Youth Mental Well-being in Malaysia: Lessons from COVID-19

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Abstract. The COVID-19 outbreak in 2020 triggered global responses marked by fear, anxiety, and stress. Recognized by the World Health Organization (WHO) as a virus with a high transmission potential and the capacity to strain healthcare systems, it led to recommendations for quarantine and isolation. Past experiences with such measures have revealed adverse psychological effects, including Post-Traumatic Stress Disorder (PTSD), increased anxiety, and aggressive behaviors in affected individuals. Mental well-being is a cornerstone of overall health, particularly for youth, given its impact on their development and transition into adulthood. With rising stress levels and the growing prevalence of early-onset mental health issues among young people, understanding the determinants of youth mental well-being becomes crucial. This study delves into these factors, emphasizing the roles of physical, psychological, socio-cultural, and nutritional influences. A comprehensive understanding of these elements is essential for formulating strategies that bolster youth mental health, a need accentuated by the challenges posed by the COVID-19 pandemic.

Keywords: COVID-19 outbreak; youth; mental well-being; Malaysia

1 Introduction

The advent of COVID-19 in early 2020 has had a profound and far-reaching impact across the globe. Emerging infectious diseases, including the COVID-19 pandemic, have triggered widespread fear, anxiety, and stress within communities, particularly when they have resulted in significant fatalities (Buheji et al., 2020). The World Health Organization (WHO) characterizes COVID-19 as a virus with the capacity to not only compromise an individual's immune system but also to spread rapidly from person to person. In response to this public health threat, the WHO has recommended a range of strategies aimed at mitigating the virus's transmission (WHO, 2023). These strategies include quarantine, isolation, physical distancing, self-care, staying informed about symptoms and risks, and disseminating accurate information to the public (Chau et al., 2021). Quarantine and isolation measures have been routinely employed during infectious disease outbreaks to curtail disease transmission (Wilder-Smith & Freedman, 2020).

Quarantine, as defined by the Centers for Disease Control and Prevention (CDC), involves "separating and restricting the movement of individuals who may have been exposed to a contagious disease," while isolation entails "separating infected individuals from those who have not been exposed to the disease" (Stefana et al., 2020). Previous research has shed light on the adverse psychological repercussions experienced by individuals subjected to quarantine and isolation during previous outbreaks, such as SARS and MERS. Studies have documented a high prevalence of mental health issues, including Post-Traumatic Stress Disorder (PTSD), among both quarantined or isolated individuals and their parents (Sayed et al., 2021). Additionally, anxiety syndromes and aggressive behaviors have been observed in individuals subjected to quarantine or self-isolation (Mutluer et al., 2020).

Mental well-being represents a critical dimension of overall health and quality of life. It encompasses both hedonic well-being, which relates to emotional states, and eudaimonic well-being, which pertains to psychological functioning and self-realization (Paleari et al., 2021). Mental well-being transcends the mere absence of mental illness and exerts a protective influence on various health outcomes. In the case of youths, mental well-being assumes a pivotal role in their social, intellectual, and emotional development. It contributes to higher self-esteem, academic attainment, and facilitates their transition into adulthood (Kondratowicz et al., 2022). However, there is growing concern surrounding the escalating levels of stress and anxiety among young people, rendering them more susceptible to mental disorders and associated comorbidities, including conduct and emotional disorders (Selvaraj et al., 2020). The World Health Organization estimates that between 10% and 20% of the global population of children and youths grapple with mental disorders and problems, with half of all mental illnesses emerging by the age of 14 (WHO, 2008). The declining rates of mental well-being among youths and the increasing prevalence of early-onset mental health issues underscore the imperative of gaining a more profound understanding of the determinants and triggers that can enhance the mental well-being of this age group.

This study endeavors to explore the contributory factors underpinning youths mental well-being, with a particular emphasis on the influence of physical, psychological, socio-cultural factors, and nutrition. A comprehensive understanding of these factors assumes paramount importance in the development of strategies aimed at promoting and safeguarding the mental well-being of youth, especially within the challenging context posed by the COVID-19 pandemic.

2 Current Context

Recent data sheds light on the precarious state of youth mental well-being in Malaysia, highlighting the significant challenges faced by this vulnerable population. The prevalence of mental health issues in Malaysia has surged to 2.3%, affecting around 500,000 individuals dealing with a range of mental health issues. Of particular concern is the situation of the country's youth, with a staggering 424,000 young Malaysians reported to be struggling with mental health problems, as revealed by the National Health and Morbidity Survey (NHMS) (2019). Even more concerning is the rising number of suicides among young Malaysians. In 2019 alone, the nation incurred an

economic loss of RM346.2 million due to suicides within this age group. This translates to approximately 382 young men and 141 young women tragically ending their own lives. Unfortunately, this distressing data has seen a regrettable increase, exacerbated by the multifaceted challenges posed by the COVID-19 pandemic in 2022.

The onset of the COVID-19 pandemic in early 2020 brought about unprecedented challenges. Malaysia, like the rest of the world, grappled with the profound and multifaceted impacts of this global crisis. Notably, the implementation of the Movement Control Order (PKP) had a significant impact on various sectors, particularly the economy and education. The stringent measures and uncertainties surrounding unfolding events pushed a substantial portion of the population into a state of heightened anxiety. As a result, many individuals experienced "anxiety attacks" as they navigated the uncharted territory of a world affected by a pandemic. Recognizing the urgency of addressing these alarming mental health concerns, dedicated researchers and organizations like FAME (NGO) took proactive measures to gain a comprehensive understanding of the challenges faced by the Malaysian community. An extensive online study was conducted, encompassing the experiences and perspectives of 460 respondents. This collective effort yielded invaluable insights into the complex tapestry of emotions and tribulations endured during this tumultuous period. Thus, this study delves into the factors contributing to youth mental well-being, drawing lessons from the impact of COVID-19.

3 Factors Influencing Youth Mental Well-Being During Covid 19

3.1 Physical Factor

Physical factors related to youth mental well-being during COVID-19 encompass various elements associated with an individual's physical health and environment (Paulus et al., 2023). These factors can significantly impact their emotional and psychological state and have garnered increased attention during the pandemic due to their effects on youth mental health. The physical well-being of youths is a pivotal factor in this context. Those with pre-existing medical conditions may experience heightened anxiety and stress, driven by concerns about their susceptibility to COVID-19. Additionally, recovering from the virus can exact both physical and emotional tolls. Equally crucial is the accessibility of healthcare services, including mental health support. Youth facing obstacles to healthcare, such as limited access or financial constraints, often experience heightened distress, recognizing the challenges they encounter in seeking necessary assistance (Im & George, 2022).

Maintaining a regular physical activity regimen has demonstrated links to improved mental health. However, lockdowns and restrictions have limited opportunities for exercise, potentially leading to restlessness, reduced mood, and increased stress among youth. Furthermore, ensuring adequate sleep plays an integral role in promoting mental well-being. Disrupted sleep patterns due to shifts in daily routines or heightened stress levels can contribute to mood disruptions and exacerbate pre-existing mental health issues (Ranasinghe et al., 2020). While essential for curbing the virus's spread, physical distancing measures can lead to social isolation and loneliness. The absence of physical interactions with peers and support networks can adversely affect mental health. Youth who have personally experienced COVID-19, either within their families or among friends, often grapple with fear, trauma, or grief. The physical consequences of the virus, coupled with the emotional toll it exacts, can leave enduring imprints on mental well-being (Bower et al., 2023). The closure of schools and the transition to remote learning can disrupt youth' daily routines, affecting their physical activity, academic performance, and social interactions. These disruptions can contribute to heightened stress and anxiety levels. Additionally, limited access to outdoor spaces and recreational activities due to lockdowns can impact physical health and contribute to feelings of confinement and frustration. While promoting proper hygiene practices, such as handwashing and mask-wearing, remains essential for safeguarding physical health, excessive fixation on hygiene or irrational fears related to contamination can give rise to anxiety disorders.

3.2 Psychological Factors

Psychological factors play a substantial role in influencing youth mental well-being during the COVID-19 pandemic (Shoshani & Kor, 2022). These factors encompass various aspects of an individual's mental and emotional state and are integral in shaping how youth navigate the multitude of challenges, stressors, and uncertainties brought about by the pandemic. Youths with heightened emotional resilience are better equipped to confront and manage stressors effectively. This resilience enables them to adapt more successfully to disruptions in their daily lives, such as changes in schooling, social isolation, and concerns regarding the virus. The strategies youths employ to cope with stress and negative emotions significantly impact their mental well-being. Embracing healthy coping strategies, like seeking social support, problem-solving, and practicing relaxation techniques, can mitigate the psychological impact of the pandemic. Pre-existing mood disorders, such as depression and anxiety, may intensify during the pandemic. Youths with these conditions might experience heightened symptoms due to factors like isolation, uncertainty, and reduced access to mental health services.

The presence of a robust support system, including family, friends, and peers, acts as a protective factor for youth mental health. Social support serves as a buffer against feelings of loneliness and provides avenues for emotional expression. Youths with higher self-esteem and self-efficacy tend to maintain a more positive outlook and experience enhanced mental well-being (Wong et al., 2023). They possess the confidence to overcome challenges and maintain a positive

self-image. Youths equipped with adaptive coping skills, including effective problem-solving and emotional regulation, are better prepared to navigate the uncertainties and disruptions brought about by the pandemic. These skills empower them to tackle challenges more proficiently. How youths perceive and interpret stressors significantly affects their mental well-being. Those who view stressors as overwhelming or insurmountable are more likely to experience negative psychological outcomes.

Youth who have encountered trauma, loss, or grief linked to COVID-19, such as the illness or death of a family member or friend, may grapple with intricate emotions and trauma-related symptoms (Fitzgerald et al., 2021). Access to mental health services and resources constitutes a critical psychological factor. Youth with limited access to mental health support may encounter difficulties in coping with their emotional challenges. Fear of contracting the virus or spreading it to loved ones, coupled with general anxiety stemming from the uncertainty of the situation, can significantly impact youth mental health. Youths facing stigma or discrimination related to COVID-19, including unjust blame for the virus's spread, may experience psychological distress (Demirtaş-Madran, 2020). Understanding and addressing these psychological factors are essential for promoting the mental well-being of youth during the COVID-19 pandemic. Implementing interventions and support systems designed to target these factors can empower youth to cope more effectively and maintain better psychological health amid these challenging times.

3.3 Socio-Cultural Factors

Socio-cultural factors encompass a broad spectrum of societal and cultural components that wield considerable influence on the mental well-being of youth amidsts the COVID-19 pandemic (Ebrahim et al., 2022). These factors play a pivotal role in molding the manner in which young individuals perceive and respond to the array of challenges and stressors precipitated by the pandemic. Within this milieu, the family environment emerges as a central socio-cultural determinant. Youth exposed to family conflict, domestic violence, or precarious living conditions face heightened risks to their mental health. Conversely, the presence of robust family support, coupled with open communication and a nurturing home milieu, can serve as protective factors. Peer relationships assume paramount importance during adolescence. Social isolation and disruptions in peer interactions due to lockdowns and physical distancing measures can engender feelings of loneliness, thereby impacting mental well-being. Additionally, youth may grapple with peer pressure associated with risky behaviors, including substance use, which can further exacerbate mental health concerns.

Access to information, notably through digital media and social networks, assumes a role in shaping the perceptions and anxiety levels of youth. Misinformation and sensationalized news reports can contribute to fear and uncertainty. Consequently, fostering responsible media

consumption and enhancing digital literacy emerges as a requisite strategy for the management of mental health. The closure of educational institutions and the pivot to online learning have precipitated disruptions in academic routines. This, in turn, has engendered academic stress, difficulties in acclimatizing to virtual learning modalities, and concerns about future prospects, all of which contribute to heightened levels of anxiety and depression among youth. Cultural beliefs and attitudes regarding mental health play a significant role in determining whether youths seek help or disclose their emotional struggles. The presence of stigma associated with mental health issues may inhibit open discussions and hinder the pursuit of professional support.

The economic repercussions of the pandemic have rendered many families vulnerable, impeding their ability to meet basic needs. This financial strain translates into increased stress levels, with adverse consequences for the mental health of youth. Disparities in access to healthcare and mental health services disproportionately impact marginalized communities. Youth hailing from lower-income backgrounds often grapple with limited access to professional mental health support. The suspension of cultural practices, rituals, and communal gatherings can disrupt the sense of belonging and identity among youths, thereby potentially affecting their mental health (Johnson-Lafleur et al., 2022). The efficacy of government responses to the pandemic, encompassing public health measures and support mechanisms for affected individuals and families, can significantly shape the overarching socio-cultural milieu and, consequently, youth mental health. Cultural values and traditions serve as influential determinants in shaping the resilience and coping mechanisms of youths. While certain cultural practices and community support systems bolster mental well-being, others may pose challenges.

It is imperative to acknowledge the intricate interplay of socio-cultural factors, with their impact on youth mental health manifesting divergently across individuals and communities. Therefore, a comprehensive and culturally sensitive approach to mental health support assumes paramount importance in effectively addressing these socio-cultural influences within the backdrop of the COVID-19 pandemic (Jain et al., 2023).

3.4 Nutrition

The nutritional well-being of youth during the COVID-19 pandemic is a subject of paramount importance (Munasinghe et al., 2020). Maintaining a balanced and nourishing diet is crucial for ensuring their physical health remains optimal. Youth who incorporate essential nutrients, vitamins, and minerals into their daily dietary intake help their bodies function at peak efficiency and maintain good physical condition. Such dietary practices substantially reduce the risk of health issues, such as diabetes and heart disease. The Health Belief Model, as originally proposed by Becker et al. (1974), posits that when young individuals recognize the advantages of good health, they are more likely to make prudent dietary choices. Moreover, beyond dietary considerations, regular

engagement in physical activity assumes a pivotal role in bolstering physical well-being during adolescence. Physical exertion contributes to cardiovascular health, enhances muscle and bone strength, improves mobility, and assists in weight management. It also acts as a preventive measure against health problems associated with excess weight. The Self-Determination Theory, as advanced by Ryan and Deci (2000), asserts that youths are more likely to sustain physical activity if they derive enjoyment from it and experience a sense of accomplishment.

Importantly, the impact of nutrition and exercise extends beyond the physical realm, significantly influencing mental well-being. Consumption of nutrient-rich foods has a positive effect on cognitive functions and emotional regulation. Regular physical activity has been shown to elevate mood and diminish the likelihood of emotional issues such as excessive worry or sadness. The Bioecological Systems Theory, as proposed by Bronfenbrenner (1979), posits that dietary habits and physical activity can wield influence over one's mental state. Youth adhering to a balanced diet and an active lifestyle often report higher levels of life satisfaction. The concept of subjective well-being, encompassing both positive and negative emotions, aligns with this notion, as posited by Diener et al. (1985). Furthermore, adopting a healthy diet and regular physical activity equips youth with effective tools for managing stress. Adequate nutrition provides the body with the necessary resources to cope with stress, while physical activity induces relaxation and reduces stress levels. The Transactional Model of Stress and Coping, outlined by Lazarus and Folkman (1984), underscores the influence of diet and physical activity on stress management. Consequently, youth who prioritize these aspects typically experience an enhanced quality of life. They exhibit increased vitality, improved problem-solving abilities, and greater resilience when confronted with challenges. The World Health Organization Quality of Life framework (2012) highlights that a good quality of life encompasses physical and mental health, as well as the capacity to derive joy from interactions with friends and family, as articulated by the World Health Organization.

Lastly, it is crucial to acknowledge that adopting a healthy lifestyle during adolescence can have far-reaching implications, including a longer and healthier lifespan. Research findings indicate that young individuals who make conscientious choices regarding nutrition and exercise are more likely to lead longer lives free from chronic illnesses (Cacioppo & Hawkley, 2003). The Life Course Perspective serves as a reminder that actions taken during youth can significantly impact long-term health, as elucidated by Elder and Shanahan in 2007. In conclusion, the well-being of youth encompasses not only physical health but also mental and emotional states. A pivotal component of youth well-being involves maintaining a balanced diet and engaging in regular physical activity. While this discussion predominantly centers on how these factors influence the mental well-being of youth, it is crucial to recognize the interconnectedness of all these aspects in contributing to an overall sense of well-being, thereby enabling young people to thrive and achieve success in life.

4 Lessons Learned In Malaysia: Implications For Youth Mental Well-Being

The insights gained from examining the impact of COVID-19 on youth mental well-being in Malaysia yield significant implications that can guide future initiatives aimed at promoting and safeguarding the mental health of young individuals. These lessons underscore several pivotal facets:

Firstly, the promotion of youth mental well-being should adopt a holistic approach. This approach necessitates the recognition and comprehension of the intricate interplay among various determinants, encompassing physical, psychological, socio-cultural, and nutritional factors. To effectively promote mental health among youths, a comprehensive perspective that takes into account the multifaceted nature of these dimensions is indispensable. Secondly, prioritizing early identification and intervention for mental health issues among youths is paramount. Offering timely support can make a substantial difference in preventing the escalation of problems and mitigating the long-term impact of mental health challenges. Consequently, investing in early intervention programs represents an investment in the well-being and resilience of future generations.

Thirdly, the pivotal role of governments in championing youth mental well-being cannot be overstated. Governments must exhibit unwavering commitment by giving priority to and allocating resources for institutions and initiatives dedicated to this noble cause. The well-being of young people should be a fundamental aspect of government agendas, reflecting a steadfast commitment to nurturing healthy, resilient, and well-adjusted future citizens. Fourthly, the integration of technology and digital advancements assumes paramount importance. These innovative tools can be effectively harnessed to create secure environments conducive to the mental well-being of youths. Digital platforms provide opportunities for facilitating open discussions, disseminating vital information, and delivering targeted interventions. Their adoption enhances accessibility and extends the reach of initiatives aimed at addressing mental health concerns among young people.

Moreover, recognizing that different youth groups may have distinct root causes of mental health issues is indispensable. This underscores the need for interventions to be thoughtfully tailored to cater to the unique needs of diverse populations within the youth demographic. Customized approaches ensure that the support provided is not only effective but also directly relevant to the specific challenges confronted by each group. Finally, the multifaceted nature of challenges associated with youth mental well-being extends beyond national borders. Consequently, ongoing discussions and collaborations at both the national and international levels are imperative. These forums serve as conduits for sharing knowledge, exchanging best practices, and engaging in collaborative problem-solving. They constitute essential components of a collective endeavor aimed at enhancing youth mental health on a global scale.

5 Conclusion

In summary, the lessons we've learned from the COVID-19 pandemic highlight the crucial importance of safeguarding and improving the mental well-being of youth, not only within Malaysia but across borders. This necessity calls for a comprehensive approach involving governments, communities, and technology as essential components. By addressing the multifaceted factors influencing young people's mental health, we embark on a joint effort that requires steadfast dedication and cooperation from all sectors of society. Ultimately, it represents an investment in the future well-being and resilience of our youth, equipping them to succeed and prosper in a world filled with both challenges and prospects.

References

- [1] Becker, M. H. (1974). The Health Belief Model and Sick Role Behavior. *Health Education Monographs*, 2(4), 409–419. https://doi.org/10.1177/109019817400200407
- [2] Bower, M., Buckle, C., Rugel, E., Donohoe-Bales, A., McGrath, L., Gournay, K., Barrett, E., Phibbs, P., & Teesson, M. (2023). 'Trapped', 'anxious' and 'traumatised': COVID-19 intensified the impact of housing inequality on Australians' mental health. *International Journal of Housing Policy*, 23(2), 260–291. https://doi.org/10.1080/19491247.2021.1940686
- [3] Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist*, 34(10), 844–850.
- [4] Buheji, M., Jahrami, H., & Dhahi, A. (2020). Minimising stress exposure during pandemics similar to COVID-19. *International Journal of Psychology and Behavioral Sciences*, *10*(1), 9–16.
- [5] Cacioppo, J. T., & Hawkley, L. C. (2003). Social isolation and health, with an emphasis on underlying mechanisms. *Perspectives in Biology and Medicine*, 46(3), S39–S52.
- [6] Chau, J. P. C., Lo, S. H. S., Saran, R., Leung, C. H. Y., Lam, S. K. Y., & Thompson, D. R. (2021). Nurses' experiences of caring for people with COVID-19 in Hong Kong: A qualitative enquiry. *BMJ Open*, 11(8), e052683.
- [7] Deci, E. L., & Ryan, R. M. (2000). The" what" and" why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01

- [8] Demirtaş-Madran, H. A. (2020). Exploring the motivation behind discrimination and stigmatization related to COVID-19: A social psychological discussion based on the main theoretical explanations. *Frontiers in Psychology*, 11, 569528.
- [9] Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13
- [10] Ebrahim, A. H., Dhahi, A., Husain, M. A., & Jahrami, H. (2022). The psychological well-being of university students amidst COVID-19 pandemic: Scoping review, systematic review and meta-analysis. *Sultan Qaboos University Medical Journal*, 22(2), 179.
- [11] Fitzgerald, D. A., Nunn, K., & Isaacs, D. (2021). What we have learnt about trauma, loss and grief for children in response to COVID-19. *Paediatric Respiratory Reviews*, *39*, 16–21.
- [12] Im, H., & George, N. (2022). Impacts of COVID-19 on Refugee Service Provision and Community Support: A Rapid Assessment during the Pandemic. *Social Work in Public Health*, *37*(1), 84–103. https://doi.org/10.1080/19371918.2021.1974639
- [13] Institute for Public Health. (2019). *National Health and Morbidity Survey (NHMS)* (Non-Communicable Diseases: Risk Factors and Other Health Problems) [Techinical Report]. Institute for Public Health.
- [14] Jain, L., Bhivandkar, S., Baqir, H., Shoib, S., Nimavat, N., Mohan, A., Zubair, A. S., Jawad, M. Y., Muhammed, N., & Ahmed, R. (2023). Beyond physical health: The role of psychosocial challenges and stigma in tackling the COVID-19 pandemic—A scoping review. Frontiers in Psychiatry, 14, 1180252.
- [15] Johnson-Lafleur, J., Nadeau, L., & Rousseau, C. (2022). Intercultural Training in Tense Times: Cultural Identities and Lived Experiences Within a Community of Practice of Youth Mental Health Care in Montréal. *Culture, Medicine, and Psychiatry*, 46(2), 391–413. https://doi.org/10.1007/s11013-021-09720-x
- [16] Kondratowicz, B., Godlewska-Werner, D., Po\lomski, P., & Khosla, M. (2022). Satisfaction with job and life and remote work in the COVID-19 pandemic: The role of perceived stress, self-efficacy and self-esteem. *Current Issues in Personality Psychology*, 9(1). https://www.termedia.pl/Journal/-75/pdf-44800-10?filename=Kondratowicz%20Satisfaction.pdf
- [17] Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer publishing company.

- [18] Munasinghe, S., Sperandei, S., Freebairn, L., Conroy, E., Jani, H., Marjanovic, S., & Page, A. (2020). The impact of physical distancing policies during the COVID-19 pandemic on health and well-being among Australian adolescents. *Journal of Adolescent Health*, 67(5), 653–661.
- [19] Mutluer, T., Doenyas, C., & Aslan Genc, H. (2020). Behavioral implications of the Covid-19 process for autism spectrum disorder, and individuals' comprehension of and reactions to the pandemic conditions. *Frontiers in Psychiatry*, 11, 561882.
- [20] Paleari, F. G., Pivetti, M., Galati, D., & Fincham, F. D. (2021). Hedonic and eudaimonic well-being during the COVID-19 lockdown in Italy: The role of stigma and appraisals. *British Journal of Health Psychology*, 26(2), 657–678. https://doi.org/10.1111/bjhp.12508
- [21] Paulus, M. P., Zhao, Y., Potenza, M. N., Aupperle, R., Bagot, K. S., & Tapert, S. F. (2023). Screen Media Activity in Youth: A Critical Review of Mental Health and Neuroscience Findings. *Journal of Mood and Anxiety Disorders*, *3*, 100018.
- [22] Ranasinghe, C., Ozemek, C., & Arena, R. (2020). Exercise and well-being during COVID 19 time to boost your immunity. *Expert Review of Anti-Infective Therapy*, 18(12), 1195–1200. https://doi.org/10.1080/14787210.2020.1794818
- [23] Sayed, M. H., Hegazi, M. A., El-Baz, M. S., Alahmadi, T. S., Zubairi, N. A., Altuwiriqi, M. A., Saeedi, F. A., Atwah, A. F., Abdulhaq, N. M., & Almurashi, S. H. (2021). COVID-19 related posttraumatic stress disorder in children and adolescents in Saudi Arabia. *PloS One*, 16(8), e0255440.
- [24] Selvaraj, P., Muthukanagaraj, P., Saluja, B., Jeyaraman, M., Anudeep, T. C., Gulati, A., Sushmitha, E. S., Dheemant, M., Jain, R., & Kadhir, I. (2020). Psychological impact of COVID-19 pandemic on health-care professionals in India—A multicentric cross-sectional study. *Indian Journal of Medical Sciences*, 72(3), 141.
- [25] Shoshani, A., & Kor, A. (2022). The mental health effects of the COVID-19 pandemic on children and adolescents: Risk and protective factors. *Psychological Trauma: Theory, Research, Practice, and Policy*, 14(8), 1365.
- [26] Stefana, A., Youngstrom, E. A., Hopwood, C. J., & Dakanalis, A. (2020). The COVID-19 pandemic brings a second wave of social isolation and disrupted services. *European Archives of Psychiatry and Clinical Neuroscience*, 270(6), 785–786. https://doi.org/10.1007/s00406-020-01137-8
- [27] WHO. (2008). World report on child injury prevention. World Health Organization.
- [28] WHO. (2012). WHOQOL Measuring Quality of Life. https://www.who.int/tools/whoqol

- [29] WHO. (2023). World Health Organization—WHO Official COVID-19 info. https://www.who.int/emergencies/diseases/novel-coronavirus-2019?adgroupsurvey={adgroupsurvey}&gclid=CjwKCAjwyNSoBhA9EiwA5aYlb5j1tnq JUceAxofTeJohTVzfE9IEbRQyhY-jMlRhJYSyyQsOqHiJHhoCWc0QAvD_BwE
- [30] Wilder-Smith, A., & Freedman, D. O. (2020). Isolation, quarantine, social distancing and community containment: Pivotal role for old-style public health measures in the novel coronavirus (2019-nCoV) outbreak. *Journal of Travel Medicine*, 27(2), 1–4.
- [31] Wong, M.-Y. C., Fung, H.-W., & Yuan, G. F. (2023). The Association between Physical Activity, Self-Compassion, and Mental Well-Being after COVID-19: In the Exercise and Self-Esteem Model Revised with Self-Compassion (EXSEM-SC) Perspective. *Healthcare*, 11(2), 233.