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Abstract

Objective: This paper reviews the evidence of youth mental ill health and its impact on secondary school educational attainment.

Method: This narrative review presents the current research related to the mental ill health of young people in urban and rural Australia, their educational attainment, and the effectiveness of mental health strategies implemented in secondary schools.

Conclusion: The prevalence of mental ill health is high for Australian young people and the onset of depression, anxiety, substance use disorders and first episode psychosis (FEP) commonly occurs when the individual is at school. The prevalence is reported to be higher for rural young people and barriers to treatment exist. Current evidence suggests that 40% of young people experiencing depression or anxiety disorders are not completing secondary school. Further evidence shows that over 50% of individuals who experience FEP do not finish secondary school. Current mental health promotion strategies employed in secondary schools have not been shown to reduce rates of depression or anxiety in adolescence nor identify prodromal or acute FEP. These strategies have not lead to interventions that assist young people with mental ill health to finish school. Not completing secondary school can limit employment options, lead to severe levels of disadvantage and increased burden on welfare and healthcare systems. All young people, including those in rural areas, have the right to education, and should not be disadvantaged in their educational aspirations because they have an emerging or current mental illness.
Key words: youth mental health, rural, first episode psychosis, secondary school, education
Introduction

The onset of most psychiatric disabilities occurs during adolescence and early adulthood [1]. This can derail, truncate or undermine a young person’s education [1]. Education is a passport to personal satisfaction and worldly success [2]. Adolescence is a crucial period in which skill development and social roles are initiated [3]. Adolescents spend more time in school than in any other formal institutional structure [4] and school plays a key part in an individual’s development including peer relationships, social interactions, academic attainment, cognitive progress, emotional control, behavioural expectations, physical and moral development [3]. These areas are also reciprocally affected by mental illness [5].

Schools are a key setting for promoting positive mental health, fostering resilience, detecting and responding to emerging mental ill health. Research indicates that education is important to people with psychotic illness and outranks symptom recovery as a goal [6]. The problem is that people with psychotic illness have low levels of secondary school completion and are the largest and fastest growing disability group in receipt of the Disability Support Pension in Australia [7, 8, 9]. Identifying students at high risk of first episode psychosis (FEP) and other serious mental illnesses, such as depression and anxiety disorders, is imperative in order to intervene early and prevent or reduce the impact of problems [10].

A narrative review was conducted in order to bring together both quantitative and qualitative evidence as well as population statistics, national and international reports to arrive at a more holistic understanding of this issue (Grant, Booth 2009). This study presents an Australian focus. It has utilized international research to highlight evidence for consideration that may further inform the Australian issue.
This review includes peer-reviewed journal articles, books and publicly available reports. Articles selected present an empirical investigation of mental illness and secondary school educational attainment or school dropout. ‘School dropout’ was defined as having left school prior to the completion of Grade 12 or graduation. The geographic terms of ‘urban’ and ‘rural’ were defined by the Rural, Remote and Metropolitan Area Index [231]: Urban = Capital cities and other metropolitan centres populations > 100,000. Rural = populations < 99 999.

A systematic search was conducted and evidence retrieved from CINAHL, MEDLINE, Psych LIT, Psych INFO and Education SAGE. Published papers were limited to English language and year of publication parameter was set from the 1995 to 2015. The abstracts, titles and index term of studies were searched using the following key works: ‘youth mental health’, ‘rural youth mental health’, ‘early psychosis’, ‘first episode psychosis’, ‘mental disorders’, ‘secondary school’, ‘high school students’, ‘junior high school students’. The population age range of interest was defined as 13-17 years for adolescence and 18 years and older for early adulthood. Additional papers were found by hand-searching the references of all retrieved articles.

A lack of literature investigating rural youth mental health was found. Qualitative studies were of small sample sizes and over 8 years old. A lack of literature investigating interventions for mental illness in school was found. No literature for interventions addressing FEP and secondary school attainment were found. There is no research about the Australian rural secondary school experience of managing and assisting students with mental illness. Quantitative studies did not control for socio-economic factors, family characteristics and school related experiences that may have contributed to school dropout therefore may present a
biased view. Educational systems and characteristics of rural areas vary considerably between countries and consequently international studies cannot be directly applied to the Australian issue. The study adopted a hierarchy of evidence that recognizes a meta-analysis or systematic review of multiple randomized controlled trials as the most reliable form of evidence and expert opinion or single case studies of lesser certainty [232].

One hundred and fifty articles were found. Of these, twenty-three Australian articles were identified as having primary importance as they focused directly on the area of interest, described or evaluated youth mental health and school educational attainment either rurally or in urban areas. Six of these articles were descriptive studies from rural Australia. Only three quantitative studies focused on rural youth mental health specifically. Forty relevant quantitative international articles were also retrieved from the United States (24 articles including 5 with a rural focus), the United Kingdom (7 articles, 1 with a rural focus), Canada (4 articles, 1 with a rural focus), Mexico (2), South Africa (1), Finland (1) and Luxembourg (1). Australian and International randomized control trials, controlled trials, surveys, cross sectional analyses, cohort studies and qualitative methods to investigate mental ill-health and secondary school attainment were included in this review. The first author was responsible for selecting papers for inclusion.

This study aims to answer the following research questions:

1. What is the prevalence of mental ill health in young people in Australia?
2. What is the prevalence of mental ill health in young people in rural Australia specifically?
3. Can young people experiencing mental illness finish school?
4. Can young people experiencing first episode psychosis finish school?
5. What mental health strategies are implemented in secondary schools in Australia and do they prevent mental illness and promote educational attainment?

Prevalence of Mental Ill Health in Young People

The prevalence of mental illness in Australia’s youth is high with one in every five adolescents likely to experience clinical depression by the age of 18 [11-15]. Anxiety and depression are the leading contributors to the burden of disease for young Australians [12, 15, 16-18]. The most common anxiety disorders reported by young Australians are social anxiety and post traumatic stress disorder with half experiencing their first symptoms by the age of 11 [12, 16-18]. Schizophrenia is the third leading contributor to the burden of disease in Australian males aged 15-24 and the fifth leading contributor for females [15-17, 19]. Psychotic disorders typically have their onset between the ages of 10 and 25 which is a critical time in terms of completing formal education and setting up career pathways [20]. First episode psychosis (FEP) or early psychosis refers to the first 2 years after the initial onset of a psychotic illness [21, 22]. In 2010 suicide was the leading cause of death for young people aged 15-24 years [23]. Prevalence studies show that 17% of females and 12% of males aged 15-19 self-harm [16, 17, 24, 25]. By the age of 14 half of all lifetime cases of mental illness are apparent, while the rest have their onset by the age of 24 [15, 16, 17]. Forty per cent of Australian Aboriginal youth aged 13 to 17 experience some form of mental illness and most fail to access mental health services [26-29].

Australian National Mental Health Survey data show that young people have the highest incidence and prevalence of mental illness across the lifespan and they also manifest the lowest service access rate of any age group, with only 21.8% of Australians between 16 and 24 years of age with a diagnosable mental illness.
accessing professional help [30]. Only 13% of young males with a mental illness access any form of mental healthcare [30]. Young people are reluctant to seek help due to concerns about confidentiality and embarrassment in disclosing their health concerns, professionals’ lack of confidence and skills, limited knowledge of available services, lack of affordable services and inadequate transportation to service sites [31, 32, 33, 34, 35].

Survey studies conducted in Australia, the United States, Britain and the Netherlands with large samples of secondary school students report that generalised anxiety, conduct disorder and depression are most commonly experienced by students, but these diagnoses are all that schools record [12, 36-42]. The incidence of eating disorders and FEP starts to increase rapidly from mid adolescence onwards and this data is not often recorded by secondary schools [42]. In an American longitudinal study of 1420 participants, Copeland et al. [39] found that 36.7% of adolescent secondary school students had at least one mental illness diagnosed by age 16 years and often symptoms were misconstrued as behavioural by schools rather than mental illness and consequently went untreated.

Prevalence of Mental Ill Health in Rural Youth

There is evidence that youth who live in rural Australian have a higher incidence of mental illness, higher rates of suicide and addictions than their urban counterparts [45, 46]. Young people experiencing FEP who live in rural areas have longer duration of untreated psychosis (DUP) and decreased access to services [47, 48]. Several Australian cross sectional studies have documented health risks in rural adolescent populations surpassing metropolitan statistics for substance abuse, suicide, unsafe sexual practices, motor vehicle and other traumatic accidents, and

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interpersonal violence [50-58, 84-88]. The Inquiry into Supply and Use of Methamphetamine (ICE) conducted by the Parliament of Victoria, Commonwealth of Australia [59] found that young people and indigenous young people who live in rural areas have a higher incidence of use than in urban areas. Further, suicide rates for young males aged 15-24 years in rural Australia are nearly twice those of males living in capital cities [23, 60-65]. Rural adolescent males with a mental illness are also significantly less likely to seek professional help for their illness [65-68]. The majority of Australian Aborigines in rural communities who suicide are under the age of 24 and this rate is estimated to be 40% higher than the rate of non-Indigenous suicides [69, 70].

The rural environment is a unique and potentially challenging sociocultural context for adolescent health [45, 92]. Statistically, rural residents achieve lower levels of education, experience greater poverty in comparison to urban and suburban populations [93]. Rural communities also tend to be more politically conservative and demonstrate a greater investment in traditional values, including gender roles, interpersonal relationships and sexual behaviors [45, 75, 94].

The Australian Institute of Family Studies report that 70% of Australians live in urban areas and 30% live in rural areas [76]. As expected, people living in major cities were less likely to have problems accessing services than those living in rural Australia. For example, the proportion of couple families having problems accessing services was 19% in major cities and 67% in rural areas. For sole parent families, the proportion having problems accessing services was 29% in major cities and 74% in rural areas [77].

Educational aspirations have also been found to be more limited in rural areas
than in major cities. For example in an longitudinal survey study conducted by the Australian Institute of Family Studies [77] 78% of urban parents expected their daughter to obtain a university qualification versus 59% of parents in rural areas, and 62% of urban parents expected their son to complete a university-level qualification versus 40% of parents from rural areas.

There is a paucity of research concerning youth mental health services in rural areas, particularly for FEP [48, 79, 80-83]. Integrated primary care programmes and early detection have been called for, but depression has been the dominant call in rural areas, not FEP [48, 89-91]. Specialist adolescent mental health services are set up in a select number of rural centres, have long waiting lists and difficulties with recruitment and retention of staff [91, 96-99]. ‘Better Access to Psychiatrist, Psychologists and General Practitioners Program’ (Better Access) and the ‘Access to Allied Psychological Services Program’ (ATAPS) aim to improve outcomes for people with a mental illness through evidence-based treatment in the Australian primary care setting (235). Services are provided by general practitioners (GPs), psychiatrists, psychologists (clinical and registered), social workers and occupational therapists and are not youth specific (235). Headspace is the Australian Government’s major investment in youth mental health (236). There is currently no evidence about the effectiveness of these programs in rural Australia or on educational attainment.

Qualitative studies conducted in rural Australia with adolescents in secondary school show that access to appropriate mental health care is limited by a confluence of factors. Rural mental health services face significant challenges in the recruitment and retention of suitably qualified staff [91]. The limitations of medical expertise in rural communities amplifies the life challenges faced by young people with low and high prevalence symptoms of mental ill health. This results in a limited choice of
health professionals and a lack of specialized services available. The availability of public transport in rural areas is limited when many need to travel to regional centers in order to access treatment [95]. Having to reveal mental health problems to another person in order to obtain transport can also be barrier to accessing help [96-98]. Waiting lists for rural mental health services are long [33] and primary care providers are often perceived by rural youth as not being ‘youth-friendly’ [66, 75, 96].

Social stigma of mental illness, stoic and self-reliant attitudes are significant barriers for rural adolescents with mental ill health seeking and receiving effective help [45, 96]. Concerns about anonymity and confidentiality and the risk of social exclusion have also been found to impact ongoing utilization of mental health services [66, 96-99]. In an Australian survey study with 201 rural secondary school students inquiring about preferences for seeking help for mental ill health, participants expressed a preference for school-based help over clinic based medical help [66, 96-99]. It is important to consider that school-based approaches may also be subjected to the same concerns of confidentiality, gossip networks and social exclusion as they are in rural mental health services.

Overall, empirical data on mental ill health in rural adolescent populations is limited [57, 58, 71]. For example, most of the evidence in FEP intervention has been based on research conducted in urban areas [47, 72, 73, 74]. There is a broad assumption that urban communities are well served and that rural communities are poorly served by specialist mental health services. It is unclear whether primary health care providers are well equipped to care for young people with symptoms of what may be severe mental illness. There is currently no research available investigating this. Further, rural communities can vary considerably from areas of
high amenity and good quality services to communities where services are poor and access inadequate. These differences need to be addressed in good quality studies.

Lack of data regarding the mental health needs of adolescents living in rural communities restricts the ability of policy makers and program planners to justify competitive budget expenditures on preventive services for vulnerable youth. Marginalized rural adolescent subgroups, such as low-income youth, are particularly vulnerable to underrepresentation and subsequently program and policy neglect. Current research studies indicate, although limited in number and scope, that the mental health needs of rural youth are more neglected than those of their urban counterparts [75].

Young People with Mental Ill Health and Secondary School Completion

Participating in education is considered key to the transition to successful adult well-being [105]. Education provides time structure, social contact, sharing of common goals, status and activity, social and occupational support to a young person [129-130]. Individuals who do not finish secondary school experience a greater likelihood of social exclusion, disability and isolation, in addition to the impact of low income which results in poorer quality of life, more illness and disease, decreased access to healthcare, increased levels of psychological distress, and maladaptive lifestyle behaviours such as substance misuse and criminal activity [131, 132].

Youth experiencing mental ill health often have difficulties sustaining and completing secondary school education [100, 101]. It is estimated that 10-50% of secondary school students dropping out may be attributed to the negative effects of mental illness [102-128]. In Australia there is little knowledge about those who are
not finishing secondary school and the factors that may influence this.

In population studies, certain traits are over-represented for young people who do not complete secondary school [101, 103, 107, 111, 112, 138]. These include socioeconomic status, ethnic and immigration background, parental factors (e.g. occupation, educational attainment, divorce, parental unemployment), living arrangements (e.g. not living with either parent, homelessness), negative school experiences (e.g. bullying, persistent truancy, expulsion and suspension, conduct and behavioural problems, learning difficulties) and crime [101, 103, 107, 111, 112, 138]. Very little attention is paid to mental illness. Given that mental illness is the leading cause of disability among young people in Australia, addressing the reasons for dropping out of secondary school and ways to reduce this should be a key priority.

In 2011, the Australian Bureau of Statistics and Institute of Health and Welfare reported that 24% of students did not complete secondary school education [139-142]. While the direct causal path for school dropout has not yet been determined in Australia, longitudinal studies conducted in the United Kingdom have demonstrated that educational status at the age of 16 years predicts their education and employment status at the age of 18 years [145] and is a strong predictor of chronic unemployment in adulthood [143-145]. Further, in a Finnish longitudinal study of 28 years, young people who were not in school at 14 years of age were more likely to have future hospital admissions due to serious mental illness such as psychotic disorder [146]. However, the precise risk factors and trajectories of young people who do not complete secondary school due to serious mental illness such as psychosis remains unclear in Australia and internationally.
In an Australian study by Purcell et al. [147] six-hundred and ninety-six young people presenting to one of the four primary mental health centers in Sydney or Melbourne aged between 15 and 25 years (M=19.0, SD=2.8; 68% female), 58% (n=404) were asked about their vocational status. Forty seven per cent of school age adolescents were not in school due to their mental health problems. In an Australian randomized control trial of vocational intervention, Killacky and colleagues [148, 149] found that in their FEP sample, 50% had less than ten years of education [148].

A review paper by Marwaha and Johnson [143] from the United Kingdom reported that at first contact to early psychosis services, 40–50% were not in school or unemployed, and 60–70% were not in school or unemployed if they have experienced a long prodrome (>12 months) [143].

In a Mexican study [101] 3005 adolescents aged 12-17 were surveyed using the International Diagnostic Interview. Nineteen per cent of participants had dropped out of school. The results of the survey showed that not being in school had profound effects on mental health with increased rates of depression (odds ratio 2:7), alcohol or substance misuse (3:4), and suicidal attempts (1:2) when compared to those students still at school full time, even after controlling for social disadvantage.

In a Canadian study [234], 201 individuals who met DSM-IV criteria for a primary anxiety disorder completed a school leaving questionnaire and self-report measures of anxiety and depression. Ninety eight participants reported leaving school prematurely (49%) and 24% of those indicated that anxiety was the primary reason for this decision. Those who left school prematurely were significantly more likely to have generalised social phobia. In an Australian analysis [105] using data from the Australian National Survey of Mental Health and Wellbeing (n = 2055), results showed that early onset mental illness was significantly associated with school
dropout. Both males and females were more likely to have not completed year 10 (middle year of secondary school) if they had previously experienced a depressive episode or a substance use disorder (cannabis, alcohol or stimulant use) prior to turning 16 years of age. Similar results have been reported in other Australian, Canadian and Irish studies [118-120].

The initial phases of FEP are characterised by impaired academic performance, change in social behaviours, and increasing absences from school [30, 131]. Functional decline often precedes the appearance of overt clinical symptoms, resulting in many young people becoming isolated from school before their illness is recognized [133, 136]. Young people often exhibit substantial levels of disability prior to the complete onset of FEP, reflecting the prodrome of the illness that leads to disengagement from education [134]. School support staff may fail to recognise those who are functionally impaired because of evolving FEP. These people are especially disadvantaged and risk lifelong social exclusion and economic marginalisation unless their ill health is recognised early and their needs targeted more directly [135-138].

The Meaningful Lives International Consensus Statement (The International First Episode Vocational Recovery Group) [150] developed by clinicians, researchers and policy makers sets clear goals for educational outcomes for young people with psychosis. These goals specify that: all young people have a right to education, training and employment; young people with psychosis should have the same educational opportunities as their non-psychotic peers; no individual should be discriminated against or disadvantaged in relation to their educational aspirations because they have had a serious mental health difficulty.

There are minimal recommendations regarding screening or monitoring of those individuals who drop out of secondary school or disengage due to these
emerging problems. Once disengaged from the “system” it is usually one to four years before these young people access mental health services [131, 132]. By then the critical period for modifying the course of severe mental disorders has passed and prospects for meaningful occupational or social rehabilitation are greatly reduced [131, 132].

The Australian Government [151-152] promotes secondary school education completion. Given the personal and societal benefits of maximizing educational attainment, accurate information about how youth mental ill health is affecting levels of secondary school attainment in Australia is needed. Relying on educational or academic outcomes may not be sensitive enough to detect early school leavers who are experiencing the early stages of illness. Students who silently initiate a process of alienation are often under diagnosed and consequently ignored by staff in school support systems. Prevention and early intervention before the age of 16 may avert subsequent termination of schooling. As the Government seeks to develop new ways to maximize assistance for youth mental health, it is vital to identify points of early detection and management of serious mental illness in school.

First Episode Psychosis and Secondary School Completion

Psychoses represent the most severe of the mental illnesses, experienced predominantly by males, which may lead to a disability that lasts a life time [164, 165]. It causes severe disruption to social and psychological development which can be compounded by further risks of prolonged psychosocial decline and arrested identity formation [21, 166]. Normal developmental challenges such as negotiating peer and parental relationships, and achieving educational and vocational goals are
more difficult due to cognitive impairment, secondary morbidity and stigma [21, 166, 167, 170, 176].

Intensive interventions aimed at maximal symptomatic and functional recovery and relapse prevention are required during the critical early years after diagnosis [21, 154, 168-176, 178]. The emergence of increasing evidence and widespread national and international efforts to reform services and develop treatment approaches for FEP have resulted in intervention centers worldwide that focus on the special needs of young people and their families [21, 166]. However, it has also become increasingly evident that although there has been significant research in the treatment and care of those with FEP, most of it has been conducted in urban settings [155].

People who experience psychosis are among the most socially and economically marginalized members of the community [9, 156, 180-198]. They experience high levels of non-participation and exclusion from the labour force [182-184, 187-189, 194]. In the First Australian National Survey of Psychosis (1997-1998) 48% of participants had not completed secondary school [19]. Educational attainment was consistently associated with employment status with those who had finished school more likely to be employed [160].

The Second Australian National Survey of Psychosis [9] conducted 12 years later confirmed that many individuals with psychosis still have suboptimal educational outcomes with 18.4% having difficulty reading and writing and only 31.9% completing school (68.1% had not) [9]. Nothing had improved in 12 years. Waghorn and colleagues [9] found that more Australian males than females did not attain a secondary school qualification. Not finishing secondary school was more common for those with schizophrenia (36.6%) and schizoaffective disorder (36.8%)

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than those with bipolar affective disorder (27.6%).

Recent studies indicate that in FEP populations 50% have less than 10 years of education [148] and the illness is associated with educational failure [161]. In an American study by Goulding and colleagues [162] 44% of their FEP sample had dropped out of school. The most common diagnosis amongst this group was schizophrenia (paranoid type 46%). In a recent Australian study by Bowman and colleagues [163], 58% of the sample had not finished secondary school. Research is urgently needed to identify effective strategies to assist young people with psychosis or emerging psychosis to pursue their educational goals and complete secondary school.

Current Mental Health Strategies Employed in Secondary Schools

There are many secondary school mental health strategies in operation across the world [42]. There have been at least 52 systematic reviews and meta-analyses examining the effectiveness of mental health strategies in secondary school [42, 201]. Outcomes measured utilized in these programmes include standardized tools or semi-structured interviews concerning severity of depressive symptoms, anxiety symptoms, individual protective and risk factors, school based protective and risk factors, mental health literacy, help seeking preferences, self-worth, school connectedness, perceived levels of teacher support, perceived satisfaction of relationship with peers, coping with childhood adversities and academic achievement [42, 201-209, 212-219, 222-230]. There are three approaches to implementing school mental health strategies.

The first is the universal, whereby teachers implement a whole school curriculum of mental health promotion (social and emotional learning (SEL), emotional literacy, emotional intelligence, resilience, life skills and character
education [201-206]. The evidence shows that this approach is failing to show an impact on the development of mental illness [42, 207, 208].

The second strategy is the selective approach implemented by mental health clinicians in schools where students at risk of developing a mental illness such as anxiety and depression are targeted [209-213]. Evidence for selective school based programme effectiveness is strong but only targets these two diagnoses [42, 214].

The third strategy is the indicated, preemptive or early treatment approach which is also implemented by mental health professionals in schools and targets young people already exhibiting clinical symptoms of anxiety, depression, deliberate self-harm and post-traumatic stress disorder [42, 212, 214-217]. Indicated programmes show stronger outcomes than both universal and selective programmes [211, 212, 215, 218, 219]. Community mental health professionals that work in these roles are social workers, occupational therapists, psychologists and psychiatrists [220]. Some schools have also recruited nurse practitioners to manage the needs of students [221].

Most mental health interventions in Australian schools are universal [222]. These programs aim to increase mental health literacy and teach first aid principles to enhance a student’s sense of self-worth, belonging and purpose [223]. An example of this is ‘MindMatters’, developed eighteen years ago. This approach is the leading initiative for promoting wellbeing and positive mental health in schools, [222, 224]. Specific strategies employed include social and emotional learning programs, effective communication and stress management.

Twelve randomized controlled trials of universal approaches by teachers have been implemented internationally to address anxiety disorders [208, 211] and twenty randomized controlled trials for depression have been implemented which included
more than 10,000 participants [208, 211]. The results of these studies showed that these interventions are not effective at improving or preventing anxiety or depression [42, 208, 211, 212, 225-229]. An Australian randomized controlled study implemented by Beyondblue aimed to address the prevention of depression in secondary school students [230]. Twenty five pairs of Australian secondary schools were matched on socio-economic status and randomly assigned to either an intervention or a comparison group (n = 5634, Year 8 students). This study found that a classroom based cognitive behavioural therapy curriculum of 30 sessions delivered by teachers did not prevent depression in adolescents. This result emphasizes the difficulties in implementing large scale school based interventions and engaging groups of adolescents in prevention programmes. It is clear that this approach makes it challenging to achieve desired outcomes and measurable changes in youth mental health because most do not need it at that time and consequently is poorly targeted [42].

Despite considerable effort and ambitious plans, the evidence indicates that young people are still not being identified effectively and provided with the assistance they require [42]. There is no evidence that school based mental health promotion strategies currently employed in Australia schools are appropriate for FEP. There has been no specific research into the effectiveness of secondary school approaches implemented in rural Australian schools.

Conclusions

The prevalence of mental ill health is high for Australian young people and the onset of depression, anxiety, substance use disorders and FEP commonly occurs when the individual is at school [11-20]. The prevalence is reported to be higher for rural
young people and barriers to treatment exist [45-48, 50-59]. Current evidence suggests that 40% of young people experiencing depression or anxiety disorders are not completing secondary school [147]. Further evidence shows that over 50% of individuals who experience FEP do not finish secondary school [148, 162, 163]. Currently in Australia reasons for school dropout are not recorded nor are individuals screened when dropout occurs. Current mental health promotion strategies employed in secondary schools have not been shown to reduce rates of depression or anxiety in adolescence nor identify prodromal or acute FEP [42, 207, 208, 211, 212, 225-229]. These strategies have not lead to interventions that assist young people with mental ill health to finish school. Not completing secondary school can limit employment options, lead to severe levels of disadvantage and increased burden on welfare and healthcare systems [7-10, 131, 132].

Young people who are unable to finish school due to mental ill health should be a high priority in research. Research is required to clarify the roles and responsibilities of secondary schools and the mental health system. Justification exists for their integration to identify and provide effective treatment that best supports both health and educational attainment. Research is required to identify ways to assist adolescents with psychosis or emerging psychotic disorders complete secondary school in both urban and rural Australia. Further understanding about the experience of secondary schools in rural Australia in managing mental ill health is required. All young people, including those in rural areas, have the right to education, and should not be disadvantaged in their educational aspirations because they have an emerging or current mental illness.


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