

Deteriorating Mental Health Needs among Youth

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Introduction

Historically, mental health of children, adolescents and young adults has been overlooked or given less priority compared to adult mental health. This disparity is reflected in the provision of services and policies, with children and adolescents mental health services (CAMHS) emerging more recently and, to date, inconsistently across countries (Signorini et al., 2017). The current mental health paradigm focuses on the treatment and management of fully established disorders in adulthood, neglecting the importance of early intervention and prevention strategies (Fusar-Poli et al., 2021). Moreover, the organization of mental health services, based on the differentiation between CAMHS and adult mental health services with 18 years of age serving as threshold, often results in service fragmentation and care disruption (Tuomainen et al., 2018).

However, evidence of epidemiological and psychosocial factors challenges this perspective and suggests a shift toward a new paradigm, with (a) prevention and early intervention as core strategic areas, and (b) the creation of new avenues of care which overcome the traditional separation of mental health services based on age. In this paper I present an analysis grounded in psychosocial factors and epidemiological evidence, advocating for a transformation in mental health service provision to prioritize the mental health needs of young individuals and to overcome the traditional division at 18 years of age.

Adolescence as a sensitive period

Adolescence and young adulthood represent sensitive periods critical for the exploration and formation of the self, for brain development, and sociocultural processing (Fuhrmann et al., 2015). Unlike childhood, where caregivers structure environments, adolescence marks a period of increased autonomy and the initiation of self-responsibility, reaching a peak during young adulthood. The degree of sensitivity during this transition is influenced by the social cues, experiences and contexts individuals encounter (Fuhrmann et al., 2015). Adolescence and young adulthood involve an identity change, and are per se already a transitioning stage of life (McNamara et al., 2017). Substantial evidence underscores the impact of childhood adversities, social isolation and social media on both physical health and mental wellbeing (Shonkoff et al., 2009). This period signifies a particular vulnerability to the effects of stress on mental health, with earlier onset often leading to more severe outcomes compared to later onset, frequently resulting in mental health problems in adulthood and diminished functioning (Andersen & Teicher, 2008; Caspi et al., 2020; Fuhrmann et al., 2015; Shonkoff et al., 2009; Zisook et al., 2007).

In the face of such issues, users lose the right to access CAMHS once they reach the age of 18, having to transition from CAMHS to adult mental health services (AMHS). Yet, the transition between services is not always guaranteed and when there is a transition mechanism available the process is often less than smooth (Signorini et al., 2017). Turning 18 coincides with exiting the school system, resulting in the loss of supportive figures within that environment. It further signifies entry into the adult world, characterized by newfound responsibilities and increased independence. This age-related threshold often places individuals at a disadvantage in accessing and receiving adequate and continuous care (Tuomainen et al., 2018). Moreover, CAMHS capacity across European countries does not appear to map onto subsequent rates of mental health conditions (Signorini et al., 2017). As a result, gaps between CAMHS and AMHS have been recently discussed and addressed by the MILESTONE initiative (Signorini et al., 2017, 2018).

The COVID-19 pandemic has worsened youth mental health, with depression rates more than doubling among 18-29 years-olds across Europe, reaching prevalence levels twice as high as in older age groups (OECD & European Union, 2022). The pandemic led to increased social isolation and distancing, reduced physical activity, bereavement, loss of resilience and heightened stress (Bilu et al., 2023; Manchia et al., 2022; Panchal et al., 2023). The profound impacts of the pandemic, Russia's aggression in Ukraine, the conflict between Palestine and Israel, the climate crisis, unemployment, increasing living expenses, and the pervasive influence of the digital world and social media have intensified existing concerns, anxieties, and feelings of depression. These factors may all exacerbate overall mental health challenges for individuals everywhere, yet children and young people are disproportionately affected by these challenges, especially during the critical stage of adolescence, emphasizing the pressing need for increased support and attention to this vulnerable group.

Epidemiological evidence

There is strong epidemiological evidence on the early onset of mental health conditions and the burden they cause at population-wide level. According to a European population study, the proportion of individuals with onset of any mental disorder before the age of 18 is 15% and the peak age at onset of any mental disorders is 16 and 18 years in female and males respectively (Dalsgaard et al., 2020). Early age of onset has been associated with poorer outcomes and increased duration of untreated illness (de Girolamo et al., 2012).

The Global Burden of Disease (GBD) study routinely provides an assessment of the status of the population, by quantifying global and regional effects of diseases, injuries, and risk factors (Castelpietra et al., 2022). European estimates of the burden of mental disorders on adolescents and young adults aged 10-24 were recently done (Castelpietra et al., 2022). In Italy in 2019, mental disorders were the leading cause of years lived with disability (YLD), contributing to 2144,31 YLDs [1505,93–2937,16] (Institute for Health Metrics and Evaluation (IHME), 2020). YLDs are the years lived in less-than-ideal health which take into account the disability caused by the disorder, thus quantifying the actual burden of the disorder on the life of the individual (Castelpietra et al., 2022). Anxiety disorders ranked as second cause of YLDs and depressive disorders ranked as fourth, contributing to a total of 694,63 [466,68–992,06] and 574,35 [365,8–856,59] YLDs per 100 000 inhabitants, respectively (Institute for Health Metrics and Evaluation (IHME), 2020). Among mental health conditions, anxiety disorders were the leading cause of YLD rates per 100 000 population in 2019, contributing to 9,37% [6,68%–12,52%] of total YLDs (Institute for Health Metrics and Evaluation (IHME), 2020).

A study was carried out among adolescents and young adults aged 14-25 years old living in Lombardy, the most populous region of Italy, using electronic health records. The study assessed treated prevalence of mental disorders from 2016 to 2021. Furthermore, the study examined indicators of mental health service use and drug prescriptions, which were referred to as treated prevalence. The results show an overall increase in mental health service utilization across the 14-25 year old population from 2016 to 2021, with the highest rates among 14-17 year old adolescents. Moreover, increasing treated prevalence emerged for females, whereas in males a loss of contact and a disengagement from the services was observed. In general, psychotropic medication prescriptions (of antidepressants, antipsychotics and stimulants) were the indicator displaying the sharpest increase since 2016, especially among the 14-17 year old group. The latter finding aligns with reports from other countries and regions, showing increasing rates of prescriptions among adolescents and young adults (Amill-Rosario et al., 2022; Bliddal et al., 2023; Rodríguez-Cano et al., 2024), suggesting increasing needs and general worsening of mental health among adolescents and young adults, especially since the COVID-19 pandemic. Other reasons behind the surge in prescription rates include the insufficient availability of non-pharmacological treatment and of psychologists, together with an increased flexibility in prescribing via telehealth. Additionally, the study showed that the first phase of the pandemic led to a reduction in access to care in both hospitals and community-based services, which was due to the reduction in supply of care and not of service needs.

Unmet needs

The study discussed above highlighted growing unmet mental health needs of youth. Considering the critical importance of adolescence and young adulthood, both from a psychosocial perspective and supported by epidemiological evidence, and recognizing that disability at a young age can have enduring effects, not only on individuals but also on public health, it could be argued that an effective mental health system should prioritize allocating resources towards services tailored to managing care for adolescents and young adults. This would encompass early intervention, prevention, and health promotion efforts targeted at the younger members of the population. However, mental health needs of the youngest are often neglected, and the resources allocated do not match the burden and needs (Erskine et al., 2015; Kieling et al., 2011). Initiation of treatment is often delayed, resulting in more severe and persistent conditions, whereas early intervention could have reduced their severity and persistence (de Girolamo et al., 2012; McGorry et al., 2006). Mental health conditions often remain undetected and unmanaged at length, especially with earlier age of onset (Erskine et al., 2015). One in two young Europeans reported unmet needs for mental health care in the spring of 2021 and 2022 (OECD & European Union, 2022). Moreover, young people have challenges in accessing mental health care, an issue that gained relevance during the pandemic. The disruptions in care delivery exacerbated the challenges faced by already-stretched mental health services (OECD & European Union, 2022; Radez et al., 2021).

Priorities and recommendations

Health policy and program planning must prioritize mental health conditions due to the substantial burden they impose in terms of disability. The current mental health system is unable to adequately cater to the rising mental health needs of adolescents and young adults, and this has been further proven by the increasing medication prescription rates observed worldwide. Moreover, efforts to reduce disease burden have predominantly focused on treatment, prevention and modification of health-related behaviors or greater accessibility of healthcare in adulthood, rather than during youth. However, an adult-centric approach may not be the most efficient from a public health standpoint, given the significantly high unmet needs among the youngest of society. Hence, policy should pivot towards a different perspective that prioritizes prevention over resource allocation for treatment. As such, we suggest such an approach and discuss some aspects of it. At a service provision level, researchers have proposed a new service design characterized by the construction of new youth-friendly avenues of care for young people transitioning to adulthood, alongside a strengthening and re-engineering of existing systems (de Girolamo et al., 2012; McGorry, 2007). This entails establishing a unique model of mental health care specifically designed for youth aged 15-25 years old, which will be added to the existing child, adult and older persons' avenues of care (McGorry, 2007). In addition, each avenue should be flexible regarding the age boundaries for accessing the service, in order to limit the fragmentation between different services, thereby ensuring a smooth transition.

To ensure the creation of a youth-based avenue of care or a transformation of the current mental health system, resources should be allocated to capacity building and training for a broader spectrum of professionals involved with young people. Those may include schoolteachers, sport coaches, religious group leaders. Their training may include the recognition of warning signs, risk factors, and social determinants of mental health conditions which typically manifest during youth. Health professionals specializing in youth mental health should be trained in the specific issues of this group as well.

Preventive and health promotion strategies are also critical. This approach is rooted in evidence that shows reducing disadvantage early in life may reduce the population-level burden later, and, by acting on potentially modifiable circumstances, mental health conditions may be prevented or minimized (Shonkoff et al., 2009). Such strategies should be developed by starting off understanding risk factors which predispose certain groups to develop a mental health condition, and rooted in scientific evidence, as the development of mental health conditions is influenced by psychological factors, genetic risk factors and socio-environmental

determinants (Shonkoff et al., 2009). Together with preventive strategies, early intervention should also be embedded in the system, to mitigate the long-term morbidity and mortality due to mental health problems, improve prognosis and increase access to care (Uhlhaas et al., 2023).

Conclusions

The COVID-19 pandemic, conflicts and the influence of social media have all contributed to the deterioration of mental health of young people, highlighting the critical nature of the youth phase. By presenting data from the GBD study in Italy and an epidemiological study on mental health service use in Lombardy, I aimed to emphasize the urgency of addressing this issue. Furthermore, I provided reasons why the age threshold of 18 for intake into adult mental health services and exit from CAMHS lacks empirical support from both an epidemiological and psychosocial perspective. There is a clear need to re-evaluate how mental health services are structured and delivered, given not only that mental health issues are the leading cause of disability in young people, but also their early age of onset and increasing prevalence rates. Existing services are unable to meet the growing demand due to fragmentation and inadequate staffing. Prioritizing the mental health needs of adolescents and young adults requires a more efficient allocation of resources. Additionally, strengthening prevention and early intervention, alongside developing new care pathways for transitioning between services, could effectively address the increasing burden of mental health conditions.

References

- Amill-Rosario, A., Lee, H., Zhang, C., & dosReis, S. (2022). Psychotropic Prescriptions During the COVID-19 Pandemic Among U.S. Children and Adolescents Receiving Mental Health Services. *Journal of Child and Adolescent Psychopharmacology*, 32(7), 408–414. <https://doi.org/10.1089/cap.2022.0037>
- Andersen, S. L., & Teicher, M. H. (2008). Stress, sensitive periods and maturational events in adolescent depression. *Trends in Neurosciences*, 31(4), 183–191. <https://doi.org/10.1016/j.tins.2008.01.004>
- Bilu, Y., Flaks-Manov, N., Bivas-Benita, M., Akiva, P., Kalkstein, N., Yehezkeli, Y., Mizrahi-Reuveni, M., Ekka-Zohar, A., Shapiro Ben David, S., Lerner, U., Bodenheimer, G., & Greenfeld, S. (2023). Data-Driven Assessment of Adolescents' Mental Health During the COVID-19 Pandemic. *Journal of the American Academy of Child & Adolescent Psychiatry*, 62(8), 920–937. <https://doi.org/10.1016/j.jaac.2022.12.026>
- Bliddal, M., Rasmussen, L., Andersen, J. H., Jensen, P. B., Pottgård, A., Munk-Olsen, T., Kildegård, H., & Wesselhoeft, R. (2023). Psychotropic Medication Use and Psychiatric Disorders During the COVID-19 Pandemic Among Danish Children, Adolescents, and Young Adults. *JAMA Psychiatry*, 80(2), 176–180. <https://doi.org/10.1001/jamapsychiatry.2022.4165>
- Caspi, A., Houts, R. M., Ambler, A., Danese, A., Elliott, M. L., Hariri, A., Harrington, H., Hogan, S., Poulton, R., Ramrakha, S., Rasmussen, L. J. H., Reuben, A., Richmond-Rakerd, L., Sugden, K., Wertz, J., Williams, B. S., & Moffitt, T. E. (2020). Longitudinal Assessment of Mental Health Disorders and Comorbidities Across 4 Decades Among Participants in the Dunedin Birth Cohort Study. *JAMA Network Open*, 3(4), e203221–e203221. <https://doi.org/10.1001/jamanetworkopen.2020.3221>
- Castelpietra, G., Knudsen, A. K. S., Agardh, E. E., Armocida, B., Beghi, M., Iburg, K. M., Logroscino, G., Ma, R., Starace, F., Steel, N., Addolorato, G., Andrei, C. L., Andrei, T., Ayuso-Mateos, J. L., Banach, M., Bärnighausen, T. W., Barone-Adesi, F., Bhagavathula, A. S., Carvalho, F., ... Monasta, L. (2022). The burden of mental disorders, substance use disorders and self-harm among young people in Europe, 1990–2019: Findings from the Global Burden of Disease Study 2019. *The Lancet Regional Health - Europe*, 16, 100341. <https://doi.org/10.1016/j.lanepe.2022.100341>
- Dalsgaard, S., Thorsteinsson, E., Trabjerg, B. B., Schullehner, J., Plana-Ripoll, O., Brikell, I., Wimberley, T., Thygesen, M., Madsen, K. B., Timmerman, A., Schendel, D., McGrath, J. J., Mortensen, P. B., & Pedersen, C. B. (2020). Incidence Rates and Cumulative Incidences of the Full Spectrum of Diagnosed Mental Disorders in Childhood and Adolescence. *JAMA Psychiatry*, 77(2), 155–164. <https://doi.org/10.1001/>

- de Girolamo, G., Dagani, J., Purcell, R., Cocchi, A., & McGorry, P. D. (2012). Age of onset of mental disorders and use of mental health services: Needs, opportunities and obstacles. *Epidemiology and Psychiatric Sciences*, 21(1), 47–57. Cambridge Core. <https://doi.org/10.1017/S2045796011000746>
- Erskine, H. E., Moffitt, T. E., Copeland, W. E., Costello, E. J., Ferrari, A. J., Patton, G., Degenhardt, L., Vos, T., Whiteford, H. A., & Scott, J. G. (2015). A heavy burden on young minds: The global burden of mental and substance use disorders in children and youth. *Psychological Medicine*, 45(7), 1551–1563. Cambridge Core. <https://doi.org/10.1017/S0033291714002888>
- Fuhrmann, D., Knoll, L. J., & Blakemore, S.-J. (2015). Adolescence as a Sensitive Period of Brain Development. *Trends in Cognitive Sciences*, 19(10), 558–566. <https://doi.org/10.1016/j.tics.2015.07.008>
- Fusar-Poli, P., Correll, C. U., Arango, C., Berk, M., Patel, V., & Ioannidis, J. P. A. (2021). Preventive psychiatry: A blueprint for improving the mental health of young people. *World Psychiatry*, 20(2), 200–221. <https://doi.org/10.1002/wps.20869>
- Institute for Health Metrics and Evaluation (IHME). (2020). GBD Compare Data Visualization. Seattle, WA: IHME, University of Washington. Available from <http://vizhub.healthdata.org/gbd-compare>
- Kieling, C., Baker-Henningham, H., Belfer, M., Conti, G., Ertem, I., Omigbodun, O., Rohde, L. A., Srinath, S., Ulkuer, N., & Rahman, A. (2011). Child and adolescent mental health worldwide: Evidence for action. *The Lancet*, 378(9801), 1515–1525. [https://doi.org/10.1016/S0140-6736\(11\)60827-1](https://doi.org/10.1016/S0140-6736(11)60827-1)
- Manchia, M., Gathier, A. W., Yapici-Eser, H., Schmidt, M. V., De Quervain, D., Van Amelsvoort, T., Bisson, J. I., Cryan, J. F., Howes, O. D., Pinto, L., Van Der Wee, N. J., Domschke, K., Branchi, I., & Vinkers, C. H. (2022). The impact of the prolonged COVID-19 pandemic on stress resilience and mental health: A critical review across waves. *European Neuropsychopharmacology*, 55, 22–83. <https://doi.org/10.1016/j.euroneuro.2021.10.864>
- McGorry, P. D. (2007). The specialist youth mental health model: Strengthening the weakest link in the public mental health system. *Medical Journal of Australia*, 187(S7), S53–S56. <https://doi.org/10.5694/j.1326-5377.2007.tb01338.x>
- McGorry, P. D., Hickie, I. B., Yung, A. R., Pantelis, C., & Jackson, H. J. (2006). Clinical Staging of Psychiatric Disorders: A Heuristic Framework for Choosing Earlier, Safer and more Effective Interventions. *Australian & New Zealand Journal of Psychiatry*, 40(8), 616–622. <https://doi.org/10.1080/j.1440-1614.2006.01860.x>
- McNamara, N. B., Coyne, I., Ford, T. J., Paul, M., Singh, S. P., & McNicholas, F. (2017). Exploring social identity change during mental healthcare transition. *European Journal of Social Psychology*, 47, 889–903.
- OECD, & European Union. (2022). *Health at a Glance: Europe 2022*. Available at: <https://www.oecd.org/health/health-at-a-glance-europe/>
- Panchal, U., Salazar de Pablo, G., Franco, M., Moreno, C., Parellada, M., Arango, C., & Fusar-Poli, P. (2023). The impact of COVID-19 lockdown on child and adolescent mental health: Systematic review. *European Child & Adolescent Psychiatry*, 32(7), 1151–1177. <https://doi.org/10.1007/s00787-021-01856-w>
- Radez, J., Reardon, T., Creswell, C., Lawrence, P. J., Evdoka-Burton, G., & Waite, P. (2021). Why do children and adolescents (not) seek and access professional help for their mental health problems? A systematic review of quantitative and qualitative studies. *European Child & Adolescent Psychiatry*, 30(2), 183–211. <https://doi.org/10.1007/s00787-019-01469-4>
- Rodríguez-Cano, R., Lotre, K., von Soest, T., Rognli, E. B., & Bramness, J. G. (2024). Loneliness in adolescence and prescription of psychotropic drugs in adulthood: 23-year longitudinal population-based and registry study. *BJPsych Open*, 10(2), e61. Cambridge Core. <https://doi.org/10.1192/bjo.2024.22>
- Shonkoff, J. P., Boyce, W. T., & McEwen, B. S. (2009). Neuroscience, Molecular Biology, and the Childhood Roots of Health Disparities: Building a New Framework for Health Promotion and Disease Prevention.

JAMA, 301(21), 2252–2259. <https://doi.org/10.1001/jama.2009.754>

- Signorini, G., Singh, S. P., Boricevic-Marsanic, V., Dieleman, G., Dodig-Ćurković, K., Franic, T., Gerritsen, S. E., Griffin, J., Maras, A., McNicholas, F., O'Hara, L., Purper-Ouakil, D., Paul, M., Santosh, P., Schulze, U., Street, C., Tremmery, S., Tuomainen, H., Verhulst, F., ... De Girolamo, G. (2017). Architecture and functioning of child and adolescent mental health services: A 28-country survey in Europe. *The Lancet Psychiatry*, 4(9), 715–724. [https://doi.org/10.1016/S2215-0366\(17\)30127-X](https://doi.org/10.1016/S2215-0366(17)30127-X)
- Signorini, G., Singh, S. P., Marsanic, V. B., Dieleman, G., Dodig-Ćurković, K., Franic, T., Gerritsen, S. E., Griffin, J., Maras, A., McNicholas, F., O'Hara, L., Purper-Ouakil, D., Paul, M., Russet, F., Santosh, P., Schulze, U., Street, C., Tremmery, S., Tuomainen, H., ... MILESTONE Consortium. (2018). The interface between child/adolescent and adult mental health services: Results from a European 28-country survey. *European Child & Adolescent Psychiatry*, 27(4), 501–511. <https://doi.org/10.1007/s00787-018-1112-5>
- Tuomainen, H., Schulze, U., Warwick, J., Paul, M., Dieleman, G. C., Franić, T., Madan, J., Maras, A., McNicholas, F., Purper-Ouakil, D., Santosh, P., Signorini, G., Street, C., Tremmery, S., Verhulst, F. C., Wolke, D., & Singh, S. P. (2018). Managing the link and strengthening transition from child to adult mental health care in Europe (MILESTONE): Background, rationale and methodology. *BMC Psychiatry*, 18(1), 167. <https://doi.org/10.1186/s12888-018-1758-z>
- Uhlhaas, P. J., Davey, C. G., Mehta, U. M., Shah, J., Torous, J., Allen, N. B., Avenevoli, S., Bella-Awusah, T., Chanen, A., Chen, E. Y. H., Correll, C. U., Do, K. Q., Fisher, H. L., Frangou, S., Hickie, I. B., Keshavan, M. S., Konrad, K., Lee, F. S., Liu, C. H., ... Wood, S. J. (2023). Towards a youth mental health paradigm: A perspective and roadmap. *Molecular Psychiatry*, 28(8), 3171–3181. <https://doi.org/10.1038/s41380-023-02202-z>
- Zisook, S., Rush, A. J., Lesser, I., Wisniewski, S. R., Trivedi, M., Husain, M. M., Balasubramani, G. K., Alpert, J. E., & Fava, M. (2007). Preadult onset vs. Adult onset of major depressive disorder: A replication study. *Acta Psychiatrica Scandinavica*, 115(3), 196–205. <https://doi.org/10.1111/j.1600-0447.2006.00868.x>