Doctor on campus: A general practice initiative for detection and early intervention of mental health problems in a rural Australian secondary school

ABSTRACT

KEY WORDS

Early intervention, adolescent mental health, rural health, education, sociology The aim of this paper is to review issues related to early intervention in mental health among adolescent students, and to specifically evaluate a school-based, early intervention program, which sought to address issues of mental health among students in a rural community in southern Australia. The early intervention program began in 2004 as school counsellors and local health professionals sought to address the difficulties rural secondary school students encountered in accessing support services. The paper seeks to explore the effectiveness of this school-based, early intervention for students, in decreasing the level of crises among students or the seriousness of associated outcomes to mental health issues, including dis-engagement from formal education.

Received 1 April 2008

Accepted 21 April 2008

Anke Doley

General Practitioner Australia

Colin Sibly

Education Department Australia

Chris Wigg

Clinical Psychologist Australia

Peter Crawford

School Principal Education Department Australia

Lindsey Cowper

Education Department Australia

Colleen Barker

Flinders University of South Australia Australia

Peter Gale

Division of Education, Arts and Social Sciences
University of South Australia
Australia

Introduction

his paper explores the issue of early intervention in adolescent mental health in rural communities, and evaluates the effectiveness of a school-based, early intervention program in a rural community in southern Australia. The specific program of focus is known as the 'Doc on Campus' (DOC) program. It began operating in May 2004 in a regional secondary school of approximately 700 students. Since its inception, over 100 secondary students have accessed the program, seeking support in a range of mental health issues. The DOC team includes a general practitioner (GP), clinical psychologists, teachers and school counsellors. Being located in a rural community, the DOC team have formally and informally followed the progress of students who have been part of the program and reported that a significant number of 'troubled' adolescents have been able to effectively reengage with learning and life in the community.

Malek (2004) suggests it is important to make the distinction between mental *health*, which focuses on physical health and well-being, and mental *illness*, which incorporates a broad range of conditions, distress, or disorders. The aim of the DOC program has sought to effectively promote adolescent health and well-being through the development of closer working relationships between health services and young people in the community through the provision of health services based in the local secondary school.

This paper aims to review research and related issues of early intervention programs in adolescent mental health. Early intervention programs and strategies have been a relatively new shift in policy. Such programs include educational programs for teachers and specific skills training for students, along with routine screenings of adolescent populations. However, until more recently, the level of knowledge on how effective early intervention strategies are has been significantly limited (Kosky et al 1992). Nevertheless, even the earliest studies on early intervention programs and policies highlight the need for a closer relationship between health and educational services (Sawyer et al 1992).

Prevalence of mental health problems/disorders among adolescents

Emotional and behavioural problems among children and young people are widespread, and incidence rates of mental health problems and illness, including those likely to continue into adulthood, elevate in the 12-25 year age group. Sawyer et al (2000) point out that nationally, 14% of Australian children and adolescents encounter mental health problems. Correspondingly, early intervention for young people has become a priority and evidence for its effectiveness is emerging (McGorry and Jackson 1999; Clarke et al 1995). Anxiety and depression are the most common mental health problems for people aged 12-17 years. Each year in Australia around 100,000 young people experience anxiety or depression. However, Sawyer et al (2000) found that only 25% of young people with significant mental health problems attended a service provider, with merely 8% reaching a child and adolescent mental health service. In response to the level of adolescent mental health problems and the low proportion of young people accessing mental health services, alternate service delivery models have been identified as a way of addressing the levels of access and ensure young people with emerging mental health problems are able to readily access local specialist therapeutic services.

Similarly, the availability and accessibility of mental health services among young people living in rural communities has been identified as a major concern. Boud et al (2006:1) note that the '... mental health of adolescents in rural Australia has received little research attention'. However, the data available on adolescent rural mental health indicates that the death rates due to suicide among males between the ages of 15 and 24 years tends to increase with the level of remoteness, with the suicide rates in remote areas being twice that of capital cities (Boyd et al 2006:3). Young people are also seen to be at greater risk of developing mental health problems if they are early school leavers, with often associated higher levels of unemployment, of Aboriginal and Torres Strait Islander descent, or reside in rural or remote Australia (Mental Health Council of Australia 2000).

Adolescent help-seeking and early intervention programs

McGorry and Jackson (1999) argue that the duration of untreated mental health problems is one of the best predictors of poor outcome. Mental health disorders among youth have a correspondingly high impact on educational achievement, with increased levels of unemployment (McGorry et al 2007). McGorry et al (2007) conclude that mental disorders are a crucial factor in limiting a person's economic and social participation in the community, and any improvement in mental health increases this level of participation and decreases welfare dependency.

In the available Australian data, it can also be concluded that issues of social stigma and a culture of self-reliance contribute to a reluctance in rural communities for individuals to acknowledge mental illness (Boyd *et al* 2006:4). Similarly, previous research indicates that there are significant barriers contributing to reluctance among adolescents in rural communities in seeking professional

assistance in mental health. These include lack of knowledge of mental health services, the preference among female rural youth to consult a female GP, and the limited number of female GPs in rural Australia (Boyd et al 2006:4). There is also an acknowledged lack of health professionals in rural areas with specialist mental health training (Boyd et al 2006:5). Goldney et al (2005) also suggest that one of the impediments to the better recognition and treatment of mental health, and in particular, depression, is the level of public knowledge about mental health.

Young people attending secondary schools are entering a crucial transition period from childhood to adulthood, and this often involves marked physical, cognitive, emotional and behavioural changes, with issues of independence and freedom coming to the fore. It can be a challenging time for young people, their parents, and the school community. The way this transition progresses also has important long-term repercussions for the emerging adult, and the level of educational achievement.

However, in Australia, as in many liberal democratic nation-states, the majority of mental health services are directed toward adults (O'Hanlon et al 2002:134). In Australia there has been a shift in policy towards an early intervention approach which began in the early 1990s, and a national early intervention network was established in 1997. Capacity building towards early intervention has been identified as a significant issue for implementing policies on early intervention (O'Hanlon et al 2002:138-9). Public resource allocation is also seen as a crucial factor for the successful implementation of early intervention programs, along with developing professional partnerships across disciplines (O'Hanlon et al 2002:140). For instance, the relationship between health and education services is identified as crucial for early intervention among young people. One example of early intervention in a school setting is in Devonport Tasmania, involving 19 primary schools and seven secondary schools with 9,000 students (O'Hanlon et al 2002:143-4). O'Hanlon et al (2002:147) suggest that 'Early intervention in the education sector has great potential'. The focus of this program was

on training education staff on signs of mental health problems (O'Hanlon et al 2002:147). Another example is in the southern region of Western Australia, covering an area with 230,000 people across 27 schools, with a focus on training staff, including teachers in the region, on a range of topics related to mental health. O'Hanlon et al (2002:148) conclude that the most successful models of early intervention programs are based on collaboration between agencies including schools.

Other projects have focused on culturallydetermined training for non-Indigenous mental health workers, culturally appropriate alternative models for Indigenous communities, and multicultural projects aimed at raising awareness about early intervention (O'Hanlon et al 2002:154). There have also been programs based in rural and remote communities that sought to incorporate training towards developing understanding of early intervention, and identification of early warning signs of mental health issues among young people (O'Hanlon et al 2002:155). However, a review of the reporting and evaluation of such programs suggests there has been an emphasis on capacity development among professional health and education workers, in contrast to access and delivery of mental health services for young people.

While there have been some programs which have focused on developing a closer relationship between health and educational services and achieving better outcomes in mental health, such programs have placed an emphasis on mental health education, and or resilience among students. For example, Shochet et al (2002) focus on prevention of adolescent depression. They review a trial involving collaboration between schools and allied health support systems through a program focusing on stress management and the prevention of conflict involving students for two hours a week for five weeks. The students' perception of the program was positive.

Similarly, Wheeler and Riviere (2002) highlight the way teachers in schools are central to the provision of effective mental health promotion among adolescents. As part of a national mental health strategy, a regional program was developed and implemented with a focus on the prevention of behavioural disorders in early childhood. As part of this program, a review of the level of mental health problems among 4-16 year olds was undertaken, with 18% of this age group being identified with mental health problems (Wheeler and Riviere 2002:245). Allen et al (2007) point out that mental health issues often start in adolescence with a depressive episode being experienced by twenty percent of adolescents by age 18 years. Allen et al (2007:S16) also note that an episode of depression in adolescents is a substantial risk factor for subsequent episodes, with '... evidence from longitudinal studies suggesting that intervening in the first episode of depression may be crucial in halting the development of a vulnerable cognitive style linked with recurrent episodes'.

Based on such international data, it has not been surprising to find an emphasis on prevention through education programs which focus on mental health and well-being. While it is not a case of either education on mental health or the provision of mental health services, it is clear there has been an emphasis on prevention through education programs, with no provision for campus-based mental health services in Australia.

Many studies conclude that if early intervention is going to be effective, the young person must connect with the service. It must be 'youth-friendly'. Being youth-friendly means adopting practices and strategies of engagement which make and sustain positive connections with young people through which they feel valued, respected and increasingly capable of taking charge of their lives. Relevant service factors that promote youth-friendliness include: accessibility, flexibility, positive communication, respect, emotional safety, transparency, alliance, advocacy, persistence, and accountability (Crago et al 2004; Mitchell 2000; Stacey 1999, 2001; Stacey et al 2002; Williams et al 2001; Wright and Martin 1998, 1999).

What can be concluded is that more '... research is needed to discriminate which practices are effective and, in particular, which interventions can be readily expected to help young people' (Swanston et al 2000:23). Sanders et al (2000:2) note that policy makers

are well aware of the social and economic costs of 'conduct problems' among young people, and the potential of early intervention in mental health. Sanders et al (2000:54) also highlight the key role of schools in effective early intervention. Schools can provide opportunities for promoting resilience and well-being in students as well as the detection and intervention of issues of mental health. It is also clear that school-based interventions can address the associated academic performance affected by mental health issues (Sanders et al 2000:55).

Mental health services in schools

Manikan (2002:26) argues that international data shows the increasing incidence of mental health concerns in children and adolescents. Moreover, most studies conclude that problem behaviour in adolescents is predictive of poor mental health in adults, and intervention is both efficacious and cost-effective in both the short- and long-term (Manikan 2002:26). 'Social and material support is key to preventing stress, building resilience, and promoting mental health' (Manikan 2002:27). Manikan (2002:22-3) concludes that schools are the most powerful contexts to both educate and treat children and adolescents, and yet there are no proper services for assessing and providing intervention in mental health for students. General practitioners are primary care givers in the early intervention of mental health, and collaborative work with schools provides the opportunity for the cost effective delivery of services without stigma (Manikan 2002:28).

Tylee et al (2007) highlight the need for a youth-friendly model of health services and argue that most adolescent health problems are preventable when primary health care services are available. There are many models for youth-friendly services, ranging from hospital-based clinics specialising in adolescent health, community-based health services, and school-based services. However, confidentiality, autonomy and an open and honest approach to the provision of health care services are seen as major factors in young people accessing services. For example, adolescents need to know that the doctor is acting primarily for them.

Alison Neil and Helen Christensen (2007) note there have been nine mental health intervention programs in schools in Australia up to June 2006 which have reported short-term improvements in the incidence of mental health problems. Neil and Christensen (2007:307) conclude that further research is required to evaluate the effectiveness of school-based prevention and early intervention programs in Australia (such as the MindMatters and BeyondBlue schools programs). Similarly, in the Australian rural context, Aisbett et al (2007) describe how the lack of reliable transport to and from the mental health service affected the level of utilisation by young people in rural communities. Other issues raised by adolescents were the lack of qualified professionals in their region who specialise in adolescent mental health, along with the frustration at long waiting lists or the lack of after-hours services. Confidentiality and stigma issues related to mental health were also identified as impeding access to health services, given that 'rural gossip' and the social visibility of visiting a health provider made the experience particularly difficult for young people in a rural context. As a consequence, the role of the GP in maintaining confidentiality is significant, as is the avoidance of labeling in successful interventions in mental health issues.

Boyd et al (2007) highlight the important role of the GP in mental health detection and management in regional Australia, often in the absence of local specialist services. A GP or family doctor is acknowledged at a practical level as taking a major responsibility for 'coordinating assessment and management' of mental health (Swanston et al 2000:22). The relationship between health and education services is identified as a crucial issue in early intervention. Problems at school, including school attendance, and academic performance, or '... withdrawal from social interactions' are also crucial signs in early intervention in adolescent mental health problems (Swanston et al 2000:14).

All the issues discussed above are relevant to young people in rural communities accessing mental health care services. They are also significant factors in the evaluation of the effectiveness of the DOC program of the school-based early intervention in mental health.

The DOC program

The aim of the DOC program was to provide a student-friendly service for early detection and intervention in order to contribute to student health and well-being, and perhaps also decrease the incidence of mental health issues in adulthood. The DOC program provides students with affordable and confidential access to mental health care, especially noting the issues confronting young people in a country town. The program also aims to avoid the delay of diagnoses and the associated unhelpful thinking and behavioural patterns which may lead to further suffering for the student and possibly additional health costs.

Traditional referral processes to medical and community health options have been found to not meet the needs of students. This may be because of long waiting lists, embarrassment or discomfort with seeing a doctor in a surgery, or concerns about confidentiality. Having a GP on campus has allowed counsellors to directly refer students with elevated needs to the GP easily, efficiently, and on site. The DOC model developed a collaborative, student-friendly and demonstrably effective approach to mental health and well-being. Keys to its success lie in the quality of medical advice available, and the involvement of counsellors, parents, and where necessary, teachers, in developing individualised support plans for students in need.

As stated earlier, the need for a highschoolbased early detection and intervention program for mental health issues had been identified after an increased rate of self-harming behavior. Up to May 2004, students would be brought to the local medical centre by the school counsellor for assessment and treatment. Treatment was especially fraught, because of the time-intensive nature of the initial assessment in a very busy clinical setting, and further follow-up was difficult. Students would rarely attend a follow-up appointment, in many instances because of the social barriers and stigma associated with isolation in a rural community (cf: Edwards and Cheers 2007). Referrals on to the local Child and Adolescent Mental Health Services were also subsequently difficult because of the long waiting times caused by a high case load.

The DOC model was initiated by a local female GP.² The DOC program is a subsidised initiative where a GP consults regularly at the regional secondary school in a school counsellor's office for one session per fortnight, seeing students who have been identified by the school counsellors as possibly suffering from a mental health problem. The initial appointment for assessment and formulation of a treatment plan is 45 minutes. Follow-up appointments of 30 to 45 minutes are also possible, depending on the complexity of mental health-related issues. All students are bulk-billed. The financial shortfall of the program is supported by the other members of the local GP clinic and the extra time commitment on the part of the GP involved in the DOC program. The support for the program by the local GP clinic is founded on a commitment to the principle that all young people, in spite of disadvantage related to regional isolation or socio-economic position, should have access to health services. Akin to universal education, such services are seen as essential pathways to better mental health outcomes in adolescence, and hopefully increased academic success at school and therefore improved professional options.

School counsellors are in a unique position of confidentiality in relation to adolescents, as these staff are often in the front-line of dealing with students with important well-being issues. For example, following a heartfelt discussion with a student, a common response would be '... so who else knows about this?' At this point the school counsellor is faced with a challenge. While the student is in need of medical/professional help, often the students want the issue 'kept quiet' and for the school counsellor to manage it. In such cases an acute challenge presents itself to ensure the student is provided with the level of help needed in an appropriate time frame. Often the student does not have a family doctor, is concerned about seeing the family doctor about 'that sort of issue', or waiting lists at the clinics are out of step with the urgent needs of the student. Waiting lists at health services can be equally prohibitive and school staff often find themselves seeking urgent medical assistance.

If staff are able to secure a medical appointment, the problems are not over. The student is confronted with the 'Doctor's Waiting Room' with eyes that 'seem to pry'. This is especially the case in regional or rural communities where the chance of being 'spotted' in the waiting room is a significant obstacle to attendance. A similar barrier is confronted with a standard 15 minute appointment which can only provide a superficial overview of the needs of the student. Sometimes, the student is also unable to leave the school without the necessary parental consent.

Through consultation with counselling staff across a number of schools, it became clear that the concerns and frustrations experienced prior to the commencement of the DOC program were shared across all rural schools. In facing the challenges of adolescent mental health, the school involved in the DOC program reflected the issues faced by other schools, public or private, rural or urban.

A major concern of the school counsellors which has been addressed by the DOC program centres on the expectation among students of a level of support in mental health issues that is often beyond the level of training of school counsellors. For counsellors, and teachers, a major concern is the significantly increased likelihood that students are able to achieve better well-being outcomes through access to increased levels of professional help when it is needed.

An example of one day in the DOC program can be illustrated in the following typical schedule:

Senior male student, self-referral with his girlfriend following series of emotional episodes at home. Admits to suicidal ideation and some self-harm (cutting). New Client – 45 mins. Case notes are provided to the GP from an interview with the student.

Junior female student, referral by a social worker/psychologist. New Client – 45 mins. The social worker/psychologist provides notes for the GP.

Senior male student, ongoing follow-up re significant mental health risk factors as per case management plan, following input from parents, and recommendations from consulting psychiatrist. 30 mins.

Senior female student, following grief related family tragedy: referral from family via school counsellor. New Client – 45 mins. Case notes by school counsellor.

Junior female student, referral by a GP. New Client – 45 mins. Case notes by referring GP.

Junior female student, re-referral request by social worker/psychologist via school counsellor. Meeting with social worker/psychologist to determine case management matter for post sexually-related trauma – 30 mins.

Based on the available data from students accessing the DOC program during the first four years of the program, a profile of the type of issues students were coping with was identified. This profile is founded on a broad cross-section of students participating in the program and is consistent with available data of issues confronting students within the broader adolescent population. The main age group accessing the DOC project were in the 14-15 year old age bracket, while a quarter of the students were aged between 16-18 years. One in five were aged between 12-13 years of age. Three-quarters were female. This may be related to the initiation of the DOC program by a female GP. However, the proportion of male students accessing the program increased during the fourth year of the program and many male students accessing the program also commented they would not have sought help at a local GP clinic. This is a significant factor given that rural adolescent males are at increased risk of suicide, and also the school's location in a drought declared area for two years of the program.

The main reasons for presentation included depressive symptoms among just over half the students accessing the DOC services, while over 40% were identified with anxiety issues. More than 60% had experienced family breakdown, while some had suffered grief issues following the death of one parent, in some cases as a result of suicide. Self-harm (mainly cutting) was a significant issue. However, the proportion of students involved in self-harm has reduced significantly over the life of the DOC program. Approximately 15% of students identified domestic violence as a contributing issue, and in the order of 10% were

involved in school avoidance behavior. A number of students had attempted suicide, and others were identified with bipolar/psychotic illness, consistent with that of the level of incidence expected within the adolescent population. Similarly, the use of marijuana, alcohol, nicotine, amphetamine and methamphetamines, as well as an intravenous drug use, was reflective of the general level of use among adolescents.

In 2006 the program was expanded through the support of the Division of General Practice, and a psychologist was assigned through the More Allied Health Services (MAHS) program. As the program had proven popular with the high school students, one or two sessions per week were provided at the local secondary school. In addition, the expansion of the DOC team to include clinical psychologists enabled the treating GP to see more students, because students were referred on to the psychologist by utilising the new Medicare mental health plan item number. The program was further expanded in 2007 when an adolescent psychiatrist agreed to consult one Saturday per month. This provided a service for the clarification of diagnosis and treatment advice.3 While the program has expanded significantly over the past three years, there remains a need for ongoing, longer-term evaluation of the program through follow-up of students who have accessed the program and may have completed their formal education.

Evaluation of the DOC program

Evaluation of the DOC program has been based on consultation with both present and past students, teachers, school staff and health care professionals. As an initiative, it has exceeded expected objectives and outcomes. The most significant indicator of the success of the program is in the reduction in the number of incidents of severe cases of self-harm over the first four years of the program.

School staff regard the successful implementation and operation of the DOC program as crucial to the level of well-being and ongoing mental health outcomes for students. Prior to DOC, the school, like schools elsewhere, was struggling to manage the case-load of students presenting with complex, and sometimes severe mental health issues.

Comments from school staff include:

The traditional drivers for the curriculum such as content and knowledge are being joined by an ever growing need to focus on the development of the whole person. Attitudes, dispositions and supporting a positive sense of self are key elements of mentoring and wellbeing programs being implemented in schools across the world. Teachers are now receiving training in care and well-being for students as much as the traditional subject-based training. This has been a major shift in the focus for teachers and their relationships with their student cohorts across the world.

Teachers and school counsellors are being confronted with a significant number of students with complex emotional health and well-being issues: depression, anxiety, self-harm/suicidal tendencies, drug/alcohol issues, anger, grief, eating disorders, and sexual health. To be able to identify students who present these issues and to be able to refer them on to professional help is fundamental to the DOC model. Early intervention and help for young people is critical. The access to professional help on campus also enables students to seek help who may not have otherwise done so externally to the school (school staff member).

The school regards the successful implementation and operation of the DOC program as having been crucial to well-being outcomes for students at the school. DOC frequently sees young people who have been 'denied' a mental health service in the past due to rigid service structures, poor availability or access, different staff interests and even inaccurate perceptions of young people and their issues. DOC stresses the importance of seeing the young person within the unique context of their lives, including the meanings they give to problems they experience. The comments of school staff also reflect the success of the program in meeting the objectives:

Our service attempts to deliver and get it right the first time. We strive for quick and thorough assessment, seamless and timely referral pathways, and evidence-based interventions. A good therapeutic connection will not only enhance positive outcome, but is likely to improve future help seeking behaviour. Elevated outcomes for students have been profound and measurable. The feedback from students has been excellent, and there has also been significant acknowledgment of the benefits of the program from both parents, and teaching staff (school counsellor).

In particular, the school counselling staff no longer face the barriers to early intervention which were previously common. The identification of the need for on-campus psychological support for students with elevated needs, and the inclusion of a social worker and consulting psychologist, have reinforced the positive outcomes of DOC program. The psychologist contributes directly to the case-conference process. The positive outcomes of the program are evident when, for example, a 16 year old male student makes an appointment with the school counsellor with the comment that: 'I've been getting really angry again of late and that's not good ... can you book an appointment for me with ... [the psychologist]'.

Consultation with counsellors and school leaders from other schools about the cooperative approach between health and education services through the DOC program, also reinforces the need for school-based, early intervention mental health programs. The support of Departments of Education/Health, at a state or commonwealth level, and policies which address the financial impost on GP services, are necessary in order for similar programs to be implemented in other rural schools. The DOC program may be of considerable benefit as part of the overall strategies for managing mental health issues in our communities, particularly those in regional centres and rural areas. The effectiveness of the DOC program is demonstrated in the following comment from a member of the DOC team:

An illustration of the potency of the DOC program was seen in October 2006 when a year 12 student in deep distress was referred to the doctor with a multitude of personal, family, school, relationship and substance misuse issues, some of which were acute and some long-standing in nature. Ordinarily, a student facing such trauma at that time, would

be unlikely to complete the year. However, following an urgent and immediate DOC referral the student was able to recover sufficiently to complete final exams and realise a long cherished dream of university study. This outcome was truly remarkable and was a clear testimony to the impact of DOC for students in the school. The DOC program has demonstrated how the integration of health and educational services has contributed to quality outcomes, and with ongoing support structures similar programs could be implemented in other schools (school staff).

The regional secondary school from which the DOC initiative has been operating, regards the successful implementation, and operation, of the program as having been crucial to the health and well-being of many students, and central to student re-engagement with education. This is illustrated in the comment from a staff member from the school:

The overwhelming majority of students who have been referred to DOC have been able to effectively re-engage with learning and with life. In the process, they have been introduced to self-management skills that will serve them well through to their adult lives (school staff).

In the past year there has also been an increase in the percentage of male adolescents accessing the program. This trend can be interpreted as an acceptance and trust by the local adolescent community who over the years had come to appreciate that confidentiality is maintained whenever possible. There are of course, some exceptions to the right of confidentiality, such as when a patient is at high risk of suicide, is suffering from physical or sexual abuse, or has homicidal plans. These exceptions are pointed out clearly at the beginning of a new patient relationship. This commitment to confidentiality and access to a 'neutral' consulting room was identified as a significant factor in the high level of participation among the students attending the school. Being located on campus in the school counsellor's office has also been crucial in engaging adolescents.

Over the four years of the program, all providers have witnessed significant improvements

in a majority of the adolescents enrolled. These improvements have been quantified by an evaluation conducted by the participating psychologist, and the rural location of the school made it possible to informally follow-up some of the participants. This follow-up indicates that after an initial six-month trial, and nearly four years of successful, ongoing operation, the Doctor on Campus initiative has proved itself a worthy model of early intervention in adolescent mental health. All providers are aware of the need to assess the long-term benefit and cost effectiveness of this program through a long-term follow-up study. However the immediate success seems to justify publishing this data to generate an interest in starting similar programs in other schools.

With support from the Departments of Education and Health, this program could be effectively replicated in other rural communities as a model for building effective relationships between teachers and health practitioners. The partnership approach to early intervention in adolescent well-being, developed in this rural secondary school, has significant potential in schools and regions across Australia, and could be particularly beneficial in rural areas.

Conclusions

This paper has sought to review the literature on early intervention in adolescent mental health in rural communities as a basis for the evaluation of the effectiveness of a specific early intervention program based in a high school in a rural community. The focus of the program was to develop a closer relationship between the health service and the local school, through basing a GP on the school campus, where referrals could be made to locally-based psychological services. The paper has also sought to review the program to evaluate the practicalities of extending this pilot program to other schools located in rural communities.

A number of conclusions can drawn from this evaluation about the form of support necessary if this program is to be successfully extended to other communities. First, given that adolescent mental health is time intensive, and its unreliable patient base is likely to lead to financial shortfalls per consulting session, appropriate remuneration by

the Australian health system, specifically Medicare, is crucial to ensure the financial viability of high school consulting. Such incentives would enhance the provision of mental health services to rural communities and attract service providers into what are identified as disadvantaged areas of health provision. Changes in health policy to attract service providers to rural communities would also 'share the load' for rural GPs. Secondly, there is a need for economic and other infrastructure incentives for allied health professionals to consult within schools, for instance, by providing travel allowances and other tangible incentives to those working in adolescent psychiatric and psychology services. Thirdly, there is a need to improve the knowledge base in adolescent mental health for GPs, and for introductory and bridging courses for school counsellors.

The DOC approach is not the only recommended response to systemic and structural issues which impede the provision and accessibility of mental health therapies for young rural people. However, it does indicate the direction in which youth mental health services could head in order for more effective, responsive and appropriate services to be routinely available.

Endnotes

- BeyondBlue is a national, independent, not-forprofit organisation, working to address issues associated with depression, anxiety and related substance misuse disorders in Australia. Further information is available at: http://www. beyondblue.org.au/index.aspx. The Mind-Matters initiative helps schools and their communities take positive action toward creating a climate of mental health. Further information is available at: http://www.curriculum.edu.au/ ccsite/cc_home,17988.html
- Rural, Remote and Metropolitan Classification
 is a rural area with a population equal to or less than 10,000.
- 3. Youth workers from a number of organisations are also involved in the program, working with individual students on special projects. For example, boys at risk have committed to consult from the school counsellor's office, further enhancing an easily accessible service for students. Other service providers and the local Health Service are also involved with students on an 'as per need' service, such as managing teen pregnancies.

References

- Aisbett, D.; Boyd, C.; Frances, K.; Newnham, K. and Hewnham, K. (2007) 'Understanding barriers to mental health service utilization for adolescents in rural Australia' *The Australian Journal of Rural Remote Health Jan-Mar* 7(1):624.
- Allen, N.; Hetrick, S.E.; Simmons, J.G.; and Hickie, I.B. (2007) 'Early intervention for depressive disorders in young people: The opportunity and the (lack of) evidence' *Medical Journal of Australia* 187(7 Suppl):S15–S17.
- Boyd, C.P.; Aisbett, D.L.; Francis, K.; Kelly, M.; Newnham, K. and Newnham, K. (2006) 'Issues in rural adolescent mental health in Australia' The International Electronic Journal of Rural and Remote Health Research, Education, Practice and Policy 6:1–9.
- Boyd, C.P.; Aisbett, D.L.; Howard, A. and Filiades, T. (2007) 'Detection and management of eating disorders by general practitioners in regional Australia' Australian e-Journal for the Advancement of Mental Health 6:1–6.
- Crago, A.; Wigg, C. and Stacey, K. (2004) 'First you have to "see" them: Youth-friendly practice in mental health work' Youth Studies Australia 23:38–45.
- Edwards, J. and Cheers, B. (2007) 'Is social capital good for everyone? The case of same-sex attracted women in rural South Australian communities' *Health Sociology Review* 16(3–4):226–36.
- Goldney, R.D.; Fisher, L.J.; Dal Grande, E. and Taylor, A.W. (2005) 'Changes in mental health literacy about depression: South Australia, 1998 to 2004' Medical Journal of Australia 183:134–137.
- Kosky, R.; Eshkevari, H.S. and Kneebone, G. (1992) Breaking Out: Challenges in Adolescent Mental Health in Australia Australian Government Publishing Service: Canberra.
- Manikan, R. (2002) 'Mental health of children and adolescents' in Singh, N.N.; Ollendick, T.H. and Singh, A.N. (eds) International Perspectives on Child and Adolescent Mental Health Volume 2: Proceedings of the second international conference, pp. 1–36.
- Malek, M. (2004) 'Understanding ethnicity and children's mental health' in Mhemooda, M. and Joughin, C. (eds) Mental Health Services for Minority Ethnic Children and Adolescents Jessica Kingsley Publishers: London, pp. 23–48.
- McGorry, P.D. and Jackson, H.J. (1999) Recognition and Management of Early Psychosis Cambridge University Press: New York.

- McGorry, P.D.; Purcell, R.; Hickie, I.B. and Jorm, A.F. (2007) 'Investing in youth mental health is a best buy' *Medical Journal of Australia* 187(7 Suppl):S5–S7.
- Mental Health Council of Australia (2000) Young People and Mental Health http://www.mhca. org.au/AboutMentalHealth/factsheets/ AdolescentYouthMentalProblems.html [accessed 31 March 2008]
- Neil, A.L. and Christensen, H. (2007) 'Australian school-based prevention and early intervention programs for anxiety and depression: A systematic review' Medical Journal of Australia 186:305–308.
- O'Hanlon, A.; Martin, G.; Dundas, P. and Davis, C. (2002) 'Reorientation of service delivery in Australia to an early intervention approach in mental health of children and adolescents' in Singh, N.N.; Ollendick, T.H. and Singh, A.N. (eds) International Perspectives on Child and Adolescent Mental Health 2: Proceedings of the second international conference, pp. 133–164.
- Sanders, M.; Gooley, S. and Nicholson, J. (2000) 'Early intervention in conduct problems in children' in Kosky, R.; O'Hanlon, A.; Martin, G. and Davis, C. (eds) Clinical Approaches to Early Intervention in Child and Adolescent Mental Health Volume 3 The Australian Early Intervention Network for Mental Health in Young People: Adelaide.
- Sawyer, M.; Meldrum, D.; Tonge, B. and Clark, J. (1992) Mental Health and Young People National Youth Affairs Research Scheme, National Clearinghouse for Youth Studies: Hobart.
- Sawyer, M.; Arney, F.; Baghurst, P.; Clark, J.; Graetz, B., Kosky, R.; Nurcombe, B.; Patton, G.; Prior, M.; Raphael, B.; Rey, J.; Whaites, L. and Zubrick, S. (2000) The Mental Health of Young People in Australia: The Child and Adolescent Component of the National Survey of Mental Health and Wellbeing Mental Health and Special Programs Branch, Commonwealth Department of Health and Aged Care: Canberra.

- Shochet, I.M.; Montague, R. and Ham, D. (2002) 'The resourceful adolescent program: A universal approach to the prevention of depression in adolescents' in Singh, N.N.; Ollendick, T.H. and Singh, A.N. (eds) International Perspectives on Child and Adolescent Mental Health 2: Proceedings of the second international conference, pp. 213–35.
- Stacey, K. (1999) 'The possibilities of youth partnership accountability for mental health services' Balance: Queensland Association of Mental Health Journal Winter:16-17.
- Stacey, K. (2001) 'Achieving praxis in youth partnership accountability' *Journal of Youth Studies* 4:209–231.
- Stacey, K.; Phillips, T. and Walker, A. (2002) Youthlink Evaluation Report Southern Child and Adolescent Mental Health Service: Adelaide.
- Stacey, K.; Webb, E.; Hills, S.; Lagzdins, N.; Moulds, D.; Phillips, T. and Stone, P. (2002) 'Relationships and power the critical core of youth partnership accountability' Youth Studies Australia 21:44–51.
- Swanston, H.; Williams, K. and Nunn, K. (2000) 'Psychological adjustment of children with chronic conditions' *Clinical Approaches to Early Intervention in Child and Adolescent Mental Health* Volume 5 (eds) Kosky, R.; O'Hanlon, A.; Martin, G. and Davis C. (eds) The Australian Early Intervention Network for Mental Health in Young People: Adelaide.
- Tylee, A.; Haller, D.M.; Graham, T.; Churchill, R. and Sanci, L.A. (2007) 'Youth-friendly primary-care services: How are we doing and what more needs to be done?' *The Lancet* 369:1565–1573.
- Wheeler, A. and Riviere, P. (2002) 'A community service model for delivery of early childhood mental illness prevention programs' in Singh, N.N.; Ollendick, T.H. and Singh, A.N. (eds) International Perspectives on Child and Adolescent Mental Health Volume 2: Proceedings of the second international conference, pp. 237–256.
- Wright, S. and Martin, G. (1998) 'Young people and mental health: Access and alliance' Youth Studies Australia 17(4):11-16.

NOW AVAILABLE AS A COURSE READER

SOCIAL CAPITAL IN A RURAL CONTEXT

Edited by Dimitria Giorgas, Charles Sturt University ISBN 978-0-9775742-7-8
A special issue of *Rural Society* journal – Volume17/3 December 2007

eContent Management Pty Ltd, PO Box 1027, Maleny QLD 4552, Australia Tel. +61-7-5435-2900; Fax. +61-7-5435-2911;

subscriptions@e-contentmanagement.com

www.e-contentmanagement.com