Actual and attempted suicides in Broken Hill

SUICIDE in isolation

by Henry Lohse

This paper reports on and discusses an investigation into the suicide and attempted suicide records in Broken Hill over the past 15 years, highlighting the differences to national trends, suggesting some local influences and offering recommendations for the future.

While the research does not focus specifically on youth, the data for that age group and the possible social factors contributing to suicide make this research relevant to those interested in the problem of youth suicide.

WHEREAS the overall rates for suicide in Australia have decreased from 1970 to 1980, the rates for particular age groups have increased significantly. For example suicide among youth increased by over 30% during this period while the total rate decreased by some 11% (Hassan 1990). Similarly Hawton and Catalan (1987), referring to attempted suicides, describe increases in rates over the last 30 years and particularly increases among the young (15-19 years) age group.

> *In general terms suicide is the second largest class of death by external causes after motor vehicle collisions* (Hallenstein 1990).

My work as a school psychologist brought me into contact with cases of attempted suicide, self injurious behaviours and a community held perspective that suicide was of significance. This experience and my curiosity encouraged me to research the area.

Broken Hill

Broken Hill, NSW, a regional city of approximately 25,000, is physically isolated from its state capital by some 1000 kms and is 500kms from the nearest capital city, Adelaide. The primary sources of income for the population are mining, grazing, tourism and welfare payments. Welfare payments support a large part of the population with some 6600 people on some form of pension. Broken Hill has an unemployment rate of approximately 14%. The population, which is aging rapidly, has a small but significant Aboriginal population and a well integrated European ethnic population.

Due to a combination of factors, the city has seen its population decline from a high of 31,000 in 1971 to slightly below 25,000 in 1990. There is a perception that the majority of lost employment opportunities have been in the traditionally blue collar or mining support areas. Another significant social change occurred in the late 70s when the last barriers to the employment of married women were removed.

The attempted suicide data for this

study was provided by the hospital authorities in summary form from their admissions register.

The completed suicide cases information was extracted from the coroner's reports held in the Broken Hill Court House. A physical search of the files was undertaken and each case where the Broken Hill Coroner concluded suicide or death at own hand, was notated as part of this research. These included the cases from nearby centres using the Broken Hill Court facilities.

The coroner's reports are the most appropriate starting point as the coroner's function "is to investigate every aspect of death reported to him in order to conclude...all the circumstances surrounding the death" and to draw together all pertinent information "with a view to seeing if there is anything which could be done to avoid the unnecessary repetition of tragedy" (Hallenstein 1990). The Victorian State Coroner further asserts that "perhaps the most important function which the coroner performs is one of providing information to the public and the government of the matters analysed, learned and understood" with a view to forming preventive or remedial policies. The details available from all coronial reports were: date, sex, age, marital status, occupation, and means of suiciding.

Within each coroner's report the police statement in most cases provided additional information. This was usually in the form of information received as to the "state of mind"of the victim, contributory factors or often the officer's own interpretation as to the reasons for the suicide.

The coroner's reports do not provide a wide range of information apart from the above points. Even then the categories such as marital status and occupation were confusing at times, such as separated, divorced or not married; or the distinctions between unemployed, retired, pensioner, not working and home duties. These inconsistencies created difficulty in assessing these categories for trends or significance.

The hospital attempted suicide information is very bare of detail, justifiably on the grounds of confidentiality. The figures are in the form of financial year (July to June) summaries showing: total attempts, sex, means, and age range. This precluded many specific analyses of the patterns in suicide attempts.

Data analysis

Statistical analysis of the data available is limited to considerations of annual rates, totals, averages and, where meaningful, standard deviations.

With completed suicides a separate male/female analysis is meaningless as the number of female cases over the 15-year period was too small. The numbers involved in suicide *attempts* however were greater and an analysis based on sex is provided.

Similarly the numbers of cases determine the analysis opportunities with consideration to age distribution. Even with suicide attempts no age factor analysis is possible due to having access to age ranges, not individual details.

The generally accepted suicide rate for Australia over the last 20 years is 11.7 per 100,000 (ABS 1989). For NSW over the last 20 years the rate has ranged from a 1971 high of 13.5 to a 1984 low of 9.5 per 100,000 (ABS 1979).

For Broken Hill the calculation of rates per 100,000 was made on the basis of a population of 27,000 to give an approximate mean for the time period and to include some regional population.

Results

Over the 15-year period of the study 91 cases of suicide were recorded and examined by the Broken Hill Coroner's Court. Figure 1 illustrates the variation in numbers of suicides per year, ranging from a low of three in 1987 to a high of 11 in 1988, with an average of six suicides per year over the study period.

From July 1979 to June 1990 there were 432 cases of self-injurious behaviour or suicidal attempts treated and recorded by the Broken Hill Base Hospital Admission Centre. The number of attempted suicides per year is shown in Figure 2 where the range is from 29 to 50 attempts per year with an average of 39 per year.

Of the 91 recorded suicides 80 were by males compared with 11 by females.

Of the attempted suicides 248 (or 57.4%) were by females compared with 184 (or 42.6%) by males (Figure 3).

The rates of suicide in Broken Hill calculated to a standard measure of incidence per 100,000 population are illustrated in Figure 4. The range for Broken Hill is from a low of 12 per 100,000 to a high of 45 per 100,000. This compares with the national average of 12 per 100,000. The standardised rate comparisons are not available for attempted suicides.

The most common method of suicide in Broken Hill is shooting, with the next most common method being drug overdose. Table 1 shows the proportions of means of suicides as percentages while the figures in brackets indicate the actual numbers.

Almost two-thirds (65%) of all suicide *attempts* involved some type of drug overdose. The next most likely means of attempting suicide was through

Figure 1: Broken Hill Suicides – Actual rates

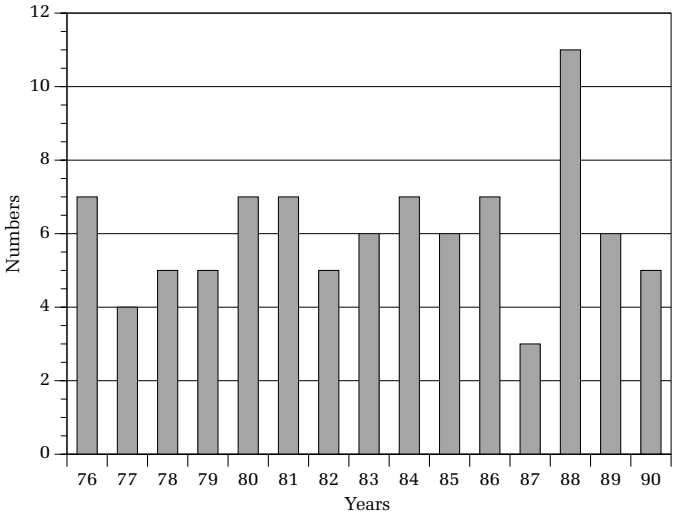


Figure 2: Attempted suicides – 1979-1990

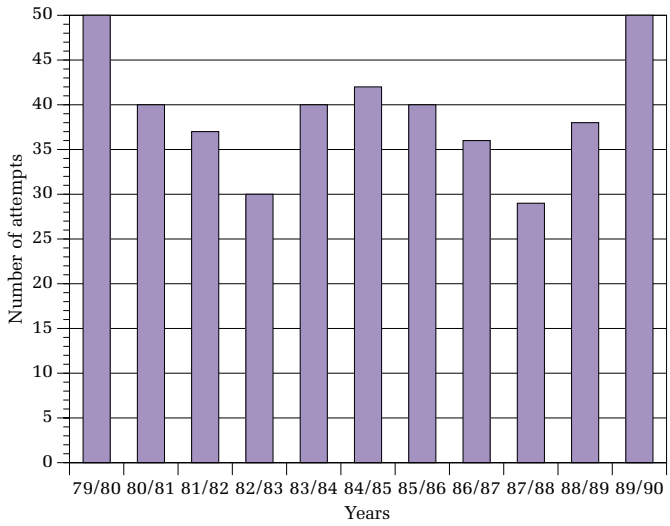
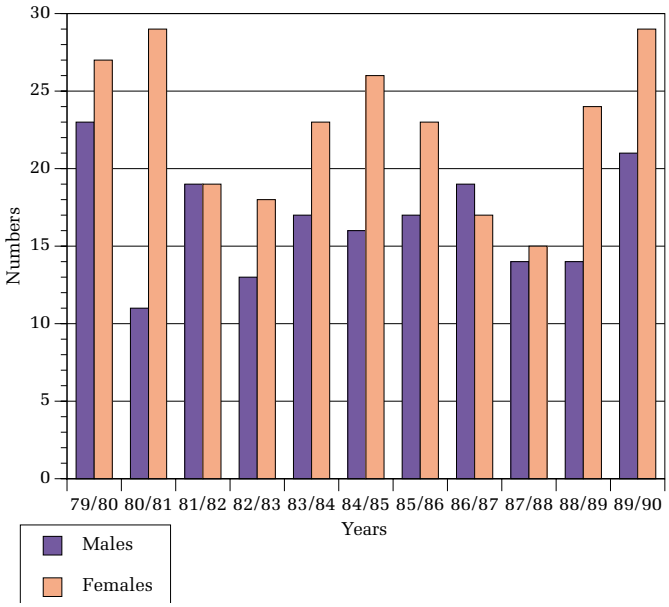


Figure 3: Attempted suicides – sexes



the use of a cutting implement, usually to the wrists (9%). The third most frequent means of attempt was through the use of firearms (3%).

Figure 5 indicates the distribution of age groups in actual suicides. The range of ages is from 12 years to 78 years. (The range of ages for attempted suicides over the same period is from 13 years to 80 years.)

An analysis of the 26 different descriptions of occupation shows the major groups in Table 2.

Table 1: Method – Completed suicides

Firearms	51.6%	(47)
Drugs	18.7	(17)
Car Exhaust	11.0	(10)
Hanging	11.0	(10)
Other (Cutting, Drown, Electrocute, Explode, Immolate, Jump, Poison)	8.0	(7)

Table 2: Main occupation categories

Pensioner	23 cases
Unemployed	15
Labourer	11
Miner	10
Retired	4
Student	3
All others	2 cases or less

Police reports attached to the coroner's findings mostly included some comments or "judgments" alluding to the reporting policeman's assessment of the underlying reason for the suicide. These are summarised into categories in Table 3 and the percentages where this "reason" is attributed is indicated.

Table 3: Contributing factors

Depression	20%
No reason attributed	16%
Prior attempt	16%
Problem relationship	14%
Alcohol	5%
Psychiatric history	3%
Financial problems	3%

Discussion

Rates

The suicide numbers for Broken Hill are significantly higher than could be expected by comparison to state averages (NSW Bureau of CSR 1990). Even during the year of fewest suicides, 1987, Broken Hill's rate is above average. From the figures below in Table 4 it can be seen that at its peak the suicide rate for Broken Hill is almost four times higher than the state average.

Dudley (1990) has described the differences in suicide rates for urban and rural populations, pointing out that rural or country youth populations are 50% more likely to commit suicide than their urban counterparts. At twice the state average for overall suicides, Broken Hill's rate is of particular concern.

Table 4: Annual suicide rates

Year	*Actual*	*Rate per 100,000*		*Times higher*
		NSW	*Broken Hill*	
1976	7	10.7	25.4	2.4
1977	4	10.7	14.5	1.4
1978	5	10.7	18.2	1.7
1979	5	10.6	18.2	1.7
1980	7	10.6	25.7	2.4
1981	7	10.6	25.9	2.4
1982	5	11.0	18.9	1.7
1983	6	9.8	23.1	2.4
1984	7	9.5	27.3	2.9
1985	6	11.7	23.8	2.0
1986	7	11.5	28.0	2.4
1987	3	11.6	12.2	1.1
1988	11	11.7	44.9	3.8
1989	6	11.7	25.5	2.1
1990	5	11.7	19.0	1 6

(NSW rates from NSW Bureau of CSR, Broken Hill rates projected from population rates as described in Broken Hill City Council 1990 Annual Report.)

Sex ratios

Clearly the Broken Hill figures suggest some significant differences to the state and national trends. With suicide attempts it is generally accepted that

females outnumber males by some 2:1 (Hawton 1987) yet the local figures indicate an almost equal distribution, 57% vs 43%. Elsewhere the ratio of adolescent females to adolescent males is considerably higher. We can only conjecture what the age distribution in Broken Hill would be without more detailed information from hospital records.

With completed suicides the usual proportions are five males to each female suicide but in Broken Hill the male rate is substantially higher, the proportion being 8:1. The reason for this imbalance I believe is closely aligned to the above average use of firearms in local suicides.

Age distribution

Figure 5 shows the age distribution of completed suicides in five-year age groups. The largest group is predictable from other research among the high risk under 24 age group. Interestingly the difference in age distribution is lessened when the figures are rearranged into 10-year age groups as in Figure 6. These figures seem to indicate a quite homogeneous attitude to suicide.

Variations in the rates for different age groups are more significant when the actual numbers are considered. For example Silburn et al (1990) point out that although the rates of suicide have increased for both the young and the very old, the sheer preponderance of young suicides makes that figure the more significant.

Method of suicide

In contrast to the proportions in the favoured means of suiciding in the Broken Hill sample, Silburn et al (1990) report a clear majority of cases preferring the use of carbon monoxide poisoning.

Cantor (1990) on the other hand reports national figures indicating a preference for the ingestion of solid (drug) and liquid substances at 33% coming ahead of firearms and explosives at 27%.

The Bureau of Crime Statistics and Research (1989) reports that among men the most common methods were hanging (24%), shooting (21%) and carbon monoxide poisoning (18%).

The choice of firearms by over half of suiciders in Broken Hill raises the question as to why this means to an end is so popular here compared with other parts of the country. This rate of firearm usage is at least twice that reported in any other study. Surely the high rate of gun ownership in this community must be a factor. A more cynical perspective may be that few other means are available or known. Attempts at suicide using the most favoured medium of drug overdose are liable to interruption by sophisticated medical treatment, whereas the fastest medical response is slow compared with the effectiveness of a gun.

It is worth noting that among others, Haines et al (1990) cite several studies where the suicide rates are established as being significantly lower where severely restrictive gun laws apply.

Community values

Perhaps an overview of an outsider's perceptions of community values may add to an understanding of the too high rate of suicide in Broken Hill.

The rural or outback mystique of self-reliance, strength and masculine activity (from shooting to domestic abuse), combined with an unfortunate attitude to such support services as do exist, make a resort to suicide almost inevitable for too many. Dudley (1990) has described the influences of isolation, loss of traditional support, rural recession, and the crippling value system, on the rural population. Add to these the pressures of small town fears of disclosure, gossip and alcohol abuse and it is little wonder that many seek a solution through suicide. Significantly, Silburn (1990) reports that 50% of males in his study were drunk at the time of suiciding.

Another factor alluded to by several writers (Hassan, Silburn, and Hart) is in

Figure 4: Suicide rates per 100,000 pop.

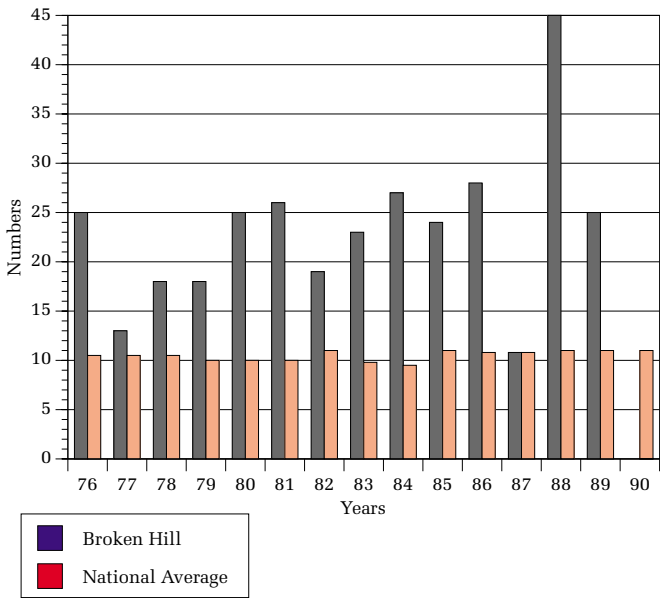
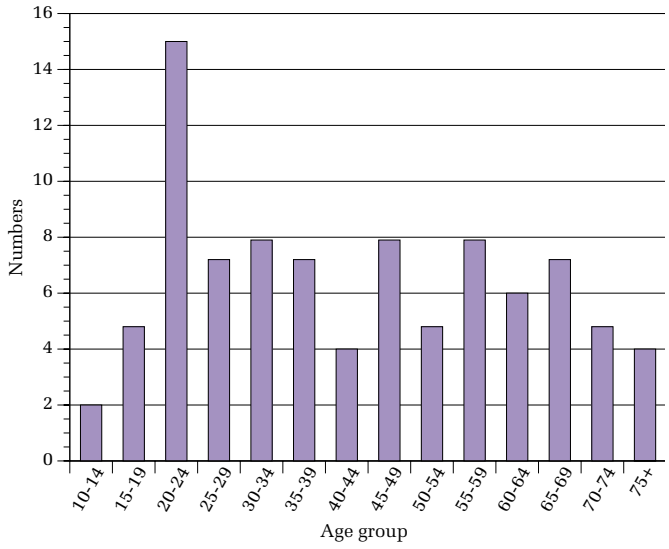


Figure 5: Age distribution



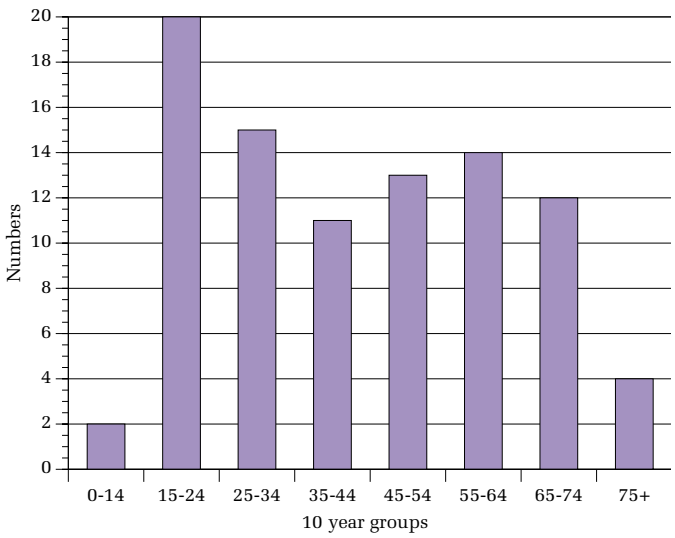
the area of risk taking behaviour. The high rate of youth unemployment, poor recreational opportunities and alcohol abuse readily lead to a sense of getting high on risk. Traffic accidents are seldom included in suicide statistics but this is a most popular medium for risk takers. Further Hassan (1990) describes on the one hand a glorification of violence through entertainment and on the other an increase in actual violent crimes reported through police records.

Attempts, actual suicides and occupations

The link between attempters and actual suicides is clearly important. Attempters must be considered as being more in need of support and/or education as figures from Hawton (1987, p.21) suggest – the suicide rates of attempters range from .8% to 3.3% compared with general population rates of .012%.

In the case of completed suicides it is interesting to note the large proportion of victims who have no occupation. Table 2 shows that 46% were either pensioners, retired or unemployed. It is not difficult to conjecture that community contact and/or support for these people was less than for the employed.

Figure 6: 10 Year age distribution



Conclusions

The community of Broken Hill has a problem with suicides. A suicide rate which is on average twice that of the nation – with highs of almost four times the national rate – indicates that some community initiatives must be taken.

The suicide issue is compounded by the accessibility of local support services. Many professional and appropriate services ranging from alcohol abuse support to mental health teams to Family and Community Services are available, but not many people are ready to admit to having a problem with alcohol, violence or relationships until after some crisis is reached – unfortunately too late for some of those with suicide in mind.

Adding to the problem of accessibility is the social stigma of being seen as weak enough, sick enough or "mad" enough to allow the community to help – even if the individual is aware of to whom or where to turn.

It seems appropriate to report the findings of Hawton (1987) who surveyed suicide attempters for the reason behind their actions. The greatest percentage of responses implied that *they did not know what else to do.*This is very much in keeping with the arguments put forward by Hassan (1990) and Taylor (1990) that poor problem solving skills are strong contributory factors in suicides. It's my opinion that another factor inherent in local suicide trends is one of socio-politics. Many suicide victims have few personal resources with which to deal with stressors, and they see few reasons in their lives to bother.

In conclusion it is clear that we still do not know enough. Psychological "autopsies" (Hallenstein 1990; Silburn 1990) – an attempt to establish scientifically the state of mind of victims and/or other contributory factors to suicides – may need to become a mandatory part of coronial or even hospital procedure. This may give us vital information on patterns and trends or guide us in best use of the appropriate services.

Recommendations

The way in which the facts of a suicide are reported leaves much to be desired. For example the police report gives little scope for later preventive programs to be established or even to give an indication of whether or not any support services have been set up for the survivors. The records are thin on the lines of any sociological or psychological viewpoint and perhaps the coroner's office is the best starting point for some social influence, possibly through the use of a psychological autopsy.

There is a need for a more systematic follow-up to suicides and attempters and to the people affected by the action.

The perceived gap between the service providers and the users needs narrowing through means such as: education (both school and community), physical location and visibility of premises. There is a need for greater community efforts to normalise the use of support services, perhaps by role modelling.

The issue of problem solving or coping skills must be addressed through education at as early a stage as possible (Mason 1990, p.71). This recommendation recognises that the peak suicide age is post schooling age, but it is felt that the only stage at which a broad-ranging program of problem solving strategies could be applied is during compulsory schooling.

The over-representation of the socially isolated suggests a need to investigate the influence of isolation on suicidal behaviour.

Finally, gun laws must be changed to make a most lethal source of destruction less readily available to the impulsive or drunken.

References

Cantor, C. 1990, Issues of Suicide Prevention – You Cannot Counsel the Dead, paper presented at 1990 conference: Preventing

Youth Suicide, Australian Institute of Criminology, Adelaide.
Dudley, M., Waters, B., Kelk, N. & Howard, J. 1990, Youth Suicide in NSW: Urban-Rural Trends 1964-1988, paper presented at 1990 conference: Preventing Youth Suicide, Australian Institute of Criminology, Adelaide.
Haines, J., Hart, E., Williams, C., Davidson, J., & Slaghuis, W. 1990, Trends in Youth Suicide in Tasmania: A Comparison Between Youth and Other Suicide, paper presented at 1990 conference: Preventing Youth Suicide, Australian Institute of Criminology, Adelaide.
Hallenstein, H. 1990, Suicide – The Coroner as Catalyst, paper presented at 1990 conference: Preventing Youth Suicide, Australian Institute of Criminology, Adelaide.
Hassan, R. 1990, Unlived Lives: Trends in Youth Suicide, paper presented at 1990 conference: Preventing Youth Suicide, Australian Institute of Criminology, Adelaide.
Hawton, R. & Catalan, J. 1987, *Attempted Suicide: A Practical Guide to its Nature and Management,* Oxford Medical Publication, Oxford.
Mason, G. 1990, *Youth Suicide in Australia: Prevention Strategies*, Department of Employment, Education and Training (Youth Bureau), Canberra.
NSW Bureau of Crime Statistics and Research1990, "Suicide", *Crime and Justice Bulletin*, 8 July, Sydney
Silburn, S., Zubrick, S. and Hayward, L. 1990, Completed Suicide in Western Australian Youth: A Study of 96 Cases Aged 15-24 Years, paper presented at 1990 conference: Preventing Youth Suicide, Australian Institute of Criminology, Adelaide.
Taylor, B. 1988, *Swept Under the Carpet*, Report of the Youth Mental Health Project, New Zealand.

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Youth Monitor extra

Concern about suicide among rural youth

♦ Western Australian statistics for 1990 show that 199 people of all ages committed suicide during that year. Of these 46 were from the country – a rate per head of population double that of metropolitan areas. In an effort to assist isolated young people, the WA Federation of Rural Youth has produced a Youth Care Card to be distributed to country teenagers this year providing them with anonymous access to advice via the telephone.

Federation deputy president Felicity Brown said: "Stress in the family is affecting everybody. But in rural areas there's the added problem of isolation. These kids simply don't know where to go for help. In their own towns they're not guaranteed confidentiality. They might be more confident ringing someone in Perth rather than someone with whom their parents are likely to socialise" (*West Australian,* 21/11/91, p.22).

♦ The Rural Doctors' Association of Queensland secretary, Dr Digby Hoyal, said the rural recession, the drought and the high unemployment rate were major contributing factors to a high rate of teenage suicide in rural areas: "They just don't see any future and they are finding it harder and harder to compete with city kids. These kids are watching the banks come in and take everything their family has. This, in turn, can cause the break-up of families due to their situation and this directly affects the teenager as well." He said that while the association does not underestimate the difficulty in getting sufficient mental health workers to country towns, they would like to see more regional mental health teams. He said the long waiting list for appointments was a hindrance to the adequate mental care of teenagers who "live in an immediate world" (*Courier Mail*, 19/12/91, p.19).

♦ A study of adolescent suicide by Prof Brent Waters and Dr Michael Dudley (Child and Adolescent Psychiatry unit, Prince of Wales Hospital, Sydney) suggests that one reason for the high rate of suicide among young males was their reluctance to seek help. The study focuses on suicide in rural NSW where the suicide rate has multiplied more than five-fold in the past 25 years and where the greatest increase has been in the past five years. According to the report, girls aged 15 to 19 attempt suicide three times as often as boys but they use less violent and reliable means, and relatively few succeed. On the other hand, males aged 15 to 19 suicide at the rate of 21 per 100,000 – a rate four times higher than for girls. The authors say that young men are more agressive and less inclined to seek help – or to believe that talking might help. They say that young men in the country have easier access to firearms, the most common method of male suicide; on top of this is the population drift to the cities, the unravelling of close-knit communities and the lack of social and psychiatric services in the country. Dr Dudley said there is also the belief that males should be self-sufficient, which means that many see economic hardship as their own moral failure. He also said early detection of suicidal behaviour could prevent many suicides and that GPs "have a role to play after a suicide attempt in preventing suicide clusters" (*Age*, 27/11/91, Tempo p.4).