Continuity of care and use of youth mental health services: A rapid literature review

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ABSTRACT

Background

Adolescence is a highly vulnerable period of physical and mental development. Around half of all mental health disorders manifest themselves by 14 years of age; however, research shows that the healthcare needs of youth with mental health issues are largely unmet.

Aims

This rapid literature review aims to investigate three issues: 1) youth mental health services that focus on integrated and/or continuity of care; 2) use of youth mental health services; and 3) barriers, facilitators, and challenges associated with youth mental health services.

Method

Researchers used various databases (eg, PubMed, websites, reference lists) to source articles published in English from 2015 to 2021. Two trained researchers reviewed the literature independently over four stages (culls) against the inclusion criteria. Relevant data from the included studies are summarised herein.

Conclusion

Research has shown that delivery of care should be via integrated models of care that seek to maximise use of available resources. However, mental health issues in youth are often complex and treatment plans do not always reflect this complexity or their diversity. Youth, parents, carers, clinicians, and other health professionals (HPs) should have the opportunity to work together to develop treatment plans within integrated, multi-disciplinary models of care that support positive

SUMMARY

Around half of all mental health disorders are evident by 14 years of age. Evidence shows that the healthcare needs of this high-risk group are largely unmet. This review seeks to provide some insights into ways to improve access to youth mental health services, thus optimising health outcomes for youth with mental health issues.

Key Words

Youth mental health; access to health care; continuity of care; use of mental health services; improved health outcomes;
health outcomes for youth. This rapid literature review provides some insight into ways to optimise health and wellbeing outcome for youth with mental health issue.

**BACKGROUND**

We conducted this rapid literature review to inform the development of an evidence-based model of care to govern the practice of nine individual healthcare services that were co-locating into one building (a Health HUB). It was proposed that the new Health HUB offer an accessible “one stop shop” for health and wellbeing services for at-risk youth. The review focused on the barriers, facilitators, challenges, and effectiveness of the delivery of integrated, collaborative youth-focused health services.

The aim of the overall longitudinal project (of which this literature review is the first phase) is to use real-time feedback to improve continuity of care for youth via the development, implementation, and trial of an integrated model of care. The aim of this rapid review was to investigate three issues:

1. Youth mental health services that focus on integrated and/or continuity of care;
2. Use of youth mental health services; and
3. Barriers, facilitators, and challenges associated with youth mental health services.

**METHOD**

**Search terms**

The rapid review followed the evidence-informed guidance of The Cochrane Rapid Reviews Methods Group.¹ We developed and deployed search strategies to source articles published in the English language from 2015–2021. The strategies were informed by the key terms within the aim of this study and their euphemisms; an examination of keywords used by PubMed; and keywords associated with known articles that were relevant to this review.

The search terms used included the following: adolescent continuity of care mental health; young people continuity of care mental health; youth continuity of care mental health; adolescent primary health care mental health; young people primary health care mental health; youth primary health care mental health; adolescent health service use mental health; young people health service use mental health; youth health service use mental health; adolescent barriers health care mental health; young people barriers health care mental health; and youth barriers health care mental health.

Exclusion criteria used to assess relevance of articles were not in English; not related to youth in the target population; research published over 10 years ago; specific treatment studies, too few participants; and not to do with continuity of care and/or service use.

**Process for review of peer-reviewed papers**

A total of 11,154 citations/papers met the criteria under the search term: adolescent + continuity of care + mental health (n=150); young people + continuity of care + mental health (n=119);
youth + continuity of care mental health (n=159); adolescent + primary health care + mental health (n=1077); young people + primary health care + mental health (n=585); youth + primary health care + mental health (n=1138); adolescent + health service use + mental health (n=2525); young people + health service use + mental health (n=1423); youth + health service use + mental health (n=2749); adolescent + barriers health care + mental health (n=316); young people + barriers health care + mental health (n=280); and youth + barriers health care + mental health (n=333).

After the removal of duplicate citations, 4,813 citations remained (Figure 1). We reviewed these citations independently over four stages or “culls”. We reviewed abstracts in the first three culls, then full articles in the final cull. The exclusion criteria used to cull the articles were as follows:

1. 1st cull—not related to youth in the target population, research more than 10 years ago (n=4813 to n=1106);
2. 2nd cull—specific treatment studies, too few participants (n=1106 to n=230);
3. 3rd cull—not to do with continuity of care and service use (n=230 to n=92); and
4. 4th cull—full articles reviewed against inclusion criteria (n=92 to n=36).

We prepared a table after the 3rd cull detailing the authors, methods used, age range, sample size, country/countries were conducted and the main conclusions. We used this table as a checklist and measure of quality of each paper reviewed in the final cull.

**Figure 1: Four review stages required to identify relevant research**
Interrater reliability
As noted previously, we (two trained researchers) reviewed each of the papers independently at each stage of the culling progress. At the end of each stage, we compared our results. As a measure of inter-rater reliability, any papers chosen by one researcher but not the other were reviewed again independently; we then discussed the papers and reached consensus on inclusion or exclusion. In the final cull, we sourced and reviewed full texts to determine inclusion using the same criteria used in the previous culls.

Limitations
We made all efforts to source available published literature pertaining to the aims of this review as per the project’s precise parameters. We conducted this review to inform the development of a model of care to govern the integrated, multi-disciplinary healthcare practice in an Australian setting. It may, however, have relevance to countries with similar healthcare systems to Australia.

Presentation of data
Key findings from all papers that fulfilled the inclusion criteria (n=36) are presented under the main headings of:

- Background/issues associated with youth mental health services;
- Continuity of care and youth mental health services; and
- Service use and youth mental health services.

RESULTS
Background/issues associated with youth mental health services
Adolescence is a highly vulnerable period of physical and mental development. It is therefore important that both mental and physical health are optimised during this time, particularly since around half of adolescent mental health disorders are evident by 14 years of age. This review provides some direction to service providers involved in the care of young people with mental health issues. Critiquing evidence about the effectiveness of continuity of care can be challenging, however, due to factors such as lack of comparability across studies and variability of services evaluated.

It is evident that the most effective approaches to improving healthcare outcomes for youth are those that focus on the development and implementation of shared care plans for individual youth. These integrated models of care improve outcomes, reduce stigma, use limited resources better, and support informed decision-making by young clients. Of concern though is the fact that the healthcare needs of youth with mental health issues are largely unmet, which may be due in part to lower levels of engagement in early treatment by youth, treatment gaps, and a paucity of resources for youth mental health services.

Another significant factor impacting service provision was the lack of HPs with relevant training and experience to effectively diagnose, treat, and manage adolescents with mental health issues.
Continuity of care and youth mental health services

Continuity of Care: Effective evidence-based models of continuity of care in mental health services include brief interventions, medication, patient self-management, specialist treatment, and/or inclusion of shared treatment plans with clinical and non-clinical services. Coordination of local services in regional, rural, and remote areas may lead to more effective care and better health outcomes for youth, compared with service providers working independently. Early intervention (treatment plans), transition support (system navigation), and mobile services (school and homeless services) have proven effective. For example, Wang et al. demonstrated the effectiveness of creating youth-friendly drop-in centres (Youth Wellness Centres [YMC]). Tailored, early interventions implemented through the YMCs were effective in catering to the mental health needs of marginalised and hard-to-reach populations.

Continuity of Care—Barriers: Major barriers exists for youth at risk in accessing health care: negative beliefs about mental health services or HPs; having to repeat their stories over and over; lack of mental health literacy; cost; socioeconomic status; uncertainly about where to get help; and concern about the perception of others around mental health services. Other barriers to effective care include limited clinical expertise, long waitlists, strict eligibility criteria, high turnover of staff, and accessibility to care. Several studies have been successful in reducing barriers to care associated with parents and carers of youth. For example, targeting the attitudes, beliefs, and behaviours of parents and carers reduced stigma, increased use of youth services, and improved communication between all partied involved.

Lack of specialist services is an increasing issue in servicing youth with complex needs. Approximately two-thirds of pediatricians lacked training in the treatment of youth with mental health disorders. Specialised youth training provides clinicians with strategies to enhance their capacity to provide care to this high-risk population. Training also helps clinicians to better understand client perspectives thus helping clients to make informed choices about their own healthcare needs. This is especially true when supporting youth who do not fit into traditional or existing program.

Home environments, preconditions (lack of support, time and resources), being in the “system” for some time, and gaps in collaboration were barriers to effective care. Another concern was that client records are often kept in multiple places with several files on the go at any one time. Where possible, centralised records and databases should be maintained so that decisions about care can be based on all available data.

Continuity of Care—Enablers: Research supported continuity of care as a cost-effective way to achieve better coverage of mental health service to youth, and better health outcomes, particularly for at-risk youth. Enablers to continuity of care include previous positive experiences with health services, cultural adaptation, sociocultural considerations, mental health literacy,
collaboration between services, parental support, shorter wait times, after hour facilities and identification of high-risk groups.\textsuperscript{3,7,8,10,11,20,26} Physicians who can effectively prioritise care, communicate with others, respond competently, and see other perspectives help to facilitate effective care.\textsuperscript{24}

Continuity of Care—Challenges: Challenges to continuity of care include gaps in care required, equity issues, willingness or ability to collaborate with other services, effective crisis management, and referral systems.\textsuperscript{19,27} Furthermore, lack of gold standards across all aspects of mental health care has hampered evaluations of effective care,\textsuperscript{25} as has the lack of research around how to encourage shared decision-making between service providers and with youth.\textsuperscript{8,12}

In general, there was no consistency in referrals within or between services. Streamlining referrals processes facilitated timely care.\textsuperscript{9,28} However, attaining relevant consents while maintaining confidentiality, incompatible processes, and lack of continuity between electronic data systems across services hampered effective shared care.\textsuperscript{7,28}

There was some evidence that youth prefer to see the same practitioner over time and that constant changes in physicians may impact adversely on care.\textsuperscript{14,17} As this is not always practical, helping youth transition between providers should be part of any integrated model of care.\textsuperscript{14,25}

Continuity of Care—Assessing effectiveness: Non-standardised measurement instruments and data collection methods impact adversely on the assessment of continuity of care.\textsuperscript{12,25} They may also lead to variations in results, hinder comparisons across studies, and impact generalisability of results.\textsuperscript{12,25} Direct data collection methods should be used where possible, but indirect sources of data (eg, hospital or service records) may be used as a proxy ensuring that the limitation of these approaches are acknowledged.\textsuperscript{12,25} Assessment of effectiveness should also consider capacity and relationship building, knowledge sharing, and use of technology to facilitate collaboration.\textsuperscript{14,16,22,29,30} Ongoing evaluation is critical to ensure that services are working together effectively and that health outcomes continue to improve.\textsuperscript{31}

Continuity of Care—Facilitators: Key facilitators to continuity of care identified include improved access, effective use of resources, and collaboration across services to promote early recognition of issues and improved health outcomes.\textsuperscript{12} Greater use of technology to facilitate delivery of youth mental health services should be investigated, with ongoing evaluation embedded in services.\textsuperscript{12}

General practitioners (GPs) are ideal conduits to facilitate shared care between young people and other specialised health services.\textsuperscript{12} For example, GPs who have a greater patient load of youth with mental health issues are more confident in supporting their needs; however, they are no more likely to refer them than those with less experience.\textsuperscript{14} If adequately trained, GPs could deliver care in a youth-friendly space, tailored to meet individual needs, and to collaborate with other clinicians.\textsuperscript{12,14} Engaging families in prevention and treatment approaches that support youth with mental health issues has also proven effective.\textsuperscript{7} Further research is needed to identify the most effective strategies to engage and embed family support in youth treatment plans.\textsuperscript{7}
Service use and youth mental health services

Service use—Effective strategies/positive outcomes: Evidence indicates effective treatments and outcomes for youth reduce stigma, improve knowledge of mental health, provide support as needed (transport, monitoring, compliance), have carer or family involvement, and deliver health care in youth friendly spaces.1

Research shows that young people (15–24 years) are more likely to visit a GP for mental health issues assessment and support. As noted previously, they prefer to attend the same GP or group of clinicians over time.9,13,10,12 It is important to note that GPs who consult frequently with youth with mental health issues have higher levels of confidence in identifying and treating mental health issues.13 Accessing preferred services and practitioners may be difficult for youth who live outside main population centres, however, the advent of telehealth services has improved service use, particularly for specialist services such as telepsychiatry.12

Service use—Barriers: Barriers to services use include lack of suitably trained professionals, shortage of resources and funding, lack of coordination of services, cost, cultural inadequacies, and stigma.2,7,12,15,33 Other barriers to access include limited transport, long commutes, scheduling, availability, limited opening hours, parental permission requirements, and staff retention.7,33,34 Stigma and negative beliefs towards HPs are barriers to mental health service use.2,7,10,12,18,21,31 Youth most at risk were often reluctant to seek help.10,31,33 A significant proportion of youth do not use any health care services.12,33 Factors associated with lower use of services include being female, school performance, residing in a lower socioeconomic area, and fewer local youth services.12 Other factors that reduce help-seeking behaviours in youth include parents that don’t accept their child’s diagnosis, family dysfunction, and trauma.35

Most primary care services are not well equipped to identify and treat youth with mental health issues.2,33 Heavy workloads of HPs are barriers to the development of relationships with youth.8,14 Barriers to care in regional or rural areas include lack of internet access, limited or no youth services, limited transport, community attitudes, not enough clinicians, and limited opening hours.7,34

Other issues that impact on access to services for youth include bouncing between services, limited resources, and lack of mental health awareness in schools.3 Some intake procedures are distressing for youth.6 Long delays between initial assessment and their first appointment is a key barrier to retention of youth.7,27 Investigation and identification of complex factors that determine whether youth seek help or use services would help to develop effective strategies to increase access to services.7,31

Service use—Facilitators: Facilitators to effective care include adequate funding, social support, awareness of services, and supportive staff.6,7,34 Coordinated primary care services, timely detection and referral, and workforce development facilitate effective care.1 Local knowledge, a ground-up approach, social networks, and building relationships also facilitate effective access to
Youth are more likely to access services if they hear about them from friends, know about the services, and the services are youth friendly services. Parents help to bridge the gap between youth and clinicians. Parents and carers provide essential support (e.g., transportation plus social and financial support) especially in non-urban areas. Models that include family outreach, telephone service, digital health strategies, and integrated care are most effective. Positive attitudes of parents, carers, and the community to mental health and flexibility of services are key factors to provision of youth mental health services.

Service use—Challenges: Many adolescents struggle to find their own way as they grow into young adulthood. Significant developmental changes indicative of this period of transition are often associated with the inmergence or worsening of mental health issues and problems with substance use. Evidence indicates that although young people could benefit from accessing healthcare services during this vulnerable time, access to and use of relevant services are limited. An urgent need exists to investigate specific barriers to help-seeking behaviours of youth and to find ways to encourage them to seek support, as required.

Parent and/or carer support has proven very effective in optimising the health outcomes of vulnerable young people by facilitating access to services and helping them to adhere to treatments. However, parents and carers are often overwhelmed by the complexities of the healthcare systems and struggle to find a clear pathway to find the most relevant services for those they are seeking to support. Therefore, parents and carers need support to successfully navigate through healthcare systems if they are to effectively support youth in their health care journey.

Service use—Collection and use of data: Another major challenge in access and provision of health services for youth is the lack of data on the use and availability of youth mental health services, and what constitutes effective treatment. Wang et al. has shown how the use of electronic records, held in one repository, proved the effectiveness of early intervention with at-risk youth and thus led to improved health outcomes. Effective ways to combine data from various sources to facilitate comparisons between interventions and services should be considered.

Service use—Other key findings: Encouraging help-seeking behaviours should lead to increased use of services. Strategies are needed to understand how to improve access to youth mental health services. Confidentiality is key to youth continuing to access services and maintaining treatment. Bulk billing is particularly important for at-risk youth, thus funding support is needed if access to care is to be optimised.

Funders and policy makers need to recognise the benefits of integrated services for youth. Youth-centred care should be grounded in the perspectives and needs of youth. Real-world experiences should be considered as a critical component to better inform effective integrated care for youth with mental health issues. Major challenges still exist in access and engagement.
of high-risk youth. Policies need to support collaborative care and continuity within and across similar services to facilitate continuity of care.

There are no agreed upon definitions of service use or common approaches to assessing the effectiveness of services. Standard definitions, measurement instruments and approaches should be investigated to ensure consistency of process, evaluation and cost-effectiveness studies that seek to improve quality of service.

CONCLUSION
This rapid literature review summarises evidence associated with continuity of care and service use related to youth mental health services. Adolescence and young adulthood are times of dramatic change and transition. Research has shown that youth have a high risk of developing mental health issues, with at least half of all mental health disorders manifesting themselves by 14 years of age. Currently, significant gaps exist in access and treatment, with those at highest risk tend to have the lowest levels of engagement with care. This matter is of concern as early intervention with treatment plans tailored to individuals, have proven effective in optimising health and wellbeing outcomes for youth.

Research has shown that delivery of care should be via integrated models of care that seek to maximise use of available resources. Mental health issues in youth are often complex, however, and treatment plans do not always reflect this complexity or their diversity. Youth, parents, carers, clinicians, and other HPs should have the opportunity to work together to develop treatment plans within integrated, multi-disciplinary models of care that support positive health outcomes for young people. This rapid literature review provides some insight into ways to optimise health and wellbeing outcome for young people with mental health issues.

REFERENCES


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PEER REVIEW

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CONFLICTS OF INTEREST

The authors declare that they have no competing interests.

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This research was conducted using the National Health & Medical Research Statement on Ethical Conduct in Human Research and approved by the GPDS Peel Health HUB (PHH) Project Management Group.