

Adolescent Mental Health Care: Time for Revolution



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Abstract

Compared to the mental health of adults, the mental health of young people is often disproportionately affected by disasters. The transitional phase from adolescence into young adulthood represents a window of opportunity to prevent new onset and to improve the outcomes of mental disorders. To a worldwide estimate, in the year 2020 between 10-20% of adolescents would have suffered from mental health problems for the first time. The main aim of this paper is to critically review the unmet needs necessary for developing integrated mental health services for adolescents and young people and to provide recommendations to be implemented in mental health services after the COVID-19 pandemic. The COVID-19 pandemic has been a global disaster that has affected the lives of adolescents and their families on multiple levels. Adolescents must receive the physical and mental care they need to develop, grow and enjoy a satisfying quality of life. Furthermore, both vertical, horizontal and longitudinal integration should be promoted.

Keywords: Youth mental health; Innovation; Mental health services; Integrated care; Multidisciplinary

Introduction

The COVID-19 pandemic has been a global disaster that has affected the lives of adolescents and their families on multiple levels. While physical health is understandably the priority during a pandemic, the impact of the COVID-19 pandemic and resulting measures on mental health has also been a major concern [1]. Indeed, the scientific literature provides clear evidence of the psychological and psychiatric impact that general health conditions have had on the general population [2,3].

Since the beginning of the COVID-19 epidemic, researchers around the world have focused more on the impact on mental health in the children and adult population, while, in our opinion, little attention has been paid to the effects of COVID-19 on adolescent mental health.

Adolescence usually includes people aged between 10 and 19 years [4], while people from 19 to 25 years old are considered young adulthood [5].

Adolescence has often been labeled by developmental theorists as a time of storm and stress [6] both due to physical and chemical changes [7] and the regulatory system still largely underdeveloped until early adulthood [8]. Another distinctive feature of adolescence is the marked increase in social sensitivity and the importance of peers [9]. These essential characteristics of adolescence have been severely threatened by the pandemic. Indeed, Gruber et al. [1] conceptualized the COVID-19 pandemic as a multidimensional stressor [1].

Furthermore, adolescence is a developmental stage in which many psychological symptoms increase in prevalence and numerous psychological problems may emerge for the first time [10].

On the other hand, adolescence, with its ongoing changes in behavioral functions and underlying neural circuits represents a "window of opportunity" to carry out early interventions in the prevention of the development of psychopathologies [11].

It is important to highlight that possible psychopathological alterations are not equally likely in all adolescents. Disasters tend to amplify pre-existing social (education, income, access to healthcare, access to other support services including psychological support) and personal (aspects relating to resilience) inequalities, resulting in an unequal impact on young people [12,13].

If we take into consideration that approximately a quarter of the world's population is represented by adolescents [14] and that about 75% of mental disorders begin before the age of 25 [15], the mental health of adolescents becomes an aspect of primary global importance.

Moreover, developing a serious mental disorder at a crucial time in life is an important predictor of persistent negative socioeconomic and health outcomes, such as economic disengagement, unemployment, low income, welfare dependency, low education and illness [16-18].

However, available evidence suggests that relatively mild mental disorders that develop during adolescence often do not persist into early adulthood [19]. Therefore, youth-focused interventions designed to reduce the risk of symptom onset or prevent progression from relatively mild mental health problems to more serious mental health problems can have a significant impact on long-term economic, educational and health outcomes.

Although past literature reported a growing trend of psychopathological aspects in adolescents before 2019 [20,21], according to the global estimate, in the year 2020 between 10-20% of adolescents would have suffered from mental health problems [22]. Numerous studies have established an association between the COVID-19 pandemic and rates of anxiety [23-27]. Other research has identified a high association between the pandemic and depression [28-31]. The study conducted by Duan et al. [24] identified an association between depression and social media use, such as smartphone addiction and Internet addiction. Guo et al. [32] identified an association between COVID-19-related stress and depression.

Surveys of young people's use of psychoactive substances report an initial decrease in alcohol and drug use, perhaps partly due to fewer opportunities for social use [33]. Other studies suggest that frequent and problematic substance use during the pandemic has increased in some high-risk youth, such as those with comorbid psychopathology [34-37].

Studies on suicide risk and/or attempted suicide have reported no increased rates of death by suicide [38,39]. Regarding emergency room visits for suicide attempts, the data are conflicting. One study reported a decrease in hospital attendance for self-harm behavior in the early months of the pandemic [40], while others reported small increases in suicidal ideation and suicide attempts among young people presenting to children's

hospitals [41] and those admitted for a psychiatric condition [42].

During the COVID-19 pandemic, adolescents with a previous diagnosis of anorexia nervosa reported a 70% increase in poor eating habits and an increase in thoughts associated with eating disorders [43]. Furthermore, an unprecedented increase in the number of hospitalizations for restrictive eating disorders has been reported [44,45].

Pre-pandemic maltreated adolescents experienced higher rates of post-traumatic stress disorder (PTSD) and higher rates of anxiety [31]. The study [46] which evaluated various groups of young people, including adolescents diagnosed with OCD, established a worsening of symptoms (44.6%). Adolescents suffering from conduct disorders and Attention-deficit/hyperactivity disorder (ADHD) presented an increase in externalizing symptoms [47]. Furthermore, observed increases in externalizing symptoms were highly associated with lower levels of socialization and parental and peer support [48].

Regarding gender, studies have established higher rates of COVID-19-related anxiety among women [29,49].

Few studies have been conducted on marginalized groups [50] and adolescents with neurodevelopmental disorders such as autism, intellectual disability and ADHD [51].

For the mental well-being of adolescents, it appears important to also consider the effects that the restrictive measures linked to the pandemic have had on young people's family relationships. Some studies highlight the worsening of intra-family conflicts between parents and adolescent children in different ways at different times of the lockdown [52,53]. Other evidence suggests that spending more time with family during the pandemic was a protective factor for young people's mental health while spending more time online and more time connected virtually with friends were positively associated with depression [28].

The effect of the pandemic and the resulting restrictive measures on the use of social media by young people is important but still unclear. Although pre-pandemic literature has established a link between adolescents' excessive use of social media and poorer psychological well-being, such as depressive symptoms [54], risky behaviors [55], and body image disturbances [56], studies carried out during the pandemic led to ambiguous results [57].

Furthermore, recent reviews classified risk and protective factors for the mental health effects of the COVID-19 pandemic [58-60].

The main aim of this paper is to critically review the unmet needs necessary for developing integrated mental health services for adolescents and young people and to provide recommendations to be implemented in mental health services.

Materials and Methods

A literature search was conducted on major databases to find useful studies for the purposes of this paper.

Discussion

The effects of the COVID-19 pandemic on adolescent well-being have reinforced the importance of putting systems in place to support adolescent well-being. The Partnership for Maternal, Newborn & Child Health, and the World Health Organization (WHO) in collaboration with the United Nations H6+Technical Working Group on Adolescent Health define children and youth well-being as “having the support, confidence, and resources to thrive in contexts of secure and healthy relationships, realizing their full potential and rights” [61]. In 2020, Ross et al. [62] proposed five interconnected well-being domains with subdomains and requirements (e.g., good health and optimum nutrition, learning and competence, connectedness, safety and supportive environment, agency and resilience).

In 2002, the WHO identified five key points to promote the delivery of quality health care for young people consisting of accessibility, acceptability, appropriateness, effectiveness, and equity of care [63]. Moreover, six different groups of youth-friendly health services have been delineated:

- a) health service specialized in children and adolescent care in a hospital setting;
- b) similar specialized service located in the community;
- c) school or college-based and stakeholders connected with schools or universities;
- d) community-based center providing health services and other services (e.g., help with literacy and numeracy skills);
- e) pharmacies and shops that sell health products but do not provide health services;
- f) outreach information and service provision.

O'Brien et al. [64] reported the gap between the prevalence of mental disorders in young people and the rates of access to treatments (25-35%), highlighting an important paradox: people with the highest level of need have the worst chance of treatment.

Many factors must be taken into consideration regarding the difficulties and barriers that young people encounter in accessing mental health services, which in our opinion, can be summarized in three factors: service, personal and social factors.

The discussion of barriers related to service factors should start from the original bifurcation of pediatric services and adult services, still leaving a gap for services for adolescents [65]. Primary care professionals experience difficulties in the recognition of youth mental health problems [64] and have already expressed a need for better training in adolescent health [66,67]. Furthermore,

poorly trained health professionals encounter difficulties in communicating with young people and their parents [68]. Young people often are unhappy with the consultation resulting in high dropout rates [69]. There are difficulties in receiving the first visit [70] and delays in starting treatment [71]. Some services are inaccessible for reasons relating to cost, where they are located, limited opening hours or lack of advertising and visibility [72-74].

A recent systematic review [75] showed young people's stigmatizing beliefs about mental healthcare, mental health professionals, and access to care. Many adolescents report fear of a lack of confidentiality from health workers [76], about being recognized in a clinic waiting room and about being scolded or carrying out unpleasant procedures [77].

Social determinants frameworks appear to be related to many health inequalities and differential access to resources around the world, such as economic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context [78]. Extensive evidence supports the impact of social determinants on mental health [79,80]. In some developing countries, restrictive laws and policies limit access to services for some groups of young people [81]. Moreover, during the pandemic, marginalized groups have been less able to engage with telehealth services [82].

Currently, mental health services are still predominantly organized around diagnostic categories diagnoses of adult mental disorders [83] that are poorly adapted to the developmental characteristics of adolescents. Indeed, the current diagnostic systems for mental disorders (DSM-5 and ICD-11) do not allow a diagnosis to be made if symptom expression is below a certain cut-off value.

Over the years, alternative approaches that reflect psychopathological dimensions have been advocated such as the Research Domain Criteria [84] and the Hierarchical Taxonomy of Psychopathology (HiTOP) [85], but proposals for an evolutionary perspective on emerging psychopathology have been rare [85,86].

Dimensional approaches are certainly necessary for the clinical evaluation of sub-threshold or prodromal symptoms that allow early interventions and preventions to be carried out.

The cornerstone of early intervention in psychiatry was certainly represented by early intervention for psychotic disorders [87] based on the clinical stage model of mental disorders [88]. Subsequently, similar interventions have been proposed for bipolar disorders [89] and major depressive disorders [90].

On the other hand, according to Rose's Strategy for Preventive Medicine [91] “a large number of people exposed to a small risk may generate many more cases than a small number exposed to a high risk”. From this perspective “the high-risk strategy” could be less effective in reducing the prevalence of the disease than “the population strategy”.

Public health is a term “coined in the early 19th century to distinguish actions governments and societies - as opposed to private individuals - should take to preserve and protect the people’s health” [92]. Therefore, if we wanted to intervene in public mental health, we should dedicate more resources to prevention rather than treating the individual through “the population strategy”.

Regarding adolescents, “the population strategy” translates into interventions aimed at the multiple factors that can influence the mental health of young people.

Recently, Fazel and Sonesson [93] have proposed a new conceptual framework of interventions entitled “the Interactional Schema” of child and adolescent public mental health. This schema places an enhanced emphasis on the interactional nature of three factors influencing child and adolescent mental health: interpersonal, community and institutional. The framework de-emphasizes individual-focused interventions by encouraging public health and prevention approaches especially with interventions delivered outside specialist mental health settings.

To address the shortcomings of the health system for the mental health of young people, since the beginning of this century, broad-spectrum approaches have emerged [94,95] with models of integrated primary mental health care [96].

Literature provides multiple definitions of integrated healthcare [97], but the one that best suits the purposes of this article is “...changes to health or both health and health-related service delivery which aim to increase integration or coordination” [98].

Starting from the project called “Headspace” founded in Australia [99], we are witnessing a global renewal in youth mental healthcare characterized by multidisciplinary, integration and delivery in a single setting that constitutes a soft entry point to mental healthcare. Numerous nations all around the world are now adopting an integrated youth primary care model [100].

Common features of these models include:

- a) clear separation of services for young people from those of children and adults with particular attention to the transition phase;
- b) greater participation of young people in service planning and reduction of stigma;
- c) single healthcare location with high visibility in the local community;
- d) flexible and soft approach to diagnosis especially in the early stages of mental ill-health.

A growing literature is highlighting the improvement in the possibility of accessing services, short-term clinical improvements and high levels of satisfaction among families [101-103].

Due to the negative outcomes of the COVID-19 pandemic on mental health among adolescents, it is imperative to provide strategies to prevent the onset of even serious psychopathological alterations today and in the future [104].

The COVID-19 pandemic has certainly represented a global disaster, but it may also have created countless possibilities for changes in youth mental health services and interventions. In this sense, the restrictive measures adopted to stem the COVID-19 pandemic could represent an issue to reflect on for future public health interventions.

In our opinion, the revolution of the youth care system should include two fundamental macro-areas integrated with each other: re-think public health institutions and promote prevention/early interventions.

Public health institutions include national and international organizations (e.g., the WHO), Ministry of Health, governments, local administrations, national health systems (where present), mental health services, primary, secondary, tertiary care, schools, etc.

Greater cooperation and integration between institutions appear necessary, to reduce the marginalization of minority groups, promote equality of rights and social security policy, address poverty and socioeconomic inequality and greater equity in the possibility of access to care. So far, the effects of these policies on mental health appear mixed [105-107].

An important aspect of the implementation of the care system is represented by the incorporation of the point of view of adolescents. Co-production experiences have shown positive results [108,109].

For about fifteen years, the WHO has recognized primary care as the heart of mental health care [110] as numerous advantages are using this approach (i.e. reduced stigma and barriers, feasibility across most healthcare contexts, etc.). Previous reviews have reported positive data on primary [111,112], secondary and tertiary integration interventions [113] in terms of better accessibility to health services, reduction of waiting times and better early detection of health problems and treatment. Furthermore, health services should have a more widespread presence throughout the territory, particularly primary care, even in the most rural areas, with the possibility of carrying out home interventions.

To reduce barriers, improve the engagement of young people and make the first contact with institutions more accessible, there are some experiences with voluntary youth or paid peer workers [114,115].

The integration of new digital technologies could on the one hand improve accessibility and engagement to care and on the other be used to carry out therapeutic interventions [116-119]. This has been especially true during the COVID-19 pandemic

[120]. Digital technologies can also be used in population-based prevention approaches and to help prevent relapse [121,122].

As regards health specialists, and in particular mental health, more training should be carried out for the recognition of the first stages of psychopathological alterations, but also to improve the relationship with young people. A new model of youth mental health care should be fostered with the establishment of a new subspecialty of youth psychiatry, separated from the medical model of pediatrics and in close collaboration with adult psychiatry.

The literal meaning of the term “prevention” is “the act of preventing something from happening” [123]. Based on the moment in which it acted during the pathology, the prevention phases were classified as primary, secondary and tertiary [124]. For the purposes of this article, we will not take into consideration the phases of the disease to be prevented, but the areas in which to act and in particular: the family and peers, the community, the school and the individual.

Family and peer relationships play a key role in youth well-being [125-127]. Scientific literature supports strong evidence on the health of young people with parenting interventions [128]. Moreover, treatment of parental mental illness can reduce the risk of new diagnoses in children [129]. Friendship interventions reported limited evidence on adolescents’ mental health [130].

Social and independent activities in the natural environment can improve mental health outcomes, but there is little evidence that these interventions may have on the incidence of new psychopathological disorders [131-133]. Social cohesion may help protect against the development of anxiety and depression among adolescents and young adults [134]. Important opportunities for intervention in the community are represented by participation in artistic and recreational activities [131,135,136].

Awareness, anti-stigma and mental health promotion campaigns are of fundamental importance for raising awareness among the general population, but most are generic or for adults [137].

The school, even if it is considered an institution, represents a focal point of prevention interventions as a place of relationships between individuals, peers, families and communities. It also represents a fundamental place in the recognition of non-clinically significant symptoms, where preventive interventions can be carried out constantly and systematically. Numerous prevention interventions have been carried out within schools for suicide, self-harming behaviors, substance misuse and bullying with variable efficacy data on young people’s well-being [138-142]. Furthermore, good evidence supports the positive effects of physical activity during school hours on students’ mental health [143,144].

For interventions on the individual, the first step to take is to focus on new diagnostic approaches, facilitating interventions for subthreshold expressions of emerging psychopathology as early as possible. As already demonstrated, younger age of onset is a predictor of longer duration of symptoms, comorbidities and worse outcomes [145].

Even if the literature highlights the greater effectiveness of indicated prevention interventions [146,147], in our opinion, we should first focus more on universal and selective prevention interventions through primary care and school and only subsequently, on indicated interventions provided by secondary care systems and tertiary.

In summary (Figure 1), the key recommendations for implementing public health institutions include:

- a) Greater cooperation and integration;
- b) Co-production experiences with adolescents;
- c) Implementation of primary care;
- d) Integration of voluntary youth or paid peer workers;
- e) Integration of new digital technologies;
- f) Better training and subspecialty.

On the other hand, the key recommendations for prevention include:

- a) Parenting and peer interventions;
- b) Social activities;
- c) Mental health promotion campaigns;
- d) School interventions;
- e) Dimensional approach;
- f) Primarily a universal intervention.

Lastly, we completely agree with Fazel and Sonesson’s statement “...mental health interventions are not necessarily confined to an individual psychological and/or pharmacological approach, and many children and adolescents could stand to benefit from interventions that take a broader view of the multitude of interpersonal-, community- and institutional-level factors that influence mental health”.

Conclusion

Due to dramatic and sudden changes in their lives during the pandemic, thousands of teenagers around the world could still be at risk for psychopathological disorders creating a mental health “pandemic” scenario.

We believe they deserve an inclusive response in terms of global health measures to avert potentially serious and long-lasting

effects in terms of marginalization, stigma and psychopathological developments. Vertical, horizontal and longitudinal integration should be promoted. Despite scientific evidence, the institutions

that deal with the mental health of young people are still inefficient even with new approaches that are still not widespread in the world.

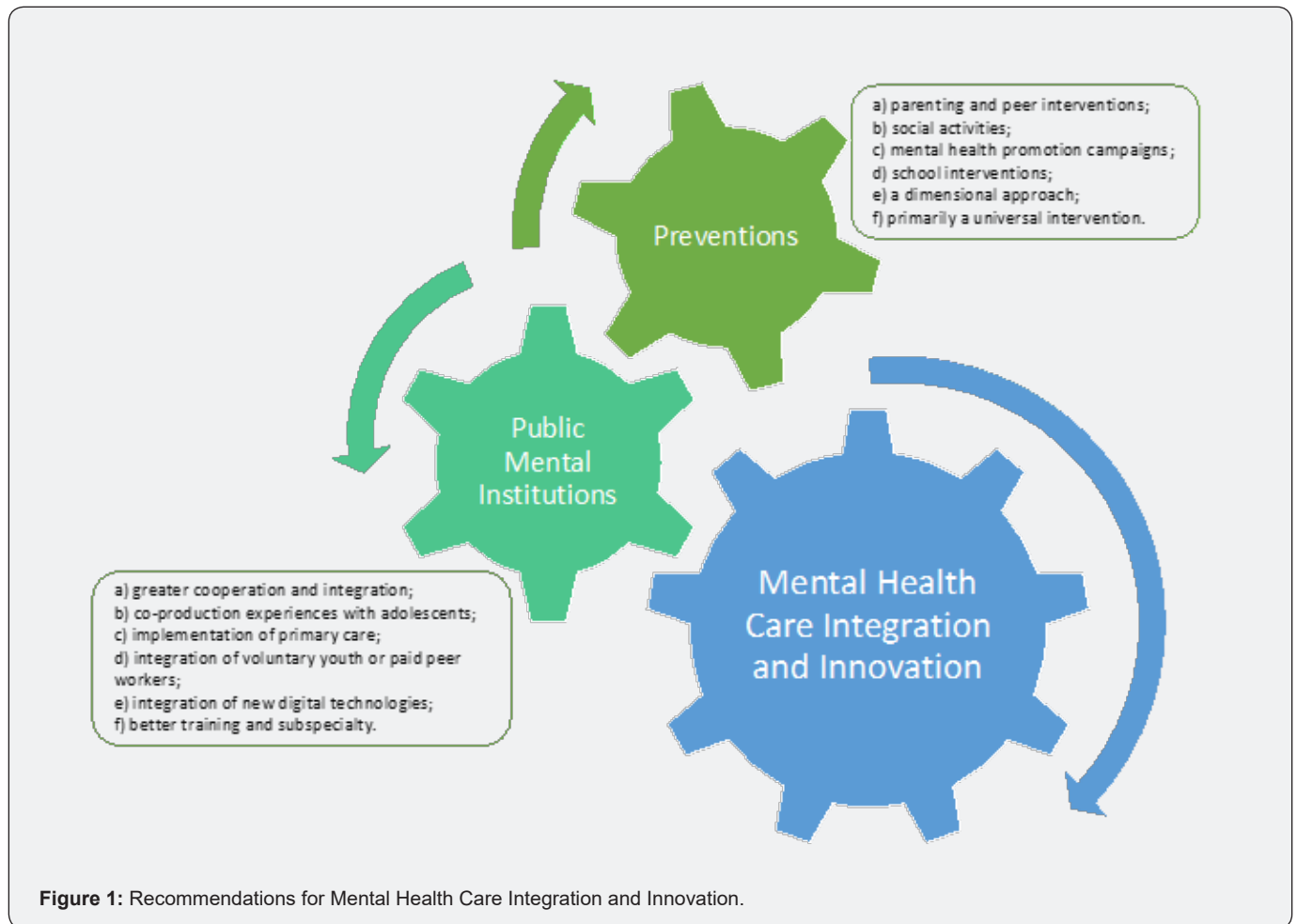


Figure 1: Recommendations for Mental Health Care Integration and Innovation.

The current lack of an adequate care system requires an absolute priority in carrying out a conceptual and practical revolution of health services for the current and future well-being of young people. On the other hand, broader prevention campaigns should be implemented to intercept potentially serious dimensional clinical aspects from a longitudinal perspective.

Thinking of the mental health of young people as a common good to be protected, the fundamental changes to be made are in the internal world and the external world of the individual, of the community, of public health institutions.

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