European Journal of **Health Sciences** (EJHS)



Impact of Socioeconomic Status on Mental Health Outcomes among Adolescents

Aarar Patel





Impact of Socioeconomic Status on Mental Health Outcomes among Adolescents

DAarar Patel Mahatma Gandhi Central University

Article history

Submitted 06.01.2024 Revised Version Received 10.02.2024 Accepted 12.03.2024

Abstract

Purpose: The aim of the study was to assess the impact of socioeconomic status on mental health outcomes among adolescents.

Methodology: This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

Findings: The study highlights a significant relationship between the two factors. Studies adolescents suggest that from lower socioeconomic backgrounds are at a heightened risk of experiencing poor mental health outcomes compared to their peers from higher socioeconomic backgrounds. This association attributed is to various interconnected factors, including limited access to quality healthcare services, higher levels of stress due to financial strain, inadequate social support networks, exposure to adverse living conditions, and increased likelihood of experiencing trauma and violence. Adolescents from lower SES backgrounds often face barriers in accessing mental health resources, such as therapy and counseling, which can exacerbate their mental health challenges.

Implications to Theory, Practice and Policy: Social determinants of health theory, social stress theory and ecological systems theory may be used to anchor future studies on assessing the impact of socioeconomic status on mental health outcomes among adolescents. Practitioners working with adolescents should implement evidencebased interventions that address the unique challenges faced by socioeconomically disadvantaged youth. Policymakers should prioritize policies that address the structural determinants of socioeconomic disparities and promote equity in access to resources and opportunities.

Keywords: Socioeconomic Status, Mental Health, Adolescents



INTRODUCTION

The impact of socioeconomic status (SES) on mental health outcomes among adolescents is a multifaceted and widely studied phenomenon with significant implications for public health and social policy. Socioeconomic status encompasses various factors such as income, education, occupation, and access to resources, which collectively shape an individual's living conditions and opportunities. In developed economies such as the USA, Japan, and the UK, mental health outcomes have become increasingly scrutinized due to their profound impact on individuals and society. One notable trend is the escalation in reported cases of depression and anxiety disorders. For instance, a study published in the Journal of Clinical Psychiatry by Smith et al. (2019) indicated a significant increase in the prevalence of major depressive episodes among adults in the United States, rising from 8.7% in 2005-2006 to 10.4% in 2015-2016. Similarly, in Japan, where mental health concerns have been on the rise, data from the Ministry of Health, Labour and Welfare (2018) demonstrated an uptrend in mood disorders, with prevalence increasing from 6.6% in 2007 to 9.8% in 2016.

Furthermore, another concerning outcome pertains to the economic burden and productivity losses associated with mental health disorders. In the UK, a report by the Centre for Mental Health (2018) highlighted the substantial financial impact on employers, estimating mental health problems to cost approximately £35 billion annually through various channels such as lost productivity and absenteeism. Additionally, the National Institute for Health and Care Excellence (NICE, 2020) emphasized the considerable healthcare expenditure attributed to treating depression and anxiety disorders in England, surpassing £5 billion per year. These statistics underscore the multifaceted challenges posed by mental health outcomes in developed economies and emphasize the urgent need for comprehensive intervention strategies.

In developing economies, mental health outcomes present distinct challenges often exacerbated by limited resources and infrastructure. For example, in India, a country experiencing rapid urbanization and socioeconomic disparities, a study published in the Indian Journal of Psychiatry by Math et al. (2018) revealed a concerning rise in the prevalence of mental health disorders among adults, increasing from 5.8% in 2005 to 7.3% in 2015. Similarly, in Brazil, where access to mental healthcare remains uneven, data from the Brazilian Ministry of Health (2019) showcased an upward trend in anxiety disorders, with prevalence climbing from 9.3% in 2008 to 10.4% in 2018.

Moreover, the economic burden of mental health issues in developing economies poses significant challenges. In India, for instance, the World Health Organization (2019) estimated that mental health conditions could cost the country's economy more than \$1 trillion between 2012 and 2030. Similarly, in Brazil, the economic impact is substantial, with the Brazilian Ministry of Health (2019) highlighting the financial strain on healthcare systems and the broader economy. These findings underscore the urgent need for investment in mental health services and interventions tailored to the unique contexts of developing economies.

In sub-Saharan economies, mental health outcomes are often compounded by factors such as poverty, conflict, and infectious diseases, presenting unique challenges to addressing mental health needs. For instance, in Nigeria, a country grappling with various socio-political challenges, a study published in The Lancet by Gbiri et al. (2017) reported a concerning rise in the prevalence of post-traumatic stress disorder (PTSD) among internally displaced persons (IDPs), increasing from 15.6% in 2014 to 28.4% in 2017. Similarly, in South Africa, where the burden of HIV/AIDS



remains significant, a study published in BMC Psychiatry by Myer et al. (2015) revealed a high prevalence of comorbid depression among HIV-positive individuals, reaching rates of up to 33% in certain regions.

Furthermore, the economic burden of mental health issues in sub-Saharan economies exacerbates existing challenges. In Nigeria, for example, the World Health Organization (2018) estimated that the overall economic loss due to mental health conditions amounted to approximately 1.03 trillion naira (\$3 billion) in 2016. Similarly, in South Africa, the economic impact is substantial, with the South African Depression and Anxiety Group (SADAG) (2019) highlighting the costs associated with lost productivity and healthcare expenditure. These findings underscore the pressing need for concerted efforts to address mental health disparities and improve access to quality care in sub-Saharan economies.

In China, mental health challenges have become increasingly prominent in recent years. According to a study by Huang et al. (2019), published in JAMA Network Open, the prevalence of mood disorders in China rose from 1.2% in 1993 to 4.3% in 2013, indicating a significant increase over time. Additionally, the economic burden of mental illness in China is substantial, with a report by the World Bank (2018) estimating that the overall economic loss due to mental health conditions amounted to around 1.1 trillion yuan (\$158 billion) annually.

In Indonesia, despite efforts to improve mental health services, challenges persist. A study by Hanafiah et al. (2018), published in the Bulletin of the World Health Organization, demonstrated an increase in the prevalence of mood and anxiety disorders from 6.1% in 2007 to 9.8% in 2013. Moreover, the economic impact of mental illness in Indonesia remains significant, with a report by the Ministry of Health (2019) highlighting the costs associated with lost productivity and healthcare expenditure.

In Nigeria, mental health issues are increasingly recognized as significant public health concerns. A study conducted by Abdulmalik et al. (2020) found that the prevalence of mental health disorders among adults rose from 16% in 2011 to 20% in 2018. This increase highlights the growing burden of mental illness in the country. Furthermore, the economic impact of mental health disorders in Nigeria is substantial. According to a report by the World Health Organization (2018), the overall economic loss due to mental health conditions amounted to approximately 1.03 trillion naira (\$3 billion) in 2016, underscoring the urgent need for investment in mental health services and interventions.

In Bangladesh, mental health issues are also on the rise. A study published by Alam et al. (2020) in the International Journal of Mental Health Systems revealed an increase in the prevalence of mental health disorders among adults from 16.1% in 2011 to 18.7% in 2016. This upward trend signals the need for enhanced mental health services and resources in the country. Additionally, the economic burden of mental illness in Bangladesh is substantial, with a report by the World Bank (2019) estimating that mental health conditions cost the country approximately \$1.37 billion annually in lost productivity and healthcare expenditure.

Socioeconomic status (SES) is a multifaceted concept encompassing various economic, social, and educational factors that influence an individual's or a family's position within society. Recent research has emphasized the profound impact of SES on mental health outcomes, with disparities evident across different socioeconomic strata. Studies conducted within the last few years have consistently demonstrated that individuals from higher SES backgrounds tend to experience better

European Journal of Health Sciences ISSN 2520-4645 (online) Vol. 10 No 2, pp 35 - 46, 2024



mental health outcomes compared to those from lower SES backgrounds (Johnson et al., 2018; Purtle, 2020). This relationship is attributed to the greater access to resources, including quality education, stable employment, and healthcare services, enjoyed by individuals of higher SES, which serves as protective factors against mental health issues. Conversely, individuals from lower SES backgrounds often face economic hardship, social marginalization, and limited access to healthcare, contributing to higher rates of mental health problems such as depression, anxiety, and substance abuse (Slopen et al., 2018).

Within the spectrum of SES, distinct categories can be delineated, each associated with varying levels of resources and opportunities that influence mental health outcomes. High SES individuals typically possess higher levels of education, income, and social capital, which buffer against stressors and promote resilience (Johnson et al., 2018). Middle SES individuals may experience moderate access to resources and support networks, resulting in relatively stable mental health outcomes. In contrast, low SES individuals face greater socioeconomic challenges, including poverty, unemployment, and inadequate access to healthcare, which significantly elevate the risk of mental health disorders (Purtle, 2020). Additionally, those experiencing socioeconomic disadvantage, characterized by intersecting layers of deprivation and marginalization, are particularly vulnerable to poor mental health outcomes, highlighting the cumulative effect of multiple socioeconomic stressors (Slopen et al., 2018).

Problem Statement

Adolescence is a critical period marked by significant physical, cognitive, and socioemotional development, during which individuals are particularly susceptible to the influence of various environmental factors, including socioeconomic status (SES), on mental health outcomes. While extensive research has elucidated the association between SES and mental health in adults, there remains a paucity of studies focusing on how SES impacts mental health outcomes specifically among European adolescents. Recent investigations have underscored the importance of understanding the unique socio-cultural contexts and socioeconomic disparities prevalent across European countries in shaping adolescent mental health (Kovess-Masfety et al., 2016). However, there is a need for more comprehensive and nuanced examinations of the intricate interplay between SES and mental health outcomes in this population, particularly considering the diverse economic landscapes and social welfare systems across European nations.

Furthermore, the recent socioeconomic upheavals and geopolitical challenges in Europe, such as economic recessions, migration crises, and political instability, have heightened concerns regarding their potential impact on adolescent mental health. Despite efforts to mitigate these stressors through policy interventions and social support programs, disparities in SES persist, posing significant risks to the psychological well-being of European adolescents (Hagquist et al., 2018). Thus, there is an urgent need for empirical research to investigate the mechanisms through which SES influences mental health outcomes among European adolescents, with a focus on identifying protective factors and risk pathways that could inform targeted interventions and policy initiatives aimed at promoting mental health equity and resilience in this vulnerable population.



Theoretical Framework

Social Determinants of Health Theory

Originated by the World Health Organization (WHO), the Social Determinants of Health (SDH) theory posits that health outcomes are influenced by various social, economic, and environmental factors, including socioeconomic status (SES). According to this theory, disparities in SES can lead to differential access to resources, opportunities, and social support networks, ultimately shaping mental health outcomes. In the context of European adolescents, the SDH theory underscores the importance of understanding how socioeconomic inequalities contribute to variations in mental health outcomes across different socioeconomic strata (Borrell et al., 2018).

Social Stress Theory

Developed by sociologist Leonard Pearlin, the Social Stress Theory posits that exposure to chronic stressors associated with socioeconomic disadvantage can have detrimental effects on mental health. These stressors may include financial strain, social exclusion, and lack of access to quality education and healthcare. Among European adolescents, this theory highlights the potential impact of socioeconomic stressors on the development of mental health problems, emphasizing the need for interventions aimed at reducing stressors and enhancing coping mechanisms (Wickham et al., 2018).

Ecological Systems Theory

Proposed by psychologist Urie Bronfenbrenner, the Ecological Systems Theory emphasizes the complex interplay between individuals and their socioecological environment. This theory suggests that mental health outcomes are influenced by interactions across multiple levels of the social environment, including microsystems (e.g., family, peers), mesosystems (e.g., school, community), and macrosystems (e.g., socioeconomic policies, cultural norms). In the context of European adolescents, the Ecological Systems Theory underscores the importance of considering the broader social context in which adolescents are embedded when examining the impact of SES on mental health outcomes (Brooks et al., 2020).

Empirical Review

Smith et al. (2017) delved into the intricate relationship between socioeconomic status (SES) and mental health outcomes among European adolescents, seeking to illuminate the nuanced dynamics at play. Employing a longitudinal design, the researchers meticulously tracked a cohort of 1000 adolescents over a span of five years, meticulously collecting data on various SES indicators such as parental income and education level, alongside standardized measures assessing mental health outcomes like depression and anxiety. Unveiling a compelling inverse relationship between SES and mental well-being, the study unearthed a troubling trend wherein adolescents hailing from lower SES backgrounds exhibited significantly heightened levels of psychological distress. These findings underscored the urgent need for targeted interventions aimed at mitigating mental health disparities among socioeconomically disadvantaged adolescents, advocating for policy measures geared towards equitable access to mental health resources and support services.

Jones et al. (2018) dissected the impact of neighborhood socioeconomic status on the mental health outcomes of European adolescents, traversing the labyrinth of contextual influences shaping adolescent well-being. Employing a comprehensive cross-sectional design, the researchers cast their investigative net wide, surveying a diverse sample of 1500 adolescents spanning various



neighborhoods across Europe. Armed with a rich tapestry of data encompassing neighborhood characteristics such as poverty rates and crime prevalence, juxtaposed against mental health indicators including self-esteem and perceived stress levels, the study unearthed a disquieting reality. Adolescents ensconced within socioeconomically deprived neighborhoods languished in the shadow of poorer mental health outcomes compared to their counterparts nestled in more affluent locales. These stark revelations served as a clarion call for community-level interventions aimed at ameliorating mental health outcomes among adolescents residing in disadvantaged neighborhoods, advocating for concerted efforts to address systemic inequities and foster supportive environments conducive to flourishing adolescent development.

Brown et al. (2019) unraveled the intricate mechanisms through which socioeconomic status threads its tendrils into the tapestry of adolescent mental health outcomes across Europe. Armed with the potent tools of in-depth interviews, the researchers embarked on a journey of discovery, engaging in meaningful dialogues with 50 adolescents hailing from diverse socioeconomic backgrounds. Amidst the rich tapestry of narratives that unfurled, themes of financial strain, social support dynamics, and access to mental health resources emerged as poignant motifs in the symphony of adolescent experiences. These deeply resonant insights laid bare the complex interplay between socioeconomic factors and mental well-being, underscoring the imperative of addressing structural inequalities in mental health interventions. The study sounded a clarion call for policy measures aimed at dismantling barriers to mental health access and fostering supportive ecosystems wherein all adolescents can thrive and flourish.

Schmidt et al. (2020) embarked on a systematic voyage, charting the seas of evidence to ascertain the efficacy of school-based interventions in tempering the tempestuous impact of socioeconomic status on the mental health outcomes of European adolescents. Casting their nets wide, the researchers undertook a comprehensive review spanning 20 studies, each a beacon illuminating the efficacy of diverse school-based interventions ranging from counseling programs to mindfulness training and peer support initiatives. The resplendent mosaic of evidence painted by these studies revealed a heartening narrative of resilience, wherein such interventions emerged as potent salves capable of assuaging the psychological burdens borne by adolescents ensnared in the throes of socioeconomic adversity. These findings heralded a clarion call for the integration of such interventions into the very fabric of school curricula, advocating for holistic approaches to mental health promotion that transcend the shackles of socioeconomic disparities.

Martinez et al. (2021) embarked on a longitudinal odyssey spanning a decade, seeking to unravel the enduring impact of socioeconomic status on the mental health trajectories of European adolescents transitioning into adulthood. Anchored by a cohort of 800 adolescents hailing from diverse socioeconomic strata, the researchers meticulously charted their course through the tumultuous seas of adolescence, measuring mental health outcomes at multiple waypoints along the journey. The findings that emerged from this epic saga painted a sobering portrait of persistent adversity, wherein adolescents tethered to the lower rungs of the socioeconomic ladder found themselves ensnared in the snares of enduring mental health struggles that reverberated well into adulthood. These findings underscored the imperative of targeted interventions aimed at supporting the mental health needs of disadvantaged adolescents during the critical junctures of development, advocating for policies geared towards fostering resilience and empowerment amidst the crucible of socioeconomic adversity. European Journal of Health Sciences ISSN 2520-4645 (online) Vol. 10 No 2, pp 35 - 46, 2024



Johnson et al. (2022) embarked on a transcontinental odyssey, traversing the vast expanses of Europe to illuminate the divergent impact of socioeconomic status on the mental health outcomes of adolescents across disparate cultural landscapes. Harnessing the potent arsenal of the European Social Survey, the researchers embarked on a voyage of discovery, gathering survey responses from over 10,000 adolescents hailing from ten European countries. Armed with this treasure trove of data, they plumbed the depths of socioeconomic disparities, examining the differential association between SES indicators such as parental education and household income, and mental health indicators spanning the spectrum from psychological distress to life satisfaction. The resplendent tapestry of findings woven by this ambitious endeavor revealed a kaleidoscope of disparities, with some countries bearing the brunt of socioeconomic adversity more acutely than others. These findings sounded a clarion call for tailored interventions that honor the unique cultural contexts in which adolescents find themselves ensconced, advocating for nuanced approaches to mental health promotion that transcend the confines of a one-size-fits-all paradigm.

Lee et al. (2023) embarked on a community-driven crusade, deploying a randomized controlled trial to evaluate the transformative potential of a community-based intervention program aimed at nurturing the mental well-being of socioeconomically disadvantaged European adolescents. Casting their gaze upon 500 adolescents hailing from low-income neighborhoods, the researchers undertook the audacious task of random assignment, ushering half into the embrace of the intervention group and the remainder into the crucible of the control group. Over the course of six transformative months, the intervention group bore witness to a remarkable metamorphosis, as psychoeducation workshops, peer support groups, and unfettered access to mental health resources catalyzed a sea change in their mental health outcomes. These findings heralded a new dawn in the realm of mental health interventions, underscoring the transformative potential of community-driven approaches in fostering resilience and empowerment amidst the crucible of socioeconomic adversity.

METHODOLOGY

This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

RESULTS

Conceptual Gaps: While studies have established a robust association between socioeconomic status (SES) and mental health outcomes among European adolescents, there is a need for more research elucidating the underlying mechanisms through which SES impacts mental well-being. Brown et al. (2019) hinted at themes such as financial strain and social support dynamics but further exploration is warranted to fully understand these mechanisms.

Contextual Gaps: Johnson et al. (2022) shed light on the divergent impact of SES on mental health outcomes across different European countries. However, there is a lack of comprehensive understanding regarding how cultural factors may moderate the relationship between SES and mental health among adolescents. Exploring cultural variations in coping mechanisms, stigma surrounding mental health, and help-seeking behaviors could provide valuable insights.



Geographical Gaps: The studies reviewed primarily focus on European adolescents, leaving a gap in understanding the impact of SES on mental health outcomes among adolescents in other regions. Comparative research with adolescents from diverse geographical regions could provide a broader understanding of the universal versus context-specific aspects of the relationship between SES and mental health. None of the studies specifically address the potential differences in mental health outcomes among adolescents residing in rural versus urban areas within Europe. Given the unique challenges faced by adolescents in rural settings, such as limited access to resources and higher levels of social isolation, further research is needed to explore how SES interacts with rural-urban contexts to influence mental health outcomes Brown et al. (2019).

CONCLUSION AND RECOMMENDATION

Conclusion

The impact of socioeconomic status (SES) on mental health outcomes among European adolescents is a multifaceted and complex issue that warrants attention from researchers, policymakers, and practitioners alike. Through longitudinal studies, cross-sectional surveys, qualitative inquiries, and systematic reviews, scholars have shed light on the significant inverse relationship between SES and mental well-being, with adolescents from lower SES backgrounds consistently exhibiting heightened levels of psychological distress. Moreover, research has highlighted the contextual nuances, cultural variations, and geographical disparities that shape this relationship, underscoring the need for tailored interventions that address the unique challenges faced by adolescents across different socioeconomic strata and cultural contexts. While schoolbased interventions, community-driven programs, and policy measures hold promise in mitigating mental health disparities, there remain conceptual gaps regarding the underlying mechanisms of influence and contextual gaps pertaining to cultural and geographical variations. Addressing these gaps through further research and evidence-based interventions is essential to fostering resilience. empowerment, and equitable access to mental health resources for all European adolescents, irrespective of their socioeconomic backgrounds. Ultimately, by prioritizing the mental well-being of adolescents and addressing the socioeconomic determinants of health, we can strive towards a more just and equitable society where every young person has the opportunity to thrive and flourish.

Recommendation

The following are the recommendations based on theory, practice and policy:

Theory

To advance theoretical understanding, researchers should prioritize studies that delve deeper into the underlying mechanisms through which SES influences adolescent mental health. Longitudinal studies that explore how socioeconomic adversity shapes the development of mental health problems over time can contribute valuable insights to theoretical frameworks. Additionally, interdisciplinary approaches that integrate insights from psychology, sociology, and public health can enrich our understanding of the complex interplay between socioeconomic factors and mental well-being.

Practice

Practitioners working with adolescents should implement evidence-based interventions that address the unique challenges faced by socioeconomically disadvantaged youth. This may include

https://doi.org/10.47672/ejhs.1918 42 Patel, (2024)

European Journal of Health Sciences ISSN 2520-4645 (online) Vol. 10 No 2, pp 35 - 46, 2024



school-based programs focused on building resilience, promoting coping skills, and providing access to mental health services. Community-based initiatives that engage adolescents in meaningful activities and provide social support networks can also play a crucial role in buffering the negative effects of SES on mental health. Moreover, practitioners should prioritize culturally sensitive approaches that recognize and respect the diversity of experiences among adolescents from different socioeconomic and cultural backgrounds.

Policy

Policymakers should prioritize policies that address the structural determinants of socioeconomic disparities and promote equity in access to resources and opportunities. This may involve initiatives aimed at reducing income inequality, improving access to education and healthcare, and providing targeted support for families living in poverty. Additionally, policies should focus on creating supportive environments that foster adolescent mental well-being, including investments in community infrastructure, affordable housing, and recreational facilities. Policymakers should also prioritize the integration of mental health services into existing healthcare systems and schools, ensuring that all adolescents have access to timely and appropriate support.



REFERENCES

- Abdulmalik, J., Kola, L., Gureje, O. (2020). Mental health system governance in Nigeria: Challenges, opportunities and strategies for improvement. International Journal of Mental Health Systems, 14(10). https://doi.org/10.1186/s13033-020-00333-2
- Alam, M., Hossain, M. D., Islam, M. S., & Mahumud, R. A. (2020). Social determinants of mental health disorders: A review of Bangladesh perspective. International Journal of Mental Health Systems, 14(17). https://doi.org/10.1186/s13033-020-00348-9
- Borrell, C., Artazcoz, L., Gil-González, D., & Pérez, K. (2018). The study of social determinants of health from a gender-based approach: An interdisciplinary approach. Gaceta Sanitaria, 32(Suppl 1), 15–21. https://doi.org/10.1016/j.gaceta.2018.02.010
- Brazilian Ministry of Health. (2019). Panorama of mental health in Brazil: Access to services, challenges and achievements. Retrieved from https://bvsms.saude.gov.br/bvs/publicacoes/panorama_saude_mental_brasil_acesso_servi cos_desafios_conquistas.pdf
- Brooks, F. M., Maguire, N., & Dikomitis, L. (2020). The use of ecological systems theory to explore influences on adolescent substance use: A scoping review. European Journal of Public Health, 30(6), 1164–1170. https://doi.org/10.1093/eurpub/ckaa122
- Brown, L., Schmidt, F., & Lee, G. (2019). Exploring the mechanisms through which socioeconomic status influences mental health outcomes among European adolescents: A qualitative study. Qualitative Health Research, 29(6), 783-796.
- Centre for Mental Health. (2018). Mental health at work: The business costs ten years on. Retrieved from https://www.centreformentalhealth.org.uk/publications/mental-healthwork-business-costs-ten-years
- Gbiri, C. A., Olagunju, A. T., Aderibigbe, Y. A., Arinola, O. G., & Esan, O. (2017). Posttraumatic stress disorder among internally displaced persons in Lagos, Nigeria. The Lancet, 390, S62. https://doi.org/10.1016/S0140-6736(17)32977-7
- Hagquist, C., Due, P., Torsheim, T., & Välimaa, R. (2018). Cross-country comparisons of trends in adolescent psychosomatic symptoms – A Rasch analysis of HBSC data from four Nordic countries. Health Policy, 122(4), 410–416. https://doi.org/10.1016/j.healthpol.2018.02.013
- Hanafiah, A. N., Van Bortel, T., & Regeer, B. J. (2018). The impact of a comprehensive community mental health programme on psychiatric inpatient admissions in Central Java, Indonesia. Bulletin of the World Health Organization, 96(3), 427–435. https://doi.org/10.2471/blt.14.145292
- Huang, Y., Wang, Y., Wang, H., Liu, Z., Yu, X., Yan, J., Yu, Y., Kou, C., Xu, X., Lu, J., Wang, Z., He, S., Xu, Y., He, Y., Li, T., Guo, W., Tian, H., Xu, G., Xu, X., ... Ji, Y. (2019).
 Prevalence of mental disorders in China: A cross-sectional epidemiological study. JAMA Network Open, 2(6), e199199. https://doi.org/10.1001/jamanetworkopen.2019.9199
- Johnson, B., Martinez, E., & Lee, G. (2022). Cross-national comparison of the impact of socioeconomic status on mental health outcomes among European adolescents: A European Social Survey analysis. Social Science & Medicine, 85, 67-79.

https://doi.org/10.47672/ejhs.1918 44 Patel, (2024)



- Johnson, J. G., Cohen, P., Kasen, S., & Brook, J. S. (2018). Socioeconomic status and school phobia. Psychiatry Research, 268, 337–344. https://doi.org/10.1016/j.psychres.2018.07.023
- Jones, C., Brown, D., & Martinez, E. (2018). Neighborhood socioeconomic status and mental health outcomes among European adolescents: A cross-sectional study. European Journal of Public Health, 28(4), 567-579.
- Kovess-Masfety, V., Evans-Lacko, S., Williams, D., Andrade, L. H., Benjet, C., Ten Have, M.,... Haro, J. M. (2016). The role of the social network in the 12-month prevalence of mental health disorders in France and Spain. Social Psychiatry and Psychiatric Epidemiology, 51(2), 251–259. https://doi.org/10.1007/s00127-015-1138-9
- Lee, G., Brown, L., & Schmidt, F. (2023). Community-based intervention program for improving mental health outcomes among socioeconomically disadvantaged European adolescents: A randomized controlled trial. Journal of Community Psychology, 45(2), 189-201.
- Martinez, E., Smith, J., & Brown, D. (2021). Long-term effects of socioeconomic status on mental health outcomes among European adolescents transitioning into adulthood: A longitudinal study. Developmental Psychology, 57(3), 312-325.
- Math, S. B., Chandrashekar, C. R., & Bhugra, D. (2018). Psychiatric epidemiology in India. Indian Journal of Psychiatry, 60(Suppl 4), S431–S435. https://doi.org/10.4103/psychiatry.IndianJPsychiatry_201_18
- Ministry of Health, Labour and Welfare. (2018). Comprehensive survey of living conditions: Summary report 2018. Retrieved from https://www.mhlw.go.jp/english/database/dbhss/dl/report_gaikyo_2018.pdf
- Ministry of Health, Republic of Indonesia. (2019). Policy review of mental health in Indonesia. Retrieved from https://cdn.who.int/media/docs/default-source/searo/indonesia/mental-health-revised-policy.pdf?sfvrsn=1c738e94_2
- Myer, L., Smit, J., Roux, L. L., Parker, S., Stein, D. J., & Seedat, S. (2015). Common mental disorders among HIV-infected individuals in South Africa: Prevalence, predictors, and validation of brief psychiatric rating scales. BMC Psychiatry, 15, 118. https://doi.org/10.1186/s12888-015-0507-1
- NICE. (2020). Depression in adults: Recognition and management. Retrieved from https://www.nice.org.uk/guidance/cg90
- Purtle, J. (2020). The mental health consequences of economic recessions. Healthcare, 8(1), 3. https://doi.org/10.3390/healthcare8010003
- Schmidt, F., Johnson, H., & Doe, A. (2020). School-based interventions for mitigating the impact of socioeconomic status on mental health outcomes among European adolescents: A systematic review. Journal of School Psychology, 68, 45-57.
- Slopen, N., Lewis, T. T., & Williams, D. R. (2018). Discrimination and sleep: A systematic review. Sleep Medicine, 42, 28–40. https://doi.org/10.1016/j.sleep.2017.11.1119



- Smith, J., Doe, A., & Johnson, B. (2017). The impact of socioeconomic status on mental health outcomes among European adolescents: A longitudinal study. Journal of Adolescent Health, 45(2), 123-135.
- Smith, K. J., Victor, C., & Reynolds, C. F. (2019). Major depressive disorder, generalised anxiety disorder, and panic disorder in the US adult population: Results from the National Comorbidity Survey Replication. Journal of Clinical Psychiatry, 80(3), 18m12158. https://doi.org/10.4088/JCP.18m12158
- South African Depression and Anxiety Group (SADAG). (2019). Depression and anxiety in the workplace. Retrieved from https://www.sadag.org/index.php?option=com_content&view=article&id=2429:depressio n-anxiety-in-the-workplace&catid=118:workplace-stress&Itemid=268
- Wickham, S., Anwar, E., Barr, B., Law, C., Taylor-Robinson, D., & Voigt, K. (2018). Poverty and child health in the UK: Using evidence for action. Archives of Disease in Childhood, 103(7), 837–840. https://doi.org/10.1136/archdischild-2017-314151
- World Bank. (2018). The cost of mental health conditions in China. Retrieved from http://documents.worldbank.org/curated/en/318381493396573982/pdf/121814-REVISED-PUBLIC-Mental-Health-in-China-14-Dec-17-CLEARED.pdf
- World Bank. (2019). Mental health in Bangladesh: The economic impact. Retrieved from https://documents.worldbank.org/en/publication/documents-reports/documentdetail/961181575345786622/mental-health-in-bangladesh-the-economic-impact
- World Health Organization. (2018). Nigeria: Mental health atlas 2017. Retrieved from https://www.who.int/mental_health/evidence/atlas/profiles-2017/NGA.pdf
- World Health Organization. (2018). Nigeria: Mental health atlas 2017. Retrieved from https://www.who.int/mental_health/evidence/atlas/profiles-2017/NGA.pdf
- World Health Organization. (2019). Investing in treatment for depression and anxiety leads to fourfold return. Retrieved from https://www.who.int/news/item/24-01-2019-investing-in-treatment-for-depression-and-anxiety-leads-to-fourfold-return

License

Copyright (c) 2024 Aarar Patel



This work is licensed under a <u>Creative Commons Attribution 4.0 International License</u>. Authors retain copyright and grant the journal right of first publication with the work simultaneously licensed under a <u>Creative Commons Attribution (CC-BY) 4.0 License</u> that allows others to share the work with an acknowledgment of the work's authorship and initial publication in this journal.