

INCREASING
AWARENESS
OF MENTAL
ILLNESS AMONG
SECONDARY
SCHOOL
STUDENTS

An evaluation of the
Mental Illness Education
– Australia (NSW) Program

INTRODUCTION

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Mental illness is an important health concern in Australia. Up to 20% of the population will experience mental illness or a mental health problem of varying severity over any twelve months. The impetus for new approaches to mental health promotion resulted, in part, from the *National Mental Health Strategy* (comprised of the *National Mental Health Policy, 1992* and the *National Mental Health Plan, 1992*) and from health promoting schools initiatives to set mental health promotion in a broader context. Over the past decade there has been a shift from institutional to community based care for people with mental illness. Negative public attitudes are recognised as a barrier to seeking help early and to the success of integration programs (Rossler and Salise, 1995).

Overseas research examining community perceptions of mental illness is limited. Most of this research does not appear to have been linked with population interventions. There is a need to design and conduct community-wide programs to influence perceptions and attitudes towards mental illness. Such programs are more likely to be effective if they are comprehensive and use a combination of strategies over time.

The Burdekin Report (Report of the National Inquiry into Human Rights of People with Mental Illness – Human Rights and Equal Opportunity Commission, 1993, p945, cited in Wearing and Edwards, 1994) recommended that ‘there should be a nationwide campaign to educate the general community and specific groups such as young people at school about mental illness’. This resulted in national efforts at increasing community awareness of mental illness in Australia during 1996 (National Community Awareness program). More recently, it has been recognised that efforts are required to develop positive attitudes towards mental illness among young people, and that the school setting may be suitable for such intervention. In general, these interventions have not been a regular part of the school curriculum and have been trialled in a few centres (Battaglia et al., 1990, Lake and Burgess, 1989, Goodwin et al., 1988).

This report describes the evaluation of a single session educational intervention conducted in schools by Mental Illness Education – Australia (NSW). The presentation targeted upper secondary school adolescents in NSW (in years 10 and 11) with the objective of improving their attitudes towards and understanding of mental illness. The program is within the efforts of the *National Mental Health Strategy* and is consistent with the broader approaches suggested in the World Health Organisation Health Promoting Schools movement.

The program was developed by Mental Illness Education – Australia (MIE-A), a non-Government organisation dedicated to fostering better attitudes towards and awareness and understanding of mental illness in the community. The one hour session was presented to groups of school students by volunteers who have had a personal experience of mental illness. The volunteers were trained by MIE-A (NSW).

The objectives of the MIE-A program are to:

- improve school students’ attitudes towards people with mental illness
- dispel myths and normalise perceptions of people with mental illness
- improve students’ understanding of the impact mental illness has on those living with mental illness
- increase students’ knowledge about mental illness and its management in the community.

One of the key goals of MIE-A is to monitor its own efficiency as a program. This report provides an independent evaluation of the MIE-A (NSW) program, with the research team working in conjunction with MIE-A (NSW) to develop measures, to access schools and to timetable the processes of collecting data from schools before and after the program.

RESEARCH DESIGN

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MIE-A (NSW) provided the program to 17 schools in 1996 and to 16 schools in 1997. The evaluation took place in 13 of these 33 schools. The evaluation comprised assessment before and after the intervention in 13 schools across NSW (two were rural). The program was evaluated using a self completed questionnaire, completed by the students one week before, and two weeks after the MIE-A educational session. The questionnaire was developed through a range of piloting processes, item definition, and psychometric assessment of validity and reliability. The questionnaire was refined during the intervention and reached acceptable levels of measurement reliability in its final form. It was used to assess the nine schools receiving the MIE-A program during the latter part of 1996 and early 1997. Data collected using this instrument are reported here.

Schools were surveyed where:

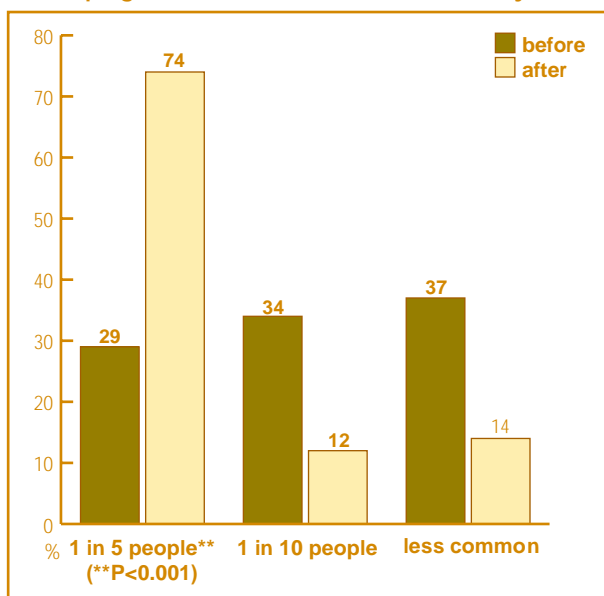
- circumstances allowed enough time for the research team
- school principals or senior teachers approved the process.

Participation in the research was voluntary for all students and was anonymous, with the students giving informed consent. De-identified data were treated as independent samples (before and after the program) in analysis.

RESULTS OF THE EVALUATION

The data presented here are based on information from 664 school students before the program, and 567 after the program. School students were mostly from Grades 10 and 11 (97% of all students), with 60% female, 77% from English speaking backgrounds, and 30% from rural schools.

Figure 1. Perceptions of lifetime risk of developing a mental illness in the community



Students were asked to identify the proportion of the population who might experience a mental illness at some time in their lives (Figure 1). The perception that one in five people might experience mental illness increased significantly following the program (P<0.001).

Students were asked what they understood by the term 'being out of touch with reality'. The proportion who responded 'psychotic' increased from 27.9% before the program to 43.5% after the program (P<0.01).

Students were also asked which health problems might be a mental illness, shown in Figure 2. Significant and appropriate increases were noted for depression**, psychotic illness*, schizophrenia** and anorexia**, and inappropriate increases for epilepsy** (**P<.001; *P<.01). There were no changes for attention deficit disorder (ADD) or asthma.

Figure 2. Perceptions of which health problems might be a mental illness

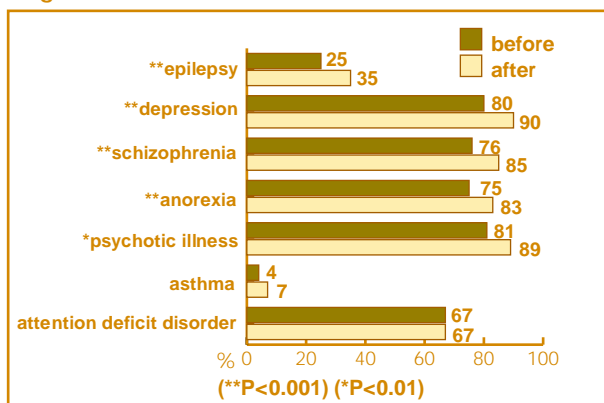


Figure 3. Improvements in perceptions about people with mental illness

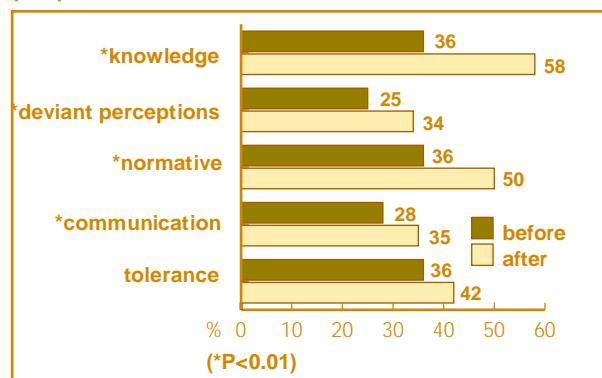


Table 1. Knowledge items about mental illness: responses (%) correct

Item: rated as agree [A] or disagree [D]	% correct pre	% correct post
Some mental illnesses are hereditary [A]	71.5	71.8
By coming into contact with a mentally ill person you can become mentally ill [D]	92.0	88.8
People who have had a serious mental illness can recover and lead a normal life [A]	63.6	77.1 *
Mental illness can be caused by chemical imbalances in the body [A]	31.5	78.1 *
Some mental illness can be controlled by medication (eg. drugs and pills) [A]	86.6	85.5
Mental illness is not selective, it can affect anyone [A]	83.6	86.4

*P<0.01

Knowledge of the components of the program was assessed by responses to a series of knowledge questions. The correct answers, based on the MIE-A (NSW) curriculum, are shown in Table 1. Before the MIE-A (NSW) presentation, more than 70% of students responded correctly to four of the six questions. The proportion of correct responses improved for two items taught in the course. These were ‘people who have had a serious mental illness **can** recover’ and ‘mental illness can be caused by chemical imbalances in the body’.

Several summary scores were constructed to reflect the overall impact of the program:

- a knowledge score derived from items in Table 1 above
- a ‘deviant’ perceptions score (whether people with mental illness were perceived as abnormal, untrustworthy, violent)
- a normative score (whether people with mental illness were seen as just like anybody else, capable of normal social roles)
- a communication score (whether people with mental illness had problems talking about their illness, shouldn’t talk about it)
- a tolerance score (which reflected whether the students would live next door to a person with mental illness, have a person with a mental illness as a close friend, marry someone with mental illness).

Each score was recoded so that a high score reflected the desirable outcome, that is, high knowledge, low perceived deviance of people with mental illness, high perceived normative roles, high beliefs that people with mental illness should communicate with others about their illness, and high tolerance towards people with mental illness.

The proportions of students reporting high scores (desirable outcome) before and after the program is shown in Figure 3. Significant improvements in the proportion who increased their scores in a positive direction were noted for knowledge, deviant perceptions, communication and normative scores (P<0.01). The tolerance score did not change significantly.

The outcomes were stratified by gender, language spoken at home, and socio-economic status (SES) to assess if there were any different impacts of the program on these subgroups. These results are shown in Figures 4-8 on the following page, with results for each score shown separately. Low SES was defined as rural students or low SES based on Census characteristics, while LOTE (language other than English spoken at home) was compared with outcomes for ESB (English spoken at home).

Knowledge scores increased significantly across all sub-groups (P<0.01). This suggested that material delivered in the MIE-A (NSW) sessions produced a significant improvement in information understood about mental illness for both genders, for high SES as well as rural and low SES students and for ESB and LOTE students.

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LOTE = Language other than English spoken at home
SES = Socio-economic status ESB = English spoken at home

Figure 4. Improvements in knowledge score about mental illness by SES, LOTE and gender

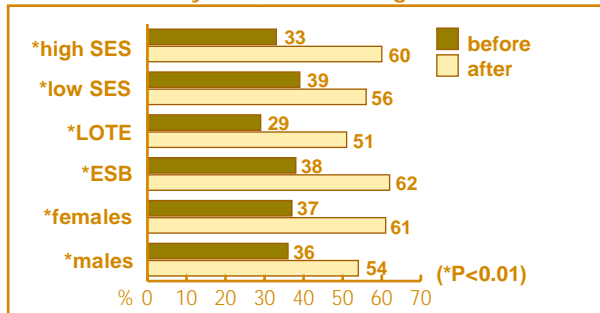


Figure 5. Improvements in deviant perception scores (ie less deviant perceptions of people with mental illness) by SES, LOTE and gender

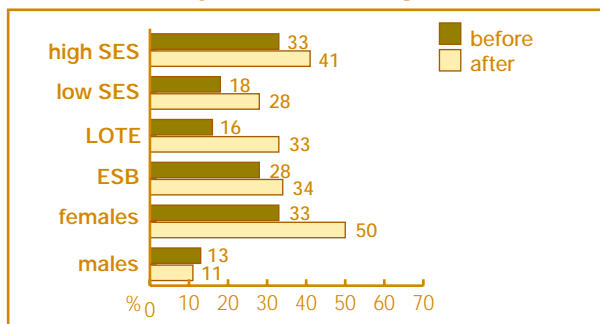


Figure 6. Improvements in normative scores about people with mental illness by SES, LOTE and gender

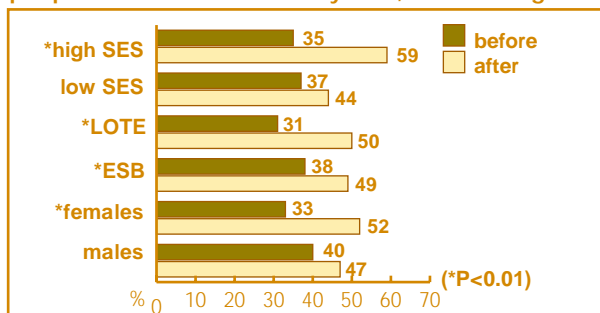


Figure 7. Improvements in communication scores for people with mental illness by SES, LOTE and gender

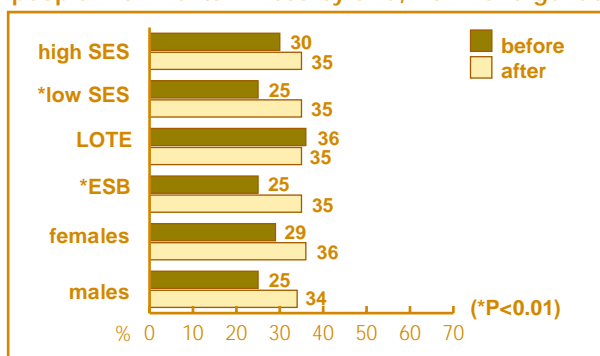
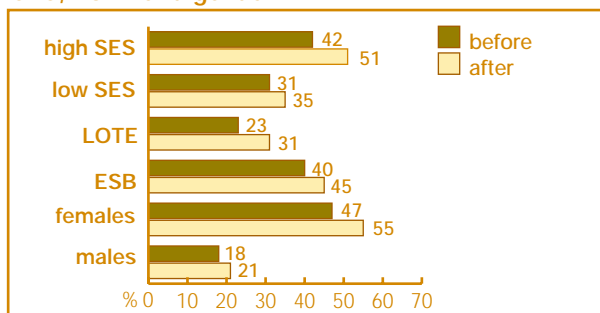


Figure 8. Improvements in tolerance score by SES, LOTE and gender



Deviant perception scores are shown in Figure 5. These improved significantly for girls in a favourable direction. The girls' scores were much higher than for boys at the baseline measurement. One-third of the girls had a favourable attitude towards people with mental illness on the deviant perception dimension. This improved to half of the girls following the program. For boys, the score was very low and did not change significantly after the program. Thus, the program had a substantial effect on girls' attitudes, but no effect on boys. Greater effects were noted for LOTE than for ESB students; the changes for low/rural and higher SES groups were similar.

Figure 6 shows normative attitude scores in the subgroups. Normative attitudes towards people with mental illness showed a nonsignificant increase among boys, and a significant and much larger increase among girls (P<0.01). Increases were significant for both language categories (ESB and LOTE), and for the high SES group (P<0.01), but not significant for the low SES/rural group.

Figure 7 shows improvements in scores related to communication by people with mental illness. All groups showed slight increases in this score. These were significant, at the P<0.01 level, for ESB and for low SES subgroups.

Figure 8 shows improvements in the tolerance score, which reflects tolerant attitudes towards people with mental illness. No significant differences (no improvements) in subgroup scores were noted, but the within group differences were marked. Girls recorded much higher tolerance scores at baseline (47% reported a high tolerance score) and follow up (55%); rates for boys were much lower, ranging from 18% pre program to 21% after it. Both these changes were not significant. Higher rates of tolerance were reported by ESB compared to LOTE students, and by high SES compared to rural/low SES students, but no group improved their score significantly.

Separate analyses were conducted for rural students, not including the low SES urban schools. Rural students showed improvements in knowledge scores, but in no other dimension measured.

Process evaluations were carried out, asking students if they liked the program session. Girls were much more favourable in responses than boys, liking the topic more (50%, compared to 37% of boys), and the opportunity to ask questions (75% of girls and 56% of boys). Girls also rated the topic and language used as more easily understood compared to boys, and rated the video as enjoyable and useful more often than boys. 48% of boys found the video useful, compared to 65% of girls. These process data were corroborated by content analyses of the open ended responses, with a substantial number of boys making equivocal or negative comments about the program. Girls rarely reported such comments.

SUMMARY

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Analysis of the data from the nine schools surveyed showed that there were consistent positive effects on knowledge of mental illness for students who experienced the MIE-A (NSW) program. There were also generally positive effects for the attitudinal summary measures.

In the baseline pre-program measures, girls had more positive attitudes and greater awareness of mental illness than did boys. On a number of attitudinal measures towards people with mental illness, the pre-program measures were already appropriate before the program, and did not change as a result of it. Girls were also more interested in the topic and the modes of presentation than boys.

Improved outcomes in relations to attitudinal measures for boys were not evident following the MIE-A (NSW) presentation. Other subgroups identified in the evaluation that appeared less likely to benefit from the MIE-A (NSW) presentation included students from socially disadvantaged areas and non-English speaking backgrounds. Rural students showed less program impact than urban students, however they were only from one rural region.

Overall, the program appears to produce some benefits for those who attend. The MIE-A (NSW) presentation appeared to have a positive effect on knowledge of mental illness and a partially positive effect on perceptions of mental illness. However, the MIE-A (NSW) curriculum needs to be refined to address issues that adolescents are not already aware of and to better meet the needs of at-risk subgroups, and those least likely to change following the intervention, especially boys.

One-off interventions are less effective than using a combination of health promotion strategies over time to achieve change. The MIE-A (NSW) program would benefit from being set within a wider planned and comprehensive approach to mental health promotion, including integration into the Personal Development programs and mental health promotion and prevention initiatives in secondary schools. A wider approach, targeting many thousands of pupils each year, might produce a better impact upon the whole NSW secondary school student population, with effects lasting over a longer period of time.

RECOMMENDATIONS

- 1 The MIE-A (NSW) program should be further developed to meet the needs of boys, socially disadvantaged groups and rural youth, through formative processes and pilot testing of more acceptable program materials.
- 2 The effective components of the program materials developed in the MIE-A (NSW) program should be incorporated into the re-developed program.
- 3 The program should be provided within a whole of school population health approach, in partnership with the NSW School-Link initiative and in accordance with Health Promotion with Schools: a Policy for the Health System (NSW Health, 2000).
- 4 To increase the population reach and cost-effectiveness of the program, a plan should be developed for reaching a substantially greater number of upper secondary school age adolescents in NSW and for increasing the reach in rural NSW.
- 5 Where resources are scarce, there should be a focus on providing the program to those who are most likely to need it, for example, boys, young people from less advantaged schools and schools which have a particular need for improved understanding and tolerance of mental health problems.
- 6 The material presented in the program should be reviewed to reflect current knowledge about mental illness and messages about early intervention, encouraging help seeking and the effectiveness of prevention should be included.
- 7 The evaluation measures to monitor the new program should be refined.
- 8 There should be continued evaluation of re-developed materials to assess ongoing performance, to continue to monitor program effectiveness in achieving its goals and objectives.

ACHIEVEMENTS SINCE THE EVALUATION

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Since the evaluation of the program, Mental Illness Education – Australia (NSW) has worked successfully to implement the recommendations arising from the evaluation and to place its program more strategically within a broader mental health promotion approach.

Mental Illness Education – Australia (NSW) has developed strong partnerships with NSW Health and with Area Health Services. In particular, through the NSW School-Link initiative, MIE-A (NSW) has become part of a wider promotion and prevention approach to mental health in schools.

The implementation of the national MindMatters initiative (Commonwealth Department of Health and Aged Care, 2000) in NSW has provided a further opportunity being taken up by MIE-A (NSW) to be integrated into a whole of school comprehensive approach to mental health promotion for secondary students. For example, the MindMatters curriculum unit aimed at understanding mental illness and decreasing stigma can include a MIE-A (NSW) presentation.

The MIE-A (NSW) curriculum has been redeveloped as 'INSIGHT – A Mental Health Awareness Program'. The new program includes: an overview of mental health; understanding of mental health problems and disorders; awareness of stigma and attitudes about mental health problems and disorders; and encouragement of help seeking. The approach has been designed to be more flexible and interactive, with greater appeal to young people, especially boys. During its development, INSIGHT was piloted in a boys' school and in schools in a rural area and has been found by MIE-A (NSW) to be acceptable and appealing to those groups. Methods for ongoing evaluation have been developed in consultation with Northern Sydney Area Health Service.

MIE-A (NSW) is also intending to develop a variety of further resources to use with different groups and is currently collaborating with a group of School-Link Coordinators to develop additional mental health literacy resources.

To broaden the reach and in response to requests from community groups, MIE-A (NSW) has developed and implemented a community program which is similar to the schools program.

MIE-A (NSW) has mounted a recruitment campaign which has resulted in the selection and training of a number of new presenters. Unfortunately, attracting younger presenters and people from rural areas is still problematic. This difficulty is reflected in a Volunteer Impact Study carried out for MIE-A (NSW) by a fourth year student from the University of Sydney Faculty of Health Sciences. MIE-A (NSW) is continuing to seek more effective methods for recruiting rural-based and younger presenters.

To address the difficulties of increasing rural and remote presentations, a plan is being developed to utilise videoconferencing facilities for presentations to rural and remote schools in NSW.

In NSW and nationally, during the same period, there have been a number of initiatives to further develop effective promotion and prevention in mental health. The actions taken by MIE-A (NSW) to address the recommendations arising from the evaluation are in line with these initiatives.

In the first National Mental Health Plan, promotion and prevention components focused on increasing public awareness of the extent of mental disorders and reducing stigma. The Second National Mental Health Plan (1998) extended this to include reducing stigmatising attitudes within the helping services and increasing mental health literacy in key settings, such as schools, and among strategic groups.

The National Action Plan for Promotion, Prevention and Early Intervention for Mental Health (2000), includes the identification of effective approaches to improving mental health literacy as a National Action item. This includes reviewing population health programs for effective approaches and partnerships that can shift attitudes, increase mental health knowledge and reduce the stigma of mental health problems and mental disorders in the community.

The NSW policy, *Health Promotion with Schools: a policy for the health system* was released in late 2000. The policy endorses a comprehensive, planned and integrated whole school approach to health promotion and encourages the establishment of partnerships between health, education and other key organisations.

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