examined.

The factors associated with the high cardiovascular disease death rates of Australian male farmers and farm managers are also being explored further.

While death rates of farmers associated with lung cancer are lower than for the Australian population as a whole, death rates for cancers of the skin, prostate and rectum are higher.<sup>8</sup> These findings are consistent with international reports.<sup>11,12</sup>

People engaged in agricultural production are also exposed to specific environmental health risks associated with their work environment including noise, zoonoses, pesticides and organic dusts.<sup>8</sup>

This brief consideration of the health status of the farming population indicates a relatively poor position for a key population group in rural Australia. It is not unreasonable to suggest an association between the stresses of business and the increasing social isolation being reported by farm families, and the poor health outcomes evident in the data. Increasing loss of control over many factors associated with the farm and business seems to be a common thread that warrants further exploration.

Such a position has been espoused by a number of observers over some time. A paper presented at the United States Surgeon Generals' Conference on Agricultural Safety in 1991 described the changing face of American agriculture,<sup>13</sup> the physical and psychological symptoms experienced by individuals in response to the stresses of farm financial difficulty, the effects on rural community and the potential effect of the foreshadowed 'destruction of locally regionally self-sufficient food systems in favour of a globalised system'.<sup>13</sup>

### THE RURAL COMMUNITY AND THE AGRICULTURAL SECTOR

Socioeconomic changes in agriculture have a significant effect on rural communities:<sup>3</sup>

- population decline in inland and remote Australia is mainly a result of long term pressures on the agricultural sector;
- employment in primary industries is in decline in inland and remote Australia;
- there has been a significant change in the demography of inland rural communities, with loss of young people to metropolitan centres for education and employment;
- percentage growth in population is closely associated with percentage growth in employment;
- most growth is in coastal regions of Australia;
- mining is now nearly as important to employment as agriculture in 'remote' Australia.

The mutual dependence of rural townships and farms has been demonstrated in inland centres, with farmers and their families responsible for a substantial proportion of wholesale and retail turnover in north-west NSW, as well as towns providing the source of off-farm income.<sup>14</sup>

McKenzie investigated the effect of declining rural infrastructure on farming enterprises in the central wheat belt of Western Australia.<sup>4</sup> Faced with withdrawal of services from the local community, the question posed was whether these changes affect the efficiency of farm enterprises. The following effects on farm enterprises were reported:

- unreliability of services was unacceptable;
- lack of choice of service providers was unacceptable;
- while health services were generally considered adequate if not further pared, mental health was a

recurring theme. Suicide was viewed as a real threat. Many participants indicated that mental health encompassed unresolved family issues and that sustained stress was having a direct effect on economic viability of the farm for some enterprises;

- access to education was reported as the major infrastructure issue that mobilises families. If adequate educational facilities are not accessible, either the child will be sent away to school, or the family will relocate;
- youth drain from communities is seen to indicate loss of community 'vibrancy and optimism';
- housing shortages pose difficulties in recruiting casual labour;
- farm people recognise the need to support and participate in local community activities, creating further pressure on time away from farm and domestic duties.

Thus a vicious cycle has been established in many inland rural communities, whereby farming enterprises are forced to purchase lower cost inputs from outside the local community, and forced to reduce labour input, causing restructuring and downsizing of smaller inland rural communities, thereby further disadvantaging farming enterprises.

### **SOCIAL AND ECONOMIC POLICY FOR IMPROVED RURAL HEALTH**

National health strategies for disease prevention in Australia have increasingly recognised the importance of attention to rural populations and Aboriginal and Torres Strait Islander health. Further, there is a similar and admirable tendency for inclusion of community 'capacity building' and community development approaches in such strategies. For example, while the National Environmental Health Strategy has a key focus on the physical environment,<sup>15</sup> it requires community participation for its implementation; and it describes strategies for community participation to achieve sustainability, for example:

- a health promotion approach;
- development of infrastructure that enables community participation;
- provision of information and development of appropriate skills.

### **CONCLUSION**

While recognising the importance of active community participation and capacity building in rural health policy, and the imperative for maintaining adequate health services delivery to rural populations, it is suggested that such strategies will fail to deliver reduced differentials in health status between rural and urban Australians unless active attention is given to sustaining the economic and employment base of rural communities. Rural health policy

in Australia needs to be accompanied by a comprehensive policy for improved social and economic wellbeing. This requires an engagement between industry, resource allocation, business development, education and training; and it necessitates a dialogue between those who make public health policy and those who make social and economic policy.

### **REFERENCES**

1. McColl JC, Donald R, Shearer C. *Rural Adjustment. Managing Change. Mid-term review of the Rural Adjustment Scheme*. Canberra: Department of Primary Industries and Energy, 1997.
2. Australian Bureau of Agricultural and Resource Economics. *Changes in non-metropolitan population, jobs and industries: Preliminary Report to the Department of Transport and Regional Services*. Canberra: Australian Bureau of Agricultural and Resource Economics, 1999.
3. McKenzie FH. *Impact of declining rural infrastructure*. Canberra: Rural Industries Research and Development Corporation, 1999.
4. Australian Bureau of Agricultural and Resource Economics. *Australian Commodity Statistics*. Canberra: Australian Bureau of Agricultural and Resource Economics, 1998.
5. Fragar LJ, Franklin R, Gray EJ, Petrauskas V. The health of Australian farming populations—a vignette. *National Rural Public Health Conference Proceedings, Adelaide*. Canberra: National Rural Health Alliance, 1997.
6. National Occupational Health and Safety Commission. *Work-related traumatic fatalities in Australia, 1989 to 1992—Agriculture industry*. Canberra: Commonwealth of Australia, 1998.
7. Franklin R, Mitchell R, Driscoll T, Fragar L. *Farm related fatalities 1989–1992*. Moree: National Farm Injury Data Centre, Australian Centre for Agricultural Health and Safety, 2000.
8. Fragar LJ, Franklin R. The health and safety of Australia's farming community. Moree: National Farm Injury Data Centre, Australian Centre for Agricultural Health and Safety, 2000.
9. Australian Centre for Agricultural Health and Safety. *Road fatalities in the farming community—Information sheet*. Canberra: Australian Transport Safety Bureau, 1999.
10. Page A, Fragar LJ. *Suicide in Australian farming 1988–1997*. In press.
11. Cerhan JR, Cantor KP, Williamson K, Lynch CF, Torner JC, Brumeister LF. Cancer Causes among Iowa farmers: recent results, time trends and lifestyle factors. *Cancer Causes Control* May 1998; 9(3): 311–9.
12. Blair A, Zahm SH. Agricultural exposures and cancer. *Environ Health Perspect* November 1995; 103 (Suppl 8): 205–8.
13. Heffernan JB. 1991. A rural sociologist's perspective. *Surgeon general's Conference on Agricultural Safety and Health April 30-May 3, 1991*. Des Moines, Iowa: National Institute for Occupational Safety and Health, 1991.
14. Trigg H. Regional rural revival—factors affecting the viability and prosperity of rural towns. *Outlook 98: Proceedings of the National Agricultural and Resources Outlook Conference*, Canberra, 3–5 February 1998. *Agriculture* 1998; 2: 155–60.
15. Department of Health and Aged Care. *National Environmental Health Strategy*. Canberra: Commonwealth of Australia, 1999.
16. Australian Bureau of Statistics. *Agriculture Australia*. Canberra: Australian Bureau of Statistics, 1999. ☒

# BUILDING CAPACITY FOR PROMOTION, PREVENTION AND EARLY INTERVENTION IN MENTAL HEALTH

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Building the capacity for promotion, prevention and early intervention in mental health—to contribute to reducing the burden associated with mental health problems—requires a number of approaches. This article discusses three specific areas: establishing the policy context; building the capacity of the community to promote their own mental health; and enhancing the capacity of the workforce for promotion, prevention and early intervention in mental health. Collaboration is a key theme across all of these areas. Other approaches that build the capacity to promote mental health—such as building the capacity for research (including intervention research), allocation of resources and leadership—are referred to.

The burden of mental health problems is large and increasing. It has been predicted that depression will be one of the greatest health problems world-wide by the year 2020.<sup>1</sup> These findings were replicated in a 1999 Australian study.<sup>2</sup> Further, it is becoming clear that the burden associated with mental health problems and disorders will not be significantly reduced by treatment alone. To achieve this an increased emphasis is required on building capacity within the community to promote and sustain their own mental health; as well as on interventions earlier in the course of mental health problems. The effectiveness of initiatives to promote mental health; and the prevention of, and early intervention in, mental health problems, is strongly supported by evidence.<sup>3–9</sup>

## ORGANISATIONAL CAPACITY TO PROMOTE MENTAL HEALTH

A favourable policy context is critical to ensure that promotion, prevention and early intervention initiatives in mental health are supported and sustained. The policy context provides leadership; a framework for activity; facilitates the incorporation of initiatives to promote mental health into the core business of a service; and can influence resource allocation.

In Australia, including NSW, the current policy context for promoting mental health and preventing the development of mental health problems and disorders is well established, and provides a clear mandate and priorities for action. The Second National Mental Health Strategy has identified promotion, prevention and early intervention in mental health as one of three key priorities.<sup>10</sup> Under this auspice the Mental Health Promotion and Prevention National Action Plan provides

a framework for building capacity and implementing initiatives across the Australian population and, within this, specific population groups.<sup>11</sup> These same directions are reflected in strategies in NSW for achieving mental health.<sup>12–18</sup>

## BUILDING CAPACITY IN THE WORKFORCE

Enhancing the capacity of the workforce to implement promotion, prevention and early intervention is also essential. The workforce is spread across: health, including mental health, community health, youth health, hospital services among others; other sectors, including education, community, housing, police and social services; and non-government and community organisations.

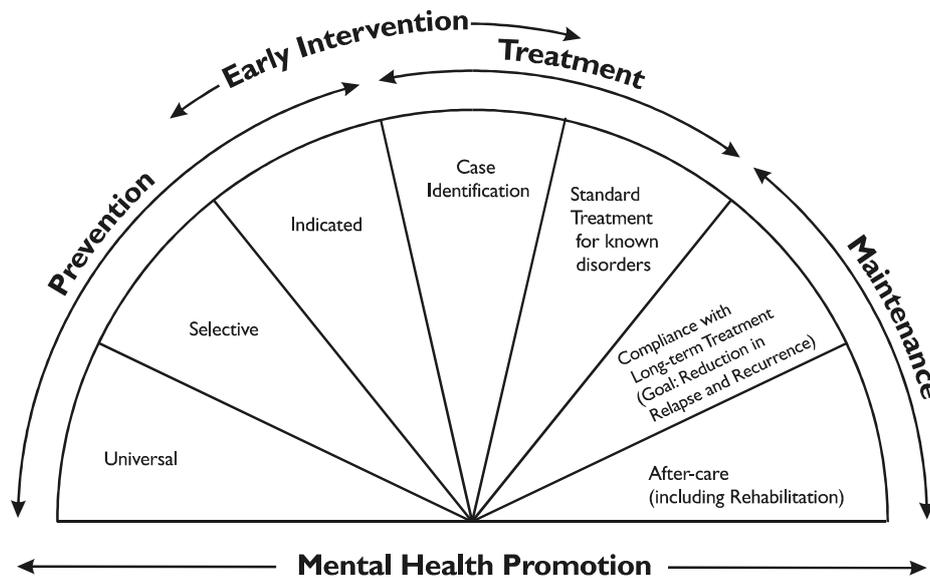
Enhancing the capacity of the workforce includes a wide range of activities from raising awareness through to supporting and sustaining new skills and initiatives that are incorporated as part of routine service delivery. The revised Mrazek and Haggerty framework outlined in the National Action Plan has been important in disseminating the concepts of promotion, prevention and early intervention in the mental health context (Figure 2). Disseminating information on evidence-based programs and their key components (through forums, seminars and resource documents) is an important part of enhancing the capacity of the workforce.<sup>19,20</sup> The learning of new skills needs to be reinforced through supervision and support. Systems and processes need to be established within and across services that ensure that the range of approaches that promote mental health are supported and sustained. Shifting attitudes to support promotion, prevention and early intervention in mental health, and incorporating such initiatives as part of routine service delivery, are challenges to be addressed. Ensuring an optimal mix of promotion, prevention (universal, selective and indicated), early intervention (indicated and case identification) and treatment initiatives, is also important.<sup>21</sup> The following are two examples of initiatives that have set out to achieve the above aims.

### The Mother Infant Network

The Mother Infant Network (MINET) in South Western Sydney is a comprehensive program, developed over nine years, with the aim of improving the mental health of new mothers and their infants in disadvantaged areas. Key components of this initiative include: definition of roles and responsibilities of service providers; description of pathways to care; development of a psycho-social screening tool with linked information system; and provision of training, clinical supervision and support to early childhood nurses learning new screening and counselling skills.<sup>22</sup> Components of the MINET program will be disseminated to other Areas across NSW over the next five years.

**FIGURE 1**

**THE MENTAL HEALTH INTERVENTION SPECTRUM FOR MENTAL DISORDERS**



Modified from Mrazek and Haggerty p.23.<sup>4</sup>

**DEFINITIONS OF TERMS**

**Mental health promotion**

'Action to maximise mental health and well-being among populations and individuals'.<sup>11</sup>

**Prevention**

'Interventions that occur before the initial onset of a disorder'.<sup>4</sup>

**Universal prevention interventions**

Interventions that are targeted to the general population or a whole population group that has not been identified on the basis of individual risk. Examples include prenatal care for all new mothers and their babies and immunisation for all children of specific ages.<sup>4</sup>

**Selective prevention interventions**

Interventions that are targeted to a sub-group of the population or individuals whose risk of developing mental disorders is significantly higher than average. The risk may be imminent or lifetime in nature. Further risk groups can be identified on the basis of biological, psychological or social risk

factors known to be associated with the disorder. Examples include: home visiting and infant day care for low birth weight children, or pre-school based programs for children from disadvantaged neighbourhoods.<sup>4</sup>

**Indicated prevention interventions**

Interventions that are targeted to high risk individuals who are identified as having minimal (but detectable) signs and symptoms foreshadowing mental disorder, or biological markers indicating predisposition for mental disorder, but who do not meet diagnostic levels at that time. Examples include parent-child interaction training programs for children with behavioural problems and their parents.<sup>4</sup>

**Early intervention**

'Interventions targeting people displaying the prodromal signs and symptoms of an illness...[that] also encompasses the early identification of people suffering from a disorder'.<sup>11</sup>

**The Southern Area First Episode**

The Southern Area First Episode (SAFE) program is establishing a comprehensive early intervention program for young people experiencing a first episode of psychosis. Raising awareness—and defining the roles of service providers including child, adolescent and adult mental health workers, general practitioners, and school counsellors—were important first steps. Ongoing knowledge and skill acquisition and the provision of clinical supervision by video conferencing with experts from across NSW are also critical.<sup>23</sup> The SAFE program provides a useful model for other rural Areas considering the introduction of programs to tackle early psychosis.

**BUILDING CAPACITY IN THE COMMUNITY**

Increasing the capacity of the community to promote and sustain their own mental health is of pivotal importance. Promoting connectedness (in families, schools and communities), and promoting resilience in individuals, can provide a buffer to the development of mental health problems and disorders.<sup>24</sup> *Mind Matters* is one example of a school-based program that aims to promote mental health among the school community.<sup>25</sup> Enhancing mental health literacy within the community is also important to ensure increased recognition of mental health problems and disorders; and referral to appropriate treatment at the earliest stages.<sup>26</sup> Another example is *Dumping Depression*,

an initiative of the Central Coast Area Health Service, which aims to raise awareness of depression and available services among young people.<sup>27</sup>

Other factors can also affect a community's capacity to promote mental health. These include: the availability of housing, child care and welfare benefits; equitable access to, and availability of, other services; and levels of community discrimination and violence. Community development that empowers community members to have the capacity to define issues and develop solutions, as well as advocate for their adoption, also contributes to improving a community's capacity to promote its mental health. Addressing these factors will effect the connectedness and resilience of individuals. The NSW Rural and Regional Youth Suicide Prevention Program 1997–2000 is an example of an initiative that has promoted community development in rural communities across NSW.<sup>28</sup>

## CONCLUSION

Building capacity to promote mental health and prevent and intervene early in illness is required to reduce the burden associated with mental health problems and disorders. This article has discussed three specific areas of activity necessary to achieve these aims: establishing the policy context; building capacity within the community to promote their own mental health; building the capacity of the workforce to promote mental health and early intervention and prevention in mental health problems and disorders.

Some other areas of activity that are necessary include: building the capacity for research, particularly intervention research; resource allocation; and leadership. *How to apply capacity building to health promotion action: A framework for the development of strategies* provides a framework for considering a range of issues to build capacity to promote mental health and prevent the development of mental health problems.<sup>29</sup> The document *Mental Health Promotion in NSW: Conceptual Framework for developing initiatives* outlines a process to assist in developing these initiatives.<sup>30</sup>

Collaboration is a key theme that links all of these activities across health sectors, across government and non-government agencies, and across communities.

## REFERENCES

1. Murray CJL and Lopez AD. *The global burden of disease: A comprehensive assessment of mortality and disability, injuries and risk factors in 1990 and projected to 2020*. Cambridge, MA: World Health Organization, 1996.
2. Mathers C, Vos T, Stevenson C. *The burden of disease and injury in Australia*. Canberra: Australian Institute of Health & Welfare, 1999.

3. Raphael B. *Scope for prevention in mental health*. Canberra: National Health and Medical Research Council, 1993.
4. Mrazek PJ and Haggerty RJ. *Reducing risks for mental disorders: Frontiers for preventive intervention research*. Washington: National Academy Press, 1994.
5. Marshall J and Watt P. *Child behaviour problems: A literature review of its size and nature and prevention interventions*. Perth: Interagency Committee on Children's Futures, 1999.
6. Shaffer D, Phillips I, Enzer N (editors). Office of Substance Abuse Prevention. *Prevention monograph 2: Prevention of mental disorders, alcohol and other drug use in children and adolescents*. Rockville: US Department of Health and Human Services, 1989.
7. Raphael B and Burrows G. (editors). *Handbook of studies on preventive psychiatry*. Brisbane: Elsevier, 1995.
8. Durlak JA and Wells AM. Primary prevention programs for children and adolescents. *Am J Community Psychol*, 1997;25:115–152.
9. Cotton P and Jackson H (editors). *Early intervention and prevention in mental health*. Brisbane: The Australian Psychological Society, 1996.
10. Australian Health Ministers. *Second National Mental Health Strategy*. Canberra: Australian Government Printing Service, 1998.
11. Commonwealth Department of Health and Aged Care. *Mental health promotion and prevention national action plan. Under the Second National Mental Health Plan: 1998–2003*. Canberra: Commonwealth Department of Health and Aged Care, 1999.
12. NSW Department of Health. *Caring for Mental Health: A framework for mental health care in NSW*. Sydney: NSW Department of Health, 1998.
13. NSW Department of Health. *NSW Strategy: Making mental health better for children and adolescents*. Sydney: NSW Department of Health, 1999.
14. NSW Department of Health. *NSW Suicide prevention strategy: We can all make a difference*. Sydney: NSW Department of Health, 1999.
15. NSW Department of Health. *Getting in early discussion paper: A framework for progressing early intervention and prevention in mental health for young people in NSW* (Draft discussion paper). Sydney: NSW Department of Health, 1999.
16. NSW Department of Health. *The start of good health: Improving the health of children in NSW*. Sydney: NSW Department of Health, 1999.
17. NSW Department of Health. *Young People's Health: Our future*. Sydney: NSW Department of Health, 1998.
18. NSW Government. *Focus on young people: NSW Youth Policy*. Sydney: NSW Government, 1998.
19. NSW Department of Health. *Prevention initiatives for child and adolescent mental health: NSW Resource Document*. Sydney: NSW Department of Health, 2000.
20. Shochet I, Holland D, Whitefield K. *Resourceful Adolescent Program: Group Leader's Manual*. Brisbane: Griffith University, 1999.
21. Offord DR, Chmura Kraemer H, Kazdin AE, Jensen PS, Harrington R. Lowering the burden of suffering from child psychiatric disorder: Trade-offs among clinical, targeted and universal interventions. *J Am Acad Child Adolesc Psychiatry*. 1998;37:686–694.

22. Wong F, Young L. The Mother Infant Network Project: South Western Sydney Area Health Service; Project Plan. Sydney: South Western Sydney Area Health Service, 1999.
23. Garland G. Early intervention in psychiatry: A rural perspective: The SAFE (Southern Area First Episode) Project. *Rural Mental Health Conference Proceedings*. Albury: Greater Murray Area Mental Health Service, 1998.
24. Resnick M, Bearman P, Blum R, Bauman K, Harris K, et al. Protecting adolescents from harm: Findings from the National Longitudinal Study on Adolescent Health. *JAMA*, 1997;278:823–832.
25. Ferguson S, Boucher S. *Mind Matters* newsletter. Information Update No. 1, October 1999.
26. Jorm A.F, Korten A.E, Jacomb P.A, Christensen H, Rogers B, Pollit P. Mental health literacy: A survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. *Med J Aust*, 1997;166: 182–186.
27. Division of Mental Health, Central Coast Area Health Service. *A mental health promotion project: Dumping Depression*. Gosford: Central Coast Area Health Service, 1998.
28. NSW Department of Health. *We can all make a difference: NSW Suicide Prevention Strategy*. Sydney: NSW Department of Health, 1999.
29. NSW Health Promotion Strategies Unit, NSW Health Department. *How to apply capacity building to health promotion action: A framework for the development of strategies*. Sydney: NSW Health Department, 1997.
30. Scanlon K, Williams M, Raphael B. *Mental health promotion in NSW: Conceptual framework for developing initiatives*. Sydney: NSW Department of Health, 1997. ☒