



A Comprehensive SWOT Analysis of Youth Mental Health in England and India

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Abstract

Background: The rise of mental health challenges among young people represents a critical global issue, carrying profound implications for individuals, society, and the economy at large. England and India demonstrate distinct prevalence rates, health infrastructures, and socio-cultural factors that influence youth mental health. **Methods:** This study employs a SWOT analysis to rigorously evaluate and contrast strategies for addressing youth mental health in England and India. We sourced data from national surveys, government reports, and peer-reviewed literature. **Results:** England showcases a robust mental health infrastructure, with specialised services and substantial resource allocation. In contrast, India is making strides with legislative advancements, integrating mental health into primary healthcare, and launching emerging awareness campaigns. Challenges encompass resource constraints, workforce deficiencies, stigma, and inequities in access across both nations. We are poised to leverage policy enhancements, implement community interventions, advance digital mental health solutions, and forge international collaborations. We face challenges such as inadequate funding, increasing demand, workforce limitations, and disjointed service delivery. **Conclusion:** Cross-cultural learning and strategic investment in youth mental health can enhance service delivery, reduce stigma, and improve outcomes. Both countries can benefit from sharing best practices while tailoring interventions to local socio-cultural and economic contexts.

Subject Areas

Health Policy

Keywords

Youth Mental Health, SWOT Analysis, Public Health Policy

1. Introduction

This research utilised a systematic literature review spanning from 2010 to 2023, exploring databases such as PubMed, Scopus, Google Scholar, and various governmental sources through the application of Boolean keyword combinations. The inclusion criteria focused on national youth mental health policy and service delivery sources, while excluding clinical studies and non-English materials. The prevalence of mental health problems in young individuals has emerged as a significant global issue, carrying significant consequences for individuals, families, and communities. In the present situation, it is imperative to analyse the condition of mental health among young individuals in various nations to comprehend the disparities in occurrence rates, fundamental determinants, and the consequences influenced by cultural, social, and economic circumstances [1]. This article examines the disparities in mental health among young individuals in two distinct nations, namely England and India. Based on a survey carried out by NHS Digital in 2017, it was found that 12.8% of children and young individuals between the ages of 5 and 19 in England were diagnosed with a mental condition. Conduct disorders, emotional disorders (such as anxiety and depression), and hyperactivity disorders are the most prevalent mental health conditions affecting young people in England [1]. In the context of England, suicide has emerged as a prominent contributor to mortality rates among the younger demographic. In recent years, there has been a progressive increase in the suicide rate among those aged 10 to 24 [2]. In the context of India, empirical research indicates that an estimated range of 7.3% to 12.5% of children and adolescents have mental health challenges. Nevertheless, it is important to acknowledge that the reported incidence of mental health issues may be underestimated and potentially higher than what is currently documented, mostly due to underreporting and restricted availability of mental health treatments [3]. Depression and anxiety disorders are prevalent mental health issues encountered by the youth population in India [4]. The prevalence of suicide among the youth population in India is a subject that warrants attention and worry. Based on the data provided by the National Crime Records Bureau (NCRB), it was observed that in the year 2019, there was a recorded total of more than 13,000 instances of self-inflicted deaths within the demographic of individuals aged 14 to 29 in the nation [5]. This analysis will compare the approaches used by England and India to tackle mental health issues that are prevalent among young people in both countries. This study tries to determine the strengths, weaknesses, opportunities, and dangers that each nation faces in dealing with this issue by doing a SWOT analysis. Specifically, the acronym stands for “strengths, weaknesses, opportunities, and threats”.

2. Methodology and Literature Search Strategy

This thorough study carefully identified, evaluated, and integrated literature on youth mental health from both English and Indian viewpoints. A comprehensive search was performed across PubMed, Google Scholar, and Scopus to collect both

peer-reviewed and grey literature. Boolean operators were utilised to pinpoint relevant papers by merging “youth mental health”, “adolescent well-being”, “SWOT analysis”, “mental health policy”, “England”, and “India”. We gathered a diverse range of sources from 2010 to 2023, emphasising national policy frameworks, service delivery, and the results related to adolescent mental health. Prominent health organisations and government entities, such as the WHO (2021), NHS England (2019), and the Ministry of Health and Family Welfare (2021), have released official documents to ensure both relevance and accuracy. The studies encompassed a focus on various SWOT areas, meticulously crafted to resonate with the unique socio-economic landscape of each nation. The secondary analyses are thorough and clearly presented, following recognised public health guidelines [6] [7].

2.1. Strengths

Regarding its strengths, England possesses a well-developed mental health infrastructure and a healthcare system that is solidly entrenched. The claim is supported by empirical studies and evidence-based interventions, creating a robust foundation for tackling mental health issues among young individuals. Services such as CAMHS (Child and Adolescent Mental Health Services) and early intervention programs offer specialized care, including implementation within educational institutions, supported by a workforce of over 14,000 full-time equivalent staff committed to CAMHS across the nation [8] [9]. The country’s enhanced economic standing facilitates a greater distribution of resources and capital towards mental health services, as evidenced by the NHS mental health budget, which amounted to around £13 billion in 2020-21, marking a 10% rise over the preceding five years [4]. The resources include specialized support and knowledgeable professionals, thereby augmenting England’s ability to provide thorough and effective mental health care services for young individuals [8] [10]. On the other hand, India exhibits significant strengths in its growing recognition of mental health as a crucial public health concern and its initiatives to incorporate mental health services within primary healthcare frameworks. For example, the National Mental Health Programme (NMHP) currently encompasses more than 600 districts, with the objective of decentralizing mental healthcare and extending its reach to rural regions [11]. The Mental Healthcare Act of 2017 establishes a framework centered on rights for patients, with the objective of integrating mental health care into broader health systems, thereby indicating significant legislative advancement [12]. Moreover, the mental health workforce in India, though constrained, has experienced a gradual increase, currently comprising about 0.75 psychiatrists and 0.12 psychologists for every 100,000 individuals [13]. The existence of traditional and cultural healing methodologies presents unique opportunities for holistic mental healthcare strategies, especially in communities where biomedical resources are limited [14]. While both nations recognize and endeavor to tackle mental health issues, the differences between them primarily arise from discrepancies in developmental stages and the resources at their disposal. The robust infrastructure of

England, coupled with its accessibility to specialized treatments, provides a notable advantage in the provision of comprehensive care [3]. In contrast, India, categorized as a lower-middle-income nation, encounters limitations in resources and infrastructure, which significantly affect the availability and accessibility of mental health treatments [7]. For instance, expenditures on mental health in India represent approximately 1.3% of the overall health budget [6], resulting in significant deficiencies in service provision despite a considerable disease burden. The disparities in resources significantly hinder the ability to deliver prompt and specialized mental health care to the youth in India.

2.2. Weaknesses

Both nations face considerable challenges regarding the psychological health of their young populations, which may be regarded as a common vulnerability. England is presently grappling with widespread mental health stigma and discrimination that obstruct individuals from obtaining suitable support [15]. Despite increasing awareness, the stigma continues to serve as a significant obstacle to help-seeking behaviors among the youth. Moreover, inadequate financial resources constrain the breadth and efficacy of mental health initiatives. The allocation of funding for mental health services in England has been notably limited, with a mere 13% of the NHS budget dedicated to this area, even though mental illnesses account for 23% of the overall disease burden [16]. The protracted waiting periods for Child and Adolescent Mental Health Services (CAMHS) represent a significant concern, as reports indicate that certain children endure waits exceeding six months for treatment, thereby negatively impacting their timely access to necessary care [17]. Disparities in access remain evident, especially in rural and economically disadvantaged regions, where specialized mental health services are notably scarce [9]. Roughly 30% of children and adolescents requiring assistance do not obtain sufficient mental health support, a situation exacerbated by regional disparities and limitations in service capacity [10]. In a comparable manner, India faces significant shortcomings in its mental health infrastructure and human resources, especially within rural areas. The WHO in a study in 2021 indicated that India has a mere 0.75 psychiatrists for every 100,000 individuals, which is significantly lower than the WHO's advised minimum of 3 psychiatrists per 100,000, thereby underscoring a pressing deficiency in the mental health workforce. The shortage is evident among various mental health professionals, with a mere 0.12 psychologists and 0.07 psychiatric nurses available per 100,000 individuals, highlighting significant resource limitations [13]. In India, insufficient government funding poses a significant obstacle: mental health is allocated less than 1.5% of the total health budget, even though mental disorders contribute to nearly 15% of the national disease burden [6]. In England, the looming budget constraints and workforce shortages have been highlighted as a growing concern. The deficiency of sufficiently trained mental health professionals limits the provision of specialized care and timely interventions. Cultural obstacles and deeply rooted misconcep-

tions regarding mental health significantly impede awareness and the pursuit of assistance in India, especially among the youth, where stigma is exacerbated by societal norms and erroneous information [14]. The interplay of these factors results in a significant treatment gap, approximated at nearly 80% for mental health conditions in India [6]. In contrast, England demonstrates a more advanced mental health infrastructure, enhanced access to specialized services, and relatively elevated levels of awareness [7]. Nevertheless, the deficiencies noted in India arise from its classification as a lower-middle-income nation grappling with issues pertaining to its population scale, constrained resources, and prevailing social stigma. It is imperative for both nations to prioritize the eradication of stigma, enhance financial investments, and broaden the accessibility of mental health services, while customizing strategies to align with their unique social and economic landscapes.

2.3. Opportunity

India and the United Kingdom both acknowledge the importance of emphasizing the mental well-being of young individuals, as demonstrated by their continuous initiatives to tackle youth mental health issues. Although opportunities may vary between the two nations, the fundamental objective persists in delivering extensive support and services that enhance mental well-being, diminish stigma, and guarantee access to care. India's focus on enhancing mental health legislation and policies reflects its commitment to establishing a legal framework that safeguards the rights of individuals with mental health conditions. The new Mental Healthcare legislation in India Called Mental Healthcare Act in 2017 exemplifies a pivotal advancement in ensuring access to mental health services and the decriminalization of suicide, marking a crucial stride in the endeavor to diminish stigma and enhance care [12]. Furthermore, the National Mental Health Programme in India seeks to incorporate mental health services within primary healthcare frameworks, a strategy that has demonstrated encouraging results in initial regions by enhancing accessibility and facilitating early intervention [6]. Through the integration of mental health education within the national education framework, India aims to empower youth with the essential knowledge and competencies to navigate their mental well-being, thereby cultivating a society characterized by greater understanding and empathy [18]. In contrast, England's focus on integrating mental health education within school curricula aligns with a comprehensive early intervention and prevention approach, bolstered by research indicating that early mental health education can diminish the onset of mental disorders by as much as 30%. The NHS Long Term Plan has allocated more than £2 billion towards mental health services for children and young people, thereby greatly enhancing access to both community-based and specialized support [16]. The proliferation of community-oriented initiatives in both countries underscores the significance of delivering accessible, community-focused mental health services that are specifically designed to meet the unique needs of young individuals. India and England

endeavor to expand their outreach to a broader demographic, especially in underserved regions, by leveraging technology to deliver prompt mental health assistance and resources. Digital mental health interventions demonstrate a capacity to enhance engagement and outcomes among young individuals by providing anonymity and convenience, thereby addressing obstacles such as stigma and geographic isolation [19]. For instance, the implementation of mobile applications and telepsychiatry in rural regions of India has significantly broadened access to mental health services in areas where conventional options are limited. In a comparable manner, the implementation of online cognitive behavioral therapy (CBT) platforms in England has emerged as a viable substitute for traditional face-to-face therapy, effectively diminishing waiting periods and enhancing service availability. Ultimately, partnerships with non-governmental organizations (NGOs) and international entities further illustrate the dedication of India and England to assimilating global best practices, exchanging resources, and fostering innovation in the realm of adolescent mental health [20]. These collaborations have facilitated the execution of culturally attuned initiatives and community engagement frameworks that have demonstrated efficacy in enhancing mental health literacy and increasing service utilization among youth demographics [21]. India and England, despite their differing methodologies and opportunities in tackling youth mental health, converge on the aspiration of fostering a society in which young individuals can flourish both mentally and emotionally. By leveraging these recognized opportunities, both nations possess the capacity to achieve significant advancements in mitigating the incidence of mental health challenges within their adolescent demographics, thereby ensuring a more promising future for subsequent generations.

2.4. Threats

In India, as in England, the mental health of the youth is an urgent issue that demands attention. Shared challenges faced by both nations encompass inadequate collaboration within healthcare sectors and notable deficiencies in the capacity of the mental health workforce. The discourse surrounding the shortage of mental health experts is often framed as a deficiency; however, its persistent ramifications present a significant challenge to the sustainability of service delivery. England is currently experiencing an escalating need for mental health services; from 2017 to 2020, there was an approximate 26% increase in referrals to Child and Adolescent Mental Health Services (CAMHS) [22]. This increase exerts strain on constrained service capacity, intensified by forthcoming budget limitations and workforce deficiencies that threaten to prolong delays and diminish the quality of care [23].

The general awareness and comprehension of mental health issues remain inadequate, especially in rural regions where 70% of the population lives. In these areas, stigma, myths, and misinformation significantly obstruct the pursuit of assistance [18]. This results in a treatment gap approximated at 83% for mental

health disorders, indicating that a significant proportion of young individuals requiring assistance do not obtain sufficient care [6]. Moreover, the disjointed collaboration among healthcare, education, and social services hinders the provision of holistic care. In both nations, fragmented systems hinder the provision of cohesive support, resulting in communication barriers among primary care providers, mental health professionals, educational institutions, and community organizations [16]. The absence of effective coordination hinders timely intervention and disrupts the continuity of care, ultimately compromising the outcomes for at-risk youth.

3. Discussion

England and India present intriguing case studies, each characterized by unique socio-cultural contexts, healthcare infrastructures, and developmental challenges. England enjoys a robust and extensive mental health framework, characterized by the NHS's wide-ranging services, school-centred programs, proactive early intervention strategies, and effective partnerships among healthcare, educational, and community domains [10] [24]. The initiatives undertaken have significantly advanced mental health awareness, diminished stigma, and improved access to care specifically designed for the youth [15]. Conversely, India encounters considerable challenges in tackling youth mental health, influenced by swift demographic shifts, socio-economic disparities, and widespread cultural stigma [14]. The interplay of these factors results in significant treatment disparities, particularly in rural regions where access to mental health professionals and high-quality services remains limited [13]. As a result, adolescents frequently encounter postponed intervention and deteriorating mental health issues [15]. Although England's focus on early intervention and multisector collaborations has resulted in enhanced outcomes, India's constrained resources and cultural obstacles persist in hindering effective service delivery [14] [25].

It is imperative for both nations to place mental health at the forefront of their policy frameworks and budgetary considerations, thereby guaranteeing adequate financial resources for prevention, early intervention, and treatment services [7]. Public awareness campaigns play a vital role in diminishing stigma and encouraging individuals to seek assistance. For instance, the Time to Change initiative in England has demonstrated its efficacy in altering public perceptions and enhancing the readiness to pursue assistance. In a comparable manner, community outreach programs that are culturally tailored in India have started to enhance mental health literacy and diminish stigma in certain areas. By tackling issues associated with inadequate resources, poor coordination, restricted knowledge, and insufficient comprehension, India and England can collaboratively strive to cultivate an environment that prioritizes the mental well-being of youth. Investing in mental health not only benefits individuals but also fortifies the social and economic structures of societies, empowering youth to thrive and engage positively within their communities [22].

Based on the findings of the SWOT analysis, significant considerations should be made about the future of initiatives that are aimed at enhancing the mental health of young people in both nations. Grasping these disparities provides significant perspectives for those in positions of influence and those delivering healthcare services. When it comes to England, the study indicates that even if significant resources are committed, the most essential thing is to prioritise eradicating stigma and boosting access in areas that are ignored to ensure healthcare that is equitable. This is the case even if the resources are committed. An increase in public knowledge via educational activities and a strengthening of the workforce in mental health are two ways that India might potentially minimise the stigma that is associated with mental illness and improve access to treatment. A thorough cross-country analysis reveals the potential for England's resource-rich strategies to be adapted to fit India's distinct context, while also acknowledging the challenges that may emerge. It is essential to engage in a thoughtful examination of the mental health teams that are established within educational institutions across England. Their substantial staffing and collaborative partnerships among diverse agencies illustrate a framework that, although it could benefit from some simplification, continues to hold significant relevance for India. Community health workers stand to gain significantly from essential mental health training, which is further augmented by the incorporation of digital tools to effectively tackle workforce deficiencies. Conversely, India's significant emphasis on community engagement and the widespread implementation of culturally relevant support mechanisms exemplifies innovative strategies that England could contemplate in addressing stigma within minority and underserved populations. By engaging in cross-cultural learning and sharing exemplary practices, both nations can cultivate innovative and contextually relevant strategies aimed at improving mental health support and outcomes for their youth populations [20] [21].

4. Conclusions

The mental health treatment of young individuals is a significant issue that merits thoughtful attention and prompt action on a global scale. By utilising the distinct strengths and opportunities present in both England and India, it becomes evident that the contrasting situations of a high-income nation and a lower-middle-income nation reveal a crucial understanding: the success of youth mental health systems relies not solely on the availability of resources but also on the adept organization, integration, and cultural alignment of those resources.

England is confronted with the challenge of ensuring equitable access within a pre-existing framework that is witnessing an increase in demand. In contrast, India must prioritise the development and expansion of capacity in manners that are both culturally and structurally pertinent. Investigating the strategic learning opportunities that arise from a comparative analysis of England's early-intervention models and India's community-based approaches reveals substantial potential for reciprocal improvement. To attain significant advancements in the realm

of youth mental health, it is imperative to cultivate collaboration among educational, health, and community systems, regardless of the economic status of a nation.

The execution of thorough initiatives aimed at enhancing awareness, accessibility, and cultural sensitivity is crucial for addressing the challenges encountered, which encompass stigma, financial limitations, and a deficiency of personnel. To effectively address these challenges, it is imperative to implement these initiatives. By integrating these essential elements into their policies and practices, both nations possess the potential to advance the objective of improving the mental health outcomes for their children. In undertaking this initiative, we shall ensure that subsequent generations are afforded the opportunity for a more promising future.

Conflicts of Interest

The author declares no conflicts of interest.

References

- [1] Cheung, R., McKeown, R. and Shah, R. (2020) Prevalence of Mental Health Conditions. Royal College of Paediatrics and Child Health. <https://stateofchildhealth.rcpch.ac.uk/evidence/mental-health/prevalence>
- [2] Nasir, R., John, E. and Mais, D. (2022) Suicides in England and Wales: 2021 Registrations. Office for National Statistics. <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2021registrations#:~:text=For%202021,%20mortality>
- [3] Hossain, M. and Purohit, N. (2019) Improving Child and Adolescent Mental Health in India: Status, Services, Policies, and Way Forward. *Indian Journal of Psychiatry*, **61**, 415-419. https://doi.org/10.4103/psychiatry.indianjpsychiatry_217_18
- [4] Singh, S. and Gopalkrishna, G. (2014) Health Behaviors & Problems among Young People in India: Cause for Concern & Call for Action. *Indian Journal of Medical Research*, **140**, 185-208. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4216492>
- [5] Singh, O.P. (2022) Startling Suicide Statistics in India: Time for Urgent Action. *Indian Journal of Psychiatry*, **64**, 431-432. https://doi.org/10.4103/indianjpsychiatry.indianjpsychiatry_665_22
- [6] Patel, V. and Saxena, S. (2019) Achieving Universal Health Coverage for Mental Disorders. *BMJ*, **366**, l4516. <https://doi.org/10.1136/bmj.l4516>
- [7] Wainberg, M.L., Scorza, P., Shultz, J.M., *et al.* (2017) Challenges and Opportunities in Global Mental Health: A Research-to-Practice Perspective. *Current Psychiatry Reports*, **19**, Article No. 28.
- [8] Public Health England (2016) Mental Health Promotion and Prevention Training Programmes: Emerging Practice Examples. https://assets.publishing.service.gov.uk/media/5b8666b940f0b6214cce7c70/Mental_health_promotion_and_prevention_training_programmes.pdf
- [9] NHS Digital (2018) Mental Health of Children and Young People in England, 2017. <https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-of-children-and-young-people-in-england/2017/2017>

- [10] NHS England (2016) The Five Years Forward View for Mental Health. <https://www.england.nhs.uk/publication/the-five-year-forward-view-for-mental-health>
- [11] Neufeld, S.A.S. (2022) The Burden of Young People's Mental Health Conditions in Europe: No Cause for Complacency. *The Lancet Regional Health—Europe*, **16**, Article ID: 100364.
- [12] Chadda, R.K. (2020) Influence of the New Mental Health Legislation in India. *BJPsych International*, **17**, 20-22. <https://doi.org/10.1192/bji.2019.18>
- [13] World Health Organization (2021) Mental Health Investment Case: A Guidance Note. <https://www.who.int/publications/i/item/9789240019386>
- [14] Venkateshiva, R.B., Gupta, S., Lohiya, A. and Kharya, P. (2013) Mental Health Issues and Challenges in India: A Review. *International Journal of Scientific and Research Publications*, **3**, 1-3.
- [15] Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., *et al.* (2014) What Is the Impact of Mental Health-Related Stigma on Help-Seeking? A Systematic Review of Quantitative and Qualitative Studies. *Psychological Medicine*, **45**, 11-27. <https://doi.org/10.1017/s0033291714000129>
- [16] (2019) NHS Mental Health Implementation Plan 2019/20-2023/24. <https://www.england.nhs.uk/publication/nhs-mental-health-implementation-plan-2019-20-2023-24/>
- [17] Children's Commissioner for England (2021) The State of Children's Mental Health Services 2020/21. <https://assets.childrenscommissioner.gov.uk/wpuploads/2021/01/cco-the-state-of-childrens-mental-health-services-2020-21.pdf>
- [18] Ministry of Health and Family Welfare, Government of India (2018) Operational Guidelines on School Health Programme under Ayushman Bharat. <https://platform.who.int/docs/default-source/mca-documents/policy-documents/operational-guidance/ind-gbv-19-04-operational-guidance-2018-eng-operational-guidelines-on-school-health-programme-under-ayushman-bharat.pdf>
- [19] Newey, M. (2021) Mental Health: Working from Home and the Use of Technology. *Strategic HR Review*, **20**, 114-118. <https://doi.org/10.1108/shr-01-2021-0001>
- [20] Sanadgol, A., Doshmangir, L., Majdzadeh, R. and Gordeev, V.S. (2021) Engagement of Non-Governmental Organisations in Moving towards Universal Health Coverage: A Scoping Review. *Globalization and Health*, **17**, Article No. 129. <https://doi.org/10.1186/s12992-021-00778-1>
- [21] Girase, B., Parikh, R., Vashisht, S., Mullick, A., Ambhore, V. and Maknikar, S. (2022) India's Policy and Programmatic Response to Mental Health of Young People: A Narrative Review. *SSM—Mental Health*, **2**, Article ID: 100145. <https://doi.org/10.1016/j.ssmmh.2022.100145>
- [22] NHS England (2021) Mental Health of Children and Young People in England 2021—Wave 2 Follow up to the 2017 Survey. <https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-of-children-and-young-people-in-england/2021-follow-up-to-the-2017-survey>
- [23] Srivastava, K., Chatterjee, K. and Bahat, P.S. (2016) Mental Health Awareness: The Indian Scenario. *Industrial Psychiatry Journal*, **25**, 131-134. https://www.researchgate.net/publication/317562139_Mental_health_awareness_The_Indian_scenario
- [24] Grimm, F., *et al.* (2022) Improving Children and Young People's Mental Health Ser-

vices. Health Found.

https://reader.health.org.uk/improving_CYPMHS/key-points

- [25] Frith, E. (2016) Progress and Challenges in the Transformation of Children and Young People's Mental Health Care. Education Policy Institute.

<https://epi.org.uk/wp-content/uploads/2018/01/progress-and-challenges.pdf>