Early Intervention and Youth Mental Health: Synergistic Paradigms to Transform Mental Health Outcomes

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Abstract

Early intervention in mental health is increasingly recognized as one of the best opportunities to alter the trajectory of mental illness and to improve patient outcomes. Young people demonstrate the highest incidence, prevalence, and burden of mental illness, making them a key population target for early intervention. Despite their need for care, young people have demonstrated low levels of service access and engagement. Traditional models of care, which reflect neither the pattern of mental disorder onset nor the unique cultural and developmental needs of young people, have formed a barrier to accessing timely mental health care by young people. The creation of a youth mental health stream that provides early intervention within a holistic and preventive framework is transforming the mental health care of adolescents and young adults. In this chapter, we provide an overview of this transformation, including the rationale, outcomes, and future directions of early intervention in youth mental health.

Keywords

Youth mental health · Early intervention · Service reform · Models of care

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Introduction

Mental ill-health is a major health issue currently experienced by young people globally. The vast majority of mental disorders emerge prior to mature adulthood, with half developing by 14 years of age and three-quarters by 24 years (Kessler et al. 2005). Those aged between 10 and 24 years bear the largest burden of mental illness (Mokdad et al. 2016). This pattern of onset and impact has led to mental illnesses being viewed as the "chronic diseases of the young" (Insel and Fenton 2005). Over the last decade, there has been growing recognition that the life stage of youth, that is the period of transition from childhood to young adulthood[1] (12–25 years), is a critical window of opportunity for improving mental health outcomes (McGorry 2011; Fusar-Poli 2019). In response to this, early intervention services with a priority focus on transition age youth have been implemented internationally. This was initiated in Australia through the creation of "headspace." In this chapter, we provide an overview of promising youth mental health service innovations, with a specific focus on headspace. First, the rationale for youth-specific early intervention services such as headspace is described; second, the development, outcomes, and global impact of headspace are summarized; and third, the future directions of early intervention in youth mental health are discussed.

The Early Intervention and Youth Mental Health Service Reform Imperative

Although mental health is a major public health concern, the treatment gap for mental illness is excessively high (Patel et al. 2018). This is most apparent in young people who, despite constituting the age group with the highest incidence, prevalence, and burden of mental illness, have the worst access to mental health care (Burgess et al. 2009). The timing of intervention plays a critical role in preventing the entrenchment of mental health symptoms and related negative impacts. Young people typically demonstrate a need for care prior to reaching the threshold for a traditional major psychiatric diagnosis (Rickwood et al. 2014) where distress, functional impairment, and early signs of mental illness are apparent, making early intervention at this time point crucial to preventing or reducing the severity of a full-threshold disorder (McGorry and van Os 2013). While some cases of mental illness are transitory, those that emerge early in life can commonly follow a course that is characterized by chronicity and multiple episodes of relapse (Gibb et al. 2010). This can be associated with a range of adverse outcomes that include premature death, social isolation, poor functioning, and poor educational and vocational productivity (Gibb et al. 2010; Morgan et al. 2017; Walker et al. 2015). There is compelling evidence that the course and functional impacts of even the most serious forms of mental illness can be positively altered through early intervention (Correll et al. 2018; Killackey et al. 2019).

Young people's poor access to mental health care reflects a range of individual and service-level barriers that are related to the design of available services and young people's help-seeking behaviors. Seeking help for a mental disorder can be a challenging experience and a complex process for young people. Their reluctance to seek help is influenced by factors such as reduced mental health literacy, a preference to solve their own problems, perceived stigma of mental illness, negative attitudes toward services, and confidentiality concerns (Rickwood et al. 2007). Prior to making contact with professional services, young people often begin the help-seeking process by seeking informal support from their social and family networks (Rickwood et al. 2015b). Initial contact with professional services is most likely to occur via their general practitioner (GP) (Lawrence et al. 2015). However, the culture of GP settings and their predominant focus on physical health can

[1]In this chapter, the term "young adult" refers to individuals aged between 20 and 25 years, while "adolescent" refers to those aged up to 19 years. The terms "youth" and "young people" are used interchangeably to refer to individuals aged between 12 and 25 years.

make them unsuitable for young people with mental health problems who are often hesitant to disclose emotional problems (Rickwood et al. 2007).

Further service-level barriers include the insufficient resourcing and poor design of specialist mental health services for young people. The configuration of traditional and current mental health services follows that of mainstream medicine where care follows a child and adolescent versus adult divide; however, neither stream is fully responsive to the specific needs of adolescents and young adults. Typically, child and adolescent services are provided until around 18 years of age. After this point, a young person must transfer to the adult service stream for continuing care. Traditional child and adolescent services largely address the needs of young children. As such, they are more suitable for managing disorders that emerge earlier in childhood (e.g., ADHD, conduct disorder, and developmental disorders) than adult-type disorders that emerge during adolescence (e.g., mood, psychotic, substance use, and personality disorder). Although child and adolescent services may manage adolescents up to 18 years of age, they often lack the expertise to effectively treat older adolescents, especially those who present with severe and complex presentations, which require more specialized and intensive treatment. The adult mental health stream is equally unsuitable for young people, since it is not specifically designed to cater for the unique clinical, developmental, and cultural needs of young people who are experiencing the early stages of mental illness. Adult services are largely focused on managing the acute crises of middle-aged patients with severe and persistent psychotic disorders. The narrow criteria for entry into adult services results in a large proportion of young people in need of mental health care being denied access (Killackey 2019). This includes young people with nonpsychotic disorders as well as those with subthreshold symptoms of mental ill-health who also require professional care (McGorry 2007). Since the latter present with a clinical profile that lacks the syndromal specificity and intensity needed to meet adult-type diagnostic criteria, they are often deemed ineligible for adult mental health services.

The adoption of a pediatric-adult model of care for mental health is a design flaw from an epidemiological, biological, and cultural perspective. Firstly, the arbitrary divide at 18 years of age directly coincides with the age range where the incidence of mental illness peaks. This has a significant negative effect on the continuity of care for adolescents who need to transition to the adult stream for ongoing treatment. The seriousness of this discontinuity has been demonstrated in the UK where over 95% of young people make a suboptimal transition to adult mental health services (Singh et al. 2010). This reflects a transition process that is often poorly planned, coordinated, and delivered (Singh et al. 2010; Perera et al. 2017), leading to young people falling through the gaps, service disengagement, poor mental health outcomes, and young people feeling anxious about transitioning to the adult stream (Dunn 2017; Singh 2009; Singh et al. 2010; Perera et al. 2017).

Secondly, the pediatric-adult model does not reflect modern society and the evolution of adolescence. Today's adolescents demonstrate a lengthened period of development, with the transition to mature adulthood continuing well into the third decade of life (Arnett et al. 2014; Sawyer et al. 2018). This phenomenon has occurred in response to a range of biological, maturational, and societal trends (Arnett et al. 2014), including earlier pubertal timing, protracted brain maturation, and delayed independence and initiation of adult roles (Lebel and Beaulieu 2011; Twenge and Park 2019; Australian Institute of Health and Welfare 2017; Parent et al. 2003). Although the impact of secular trends on mental health outcomes is not fully understood, there is evidence to suggest that it has heightened the risk of mental illness. Numerous studies have demonstrated a rising rate of mental health problems in young people (Weinberger et al. 2018; Collishaw 2015; Sellers et al. 2019; Twenge 2015), which is supported by reports of increasing rates of suicide (Twenge et al. 2018) and worsening functional outcomes (Sellers et al. 2019).

Applying Early Intervention to Youth Mental Health Care

The current configuration of mental health care based on a pediatric-adult split sells adolescents and emerging adults short. Its failure to reflect the epidemiology of onset of mental illness creates a critical barrier to care that prevents access to early intervention. A pediatric model, which privileges the needs of younger children, can successfully focus on prevention and early intervention for the disorders that do emerge prepubertally, notably autism, conduct disorder, ADHD, and anxiety. However, the surge of new morbidity from puberty through to the mid-20s, which encompasses all the syndromes that feature across the decades of adult life, means that a new, distinct youth-focused approach to mental health care is essential. The goal is to ensure that young people can access services and that the quality and continuity of care offered by services can effectively meet their clinical, developmental, and cultural needs. This has led to the creation of a discrete youth mental health model of care that differs from those designed for children and older adults but with seamless linkages across streams (McGorry et al. 2007). Youth-specific services are required owing to the unique needs of young people and the complex and evolving pattern of morbidity and symptomatic fluidity that is characteristic of this population (McGorry et al. 2014). The early stages of a mental state disorder in young people are often characterized by a range of co-occurring problems, including substance abuse and personality difficulties, which require an integrated approach to mental health care. In addition to responding to this heterogeneous pattern of clinical presentation, services should address the cultural and developmental needs that are unique to adolescents and young people, which are typically not catered for within the adult service stream (McLaren et al. 2013). Such needs include a young person's individual and group identity and their help-seeking preferences and behaviors.

To effectively respond to the diversity and complexity of need among young people, a multilayered approach to care is required where different service levels are available that have the capacity to manage the high volume of presentations and the full spectrum of need. Service levels that could cover the range, complexity, and severity of mental illness seen in young people include e-health, primary or enhanced primary care services for those with mild-to-moderate mental ill-health, and specialized backup services for those with complex or severe presentations (e.g., personality, mood, and psychotic disorders) (McGorry et al. 2014). These systems should be guided by key principles of mental health care for young people (Box 1). They should address the individual and service-level barriers to accessing care, which involves enhancing mental health literacy and providing care that is accessible, acceptable, affordable, non-stigmatizing, and appropriate to the young person's developmental phase and stage of illness (McGorry et al. 2014).

Box 1 Key Principles for Systems of Mental Health Care for Young People. (Reproduced from McGorry et al. (2014) with Permission)

- Youth participation at all levels, to enable the creation of youth-friendly, stigma-free cultures of care that provide what young people and their families really need.
- Care that represents the epidemiology of mental ill-health in young people and acknowledges the developmental culture of emerging adults.
- A holistic, preventive, and optimistic framework that emphasizes early intervention and offers a comprehensive, evidence-informed, stepped care, which is governed by risk-benefit considerations and shared decision-making, with key targets of social and vocational outcomes.
- An integrated practice unit in which providers of care are organized around the needs of the young person and their family and through which a dedicated team of clinical and nonclinical personnel

(continued)

Box 1 (continued)

provide the full cycle of care for the young person's disorder; this approach fundamentally changes the way clinicians are organized to deliver care.

- Elimination of discontinuities at peak periods of need for care during developmental transitions.
- Positive and seamless links between services for young children and adults.
- Flexible tenure and reentry to care as needed during the crucial period of transition from childhood to adulthood.

For over a decade, innovative reform in the design and delivery of youth mental health care has gained international momentum. The positive outcomes resulting from the implementation of early intervention for psychotic disorders in the 1990s, including evidence of treatment benefit and global service transformation (Correll et al. 2018; van der Gaag et al. 2013; McGorry 2015), provided the foundations for a broader application of early intervention that spanned the full range of emerging mental disorders in young people. This included mood and anxiety disorders, substance use disorders, eating disorders, and personality disorders (McGorry et al. 2006, 2014; Chanen and McCutcheon 2013). The transformation of mental health services for young people originated in Australia through an evidence-informed and innovative approach ("headspace") and has subsequently spread to other nations (Illback and Bates 2011; Iyer et al. 2015; Vyas et al. 2014; McGorry et al. 2007, 2013). Strengths of the headspace model are its flexibility and ability to address community needs (Rickwood et al. 2015a). This means that the model can be adapted to suit a range of local contexts while maintaining the common goal of developing a youth mental health stream that provides integrative and seamless care from adolescence to mature adulthood, with soft transitions between child and adult services.

Australia's Innovation: Enhanced Primary Mental Health Care for Young People

headspace, the National Youth Mental Health Foundation, was established in 2006 with the mission to promote and support early intervention for young people aged 12–25 years with a range of mental disorders (McGorry et al. 2007). The headspace model of care is underpinned by (i) ten service components (youth, family, and friends participation, community awareness, enhanced access, early intervention, appropriate care, evidence-informed practice, four core streams, service integration, and supported transitions) and (ii) six enabling components (national network, lead agency governance, consortia, multidisciplinary workforce, blended funding, and monitoring and evaluation) (Rickwood et al. 2019). These core components currently represent best practice to deliver and reform youth mental health care (Rickwood et al. 2019).

headspace is an enhanced primary care model that provides young people with integrated mental health, drug and alcohol, physical and sexual health, and vocational supports. These four core streams of care are supplemented by headspace's community awareness campaigns that enhance young people's help-seeking behavior, facilitate the early identification of emerging mental health problems, and strengthen referral pathways into the service (McGorry et al. 2014). A key goal of the headspace model is to establish youth-friendly and highly accessible centers that target young people's core health needs via a multidisciplinary care model with close connections to local specialist services and community organizations (Rickwood et al. 2019). This is underpinned by headspace's strong commitment to youth participation and engagement, which ensures a stigma-free and soft entry to care that is more acceptable to young people and more likely to encourage service access and engagement.

Most headspace clients are experiencing the early stages of illness, which are often associated with significant distress and functional impairment, risk of self-harm and suicidal ideation, and substance abuse (Rickwood et al. 2014, 2015c;

Scott et al. 2012). These alone, as well as their risk of persistence and progression, warrant a need for care with a strong emphasis on appropriate and preventive interventions. headspace delivers early intervention within a preventive framework that provides evidence-informed stepped care guided by risk-benefit considerations and shared decision-making, with key targets including social and vocational outcomes (McGorry et al. 2014). First-line treatments typically consist of simple and brief psychosocial interventions, with pharmaceutical approaches reserved for those who do not benefit from initial psychosocial interventions or who present with more severe symptoms or risk (McGorry et al. 2014). The advantage of this approach is that care can be matched to a young person's stage of illness, with a key focus on providing the right evidence-based interventions at the right time to improve outcomes and reduce the risk of illness progression (McGorry et al. 2006). This is in line with the clinical staging model, which distinguishes early and mild clinical features from those that are more severe and established (McGorry et al. 2006). The clinical staging model's focus on early detection and preventive intervention makes it particularly relevant to young people since (i) the onset of mental illness is most common at this stage of life, (ii) traditional diagnostic systems fail to capture the early stage of illness, and (iii) the poor specificity of their symptom profiles means that treatment approaches will differ to those for a full-threshold illness (McGorry and Hickie 2019). The model's ability to capture the differential risk of illness progression supports its ability to guide service delivery, particularly regarding resource allocation and developing evidence-based stage-specific intervention and prevention strategies (Iorfino et al. 2019).

The outcomes of headspace have been favorable across a number of domains. This success has resulted in headspace being scaled up to 110 centers nationally, with funding committed for a further 30. In the 2017/2018 financial year, a total of 88,557 young people accessed a headspace center and 33,793 accessed eheadspace, its online and phone service (headspace 2018). Of those who accessed a headspace center, most were female (60%) and were engaged in education and/or employment (80%) (headspace 2018; Hilferty et al. 2015). Approximately three quarters of young people who access headspace present with high or very high levels of psychological distress at entry (Hilferty et al. 2015). Regarding treatment outcomes, 60% of headspace clients show significant reductions in symptoms and/or functional impairment (Rickwood et al. 2015c), with reductions especially seen in suicidal ideation, self-harm, and days absent from school or employment (Hilferty et al. 2015). In addition, high levels of satisfaction have been reported by young people and their families who access headspace services (Rickwood et al. 2017; Hilferty et al. 2015).

headspace has played a central role in enhancing access to mental health care, particularly for a number of marginalized and at-risk groups. Compared to the general Australian youth population, demographic groups overrepresented at headspace are young people who are Indigenous, identify as lesbian, gay, bisexual, transgender, or inter-sex (LGBTI), reside in regional Australia, and are disengaged from work or study (Hilferty et al. 2015). This suggests that headspace has improved service access for young people who have traditionally been disadvantaged in accessing mental health care. This positive finding reflects headspace's social and cultural inclusiveness as well as the priority allocation of headspace centers within regions where access to mental health care is limited due to factors such as remoteness or disadvantage. Young people who are experiencing homelessness or insecure housing are also overrepresented as headspace clients; however, sustained engagement with this population has been identified as a challenge (Hilferty et al. 2015). Demographic groups underrepresented at headspace are young people from culturally and linguistically diverse backgrounds (CALD) and young people living in the most advantaged and disadvantaged areas of Australia (Hilferty et al. 2015).

Social and cultural inclusivity is a fundamental component of the headspace model (Rickwood et al. 2019). Each center is able to tailor their décor to local need to ensure that the center's

environment is comfortable and culturally welcoming. This may involve strategies such as displaying Aboriginal art and the Aboriginal and Torres Strait Islander flags, having posters and messages that acknowledge LGBTIQ and cultural groups, and providing access to interpreters (Rickwood et al. 2015d). Addressing the needs of CALD young people is important, especially since the population growth for 12–24 year olds has been faster for CALD young people than their Australian-born peers (Hugo et al. 2014). While access to headspace by young people from CALD backgrounds remains a challenge, strategies to improve this have been recommended, including engagement with local CALD communities, ensuring a culturally inclusive environment (e.g., displaying culturally appropriate information and welcome signs in a range of languages), developing culturally appropriate treatments, providing headspace staff with cultural awareness training, and employing a CALD workforce (Rickwood et al. 2015d).

Global Progress in Early Intervention and Youth Mental Health

Beyond Australia, progress in youth mental health reform has expanded to other parts of the globe, with the UK, Ireland, Canada, the USA, Europe, and Asia adopting similar, culturally appropriate models (Hetrick et al. 2017). Available services include Jigsaw in Ireland (O'Keeffe et al. 2015), Youthspace in Birmingham (Vyas et al. 2014), ACCESS Open Minds in Canada (Malla et al. 2019), Foundry in British Columbia, @Ease in the Netherlands, allcove in the USA, and headspace in Denmark, Israel, and Iceland. Collectively, integrated models of care have yielded positive outcomes in terms of access to care, symptomatic and functional recovery, and client satisfaction (Hetrick et al. 2017). Although youth models of care have predominately been implemented in high-resource settings, they can be adapted for low- and middle-resource settings to improve access to care and effectively meet the mental health needs of young people worldwide in a manner that is culturally appropriate and acceptable. A current area of development is designing a global framework for youth mental health care that supports the implementation of early intervention for young people across all resource settings (low, middle, and high). The global progress achieved thus far has been facilitated by a number of platforms, which have supported evidence-based reform through innovation in research and translation. These platforms include the International Association for Youth Mental Health, the International Youth Mental Health Research Network, IEPA: Early Intervention in Mental Health, Frayme, and the journal *Early Intervention in Psychiatry.*

Future Directions for Youth Mental Health

Despite the promising outcomes to date, the task of creating, evaluating, and scaling up youth-focused mental health care remains an ongoing challenge (McGorry 2019). Additional work is needed to realize the potential of early intervention for young people with mental ill-health and to reduce the significant unmet need experienced by this population globally.

From an Australian perspective, the headspace model of care could be further strengthened through stronger national oversight to ensure integrative commissioning and additional funding streams to extend tenure of care, improve model fidelity, and support core streams (e.g., alcohol and other drug and vocational interventions) (McGorry et al. 2019). There is also an urgent need for headspace to address the high and growing level of demand for services, which most headspace centers have struggled to meet due to underlying systemic issues (e.g., resource constraints, workforce availability, difficulty recruiting and retaining staff, and the physical constraints of centers) (headspace 2019).

One solution to addressing this unmet need among young Australians is expanding the headspace model to effectively respond to the full spectrum of illness complexity and severity. Although headspace was designed to address mild-to-moderate mental health concerns, a

considerable subset of clients present with higher levels of need (McGorry et al. 2014; Rickwood et al. 2014). Among the 40% of headspace clients who do not significantly benefit from treatment are young people with complex or severe forms of mental ill-health who require more specialized, intensive, and extended care than can be currently provided at headspace. Such care may include mobile home-based and outreach care, specific disorder-based expertise, and acute and subacute residential care. Despite a high need for care, this group of young people are often denied service access, as they are deemed either not unwell enough or too ill for service entry within the acute and primary care systems. This service gap is reflected in the increasing mental health-related presentations in emergency departments (Hiscock et al. 2018), a setting that is often unsuitable and traumatic for young people who are in distress and experiencing mental ill-health.

A current priority for reform is addressing this "missing middle" of young people, which requires ongoing investment for, and strengthening and integration of, youth mental health systems to effectively manage the full spectrum of presentations (McGorry and Hamilton 2017). This would involve creating seamless transitions of care from primary to tertiary services and ensuring coordination with social systems through a vertically integrated system. In Australia, this has begun to be addressed in the field of early psychosis through the establishment of 6 headspace Youth Early Psychosis Program (hYEPP) centers that are linked to a local cluster of headspace services. A future goal is to similarly expand the care offered at headspace by incorporating services for young people who present with complex and severe presentations across the diagnostic spectrum of mental illness (McGorry et al. 2018, 2019). This is a key step to ensure that access and quality of care is equitable for all young people experiencing mental illness.

Addressing the socioeconomic disparities in mental health among Australian young people remains a challenge (Lawrence et al. 2015). While the allocation of headspace centers prioritizes lower socioeconomic communities, young people residing in the most disadvantages regions of Australia are slightly underrepresented as headspace clients (Hilferty et al. 2015). National coverage of headspace is the ultimate goal, with young people in every region of Australia having equal access to a headspace center (McGorry et al. 2019).

Conclusion

The life stage of youth presents a critical opportunity to reduce the incidence, prevalence, and burden of mental disorders through early intervention with a preventive focus. Young people have distinct developmental and cultural needs that must be considered in the design of early intervention services, in addition to their specific psychosocial needs and pattern of disorder onset. Youth-focused models of care have demonstrated that by addressing these areas, barriers to mental health care can be reduced, service engagement can be enhanced, and treatment discontinuity at critical periods can be eliminated. The service reform achieved thus far has paved the way for further innovative developments, including strengthening models of care to ensure that evidence-based interventions are accessible to all young people across the entire spectrum, complexity, and severity of mental illness.

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