How to Cite:
Alqablan, A. K., & Almahboub, M. S. (2022). Developing mental health support programs: Social services programs. *International Journal of Health Sciences*, *6*(S9), 5147–5159.
https://doi.org/10.53730/ijhs.v6nS9.14989

Developing mental health support programs: Social services programs

Amal Khalid Alqablan
KSA, National Guard Health Affairs

Maha Saad Almahboub
KSA, National Guard Health Affairs

***Abstract*---**Aim: This article examines the development and implementation of mental health support programs, particularly focusing on prevention and promotion strategies to address the rising incidence of mental disorders globally. Methods: A comprehensive literature review was conducted to assess the effectiveness of various mental health promotion and prevention interventions. The review included studies from high-income countries (HICs) and low- and middle-income countries (LMICs), evaluating their applicability and outcomes. Results: Evidence suggests that effective mental health support programs are crucial for reducing the burden of mental disorders. Preventive strategies, such as universal, selective, and indicated interventions, have demonstrated effectiveness in promoting mental health and preventing disorders across different populations, including adolescents and the elderly. Innovations in digital technology, such as internet- and mobile-based interventions, have also shown promise in increasing accessibility. Conclusion: The need for culturally appropriate and resource-sensitive mental health promotion strategies is paramount, especially in LMICs, where the treatment gap is significant. Future research should focus on personalizing interventions, enhancing mental health literacy, and integrating community involvement to optimize the delivery of mental health services.

***Keywords*---**Mental health, prevention, promotion, low- and middle-income countries, digital interventions, community engagement.

Introduction

The impact of mental diseases on productive years of life, in particular, is becoming more widely recognized as a crucial public health concern and a substantial contributor to worldwide disability (1). Disability-Adjusted Life Years

(DALYs) associated with mental diseases have increased from about 80 million to over 125 million, according to the 2019 Global Burden of Disease report. As a result, throughout the previous thirty years, mental illnesses have risen among the top 10 causes of DALYs worldwide (2). Interestingly, substance use disorders (SUDs) are not included in this statistic, which if included would greatly increase the overall burden. Adding in the stress on caregivers would also raise this number even more. Important elements that influence mental health include personal, societal, cultural, political, and economic aspects. Growing rates of mental illness can have a negative impact on physical well-being and impede the social and economic advancement of a country (3). Spending on mental health accounts for 3-4% of GDP in affluent countries; in low- and middle-income countries (LMICs), this amount is significantly lower (4). Untreated mental health problems in childhood and adolescence can result in serious long-term social and economic problems, such as more contacts with the criminal justice system, less opportunities for employment, and poorer incomes (5–8).

Prevention of Mental Health Is Necessary

A higher risk of mental illness is correlated with lower levels of positive well-being, according to longitudinal study (9). On the other hand, elements that promote resilience and wellbeing are essential for averting mental diseases and enhancing the prognosis of people who are impacted (10, 11). Patients with depressive illnesses, for example, who exhibit greater premorbid resilience, typically react faster (12). On the other hand, relapse risks are higher for those with bipolar affective disorder or recurrent depressive disorder who have a lower premorbid quality of life (13). Given the serious social and economic consequences of poor mental health, there is a rising understanding of the need of improving well-being and positive mental health as a strategy to avoid mental disorders (14–16). Research indicates that preventative and mental health promotion programs are economical means of reducing the morbidity linked to mental illness, which is advantageous for both individuals and the community (17).

Effective mental health services have not been widely implemented, despite the World Health Organization's (WHO) definition of health as "a state of complete physical, mental, and social well-being and not merely an absence of disease or infirmity" (18). Furthermore, compared to illness-oriented studies like those that look into psychopathology, mental illnesses, and treatment, preventative and promotional components of mental health research have gotten less attention (19, 20). Healthcare professionals, such as doctors and psychiatrists, frequently lack knowledge about the many ideas, approaches, and treatments linked to mental health promotion and prevention (11, 21).

The rising incidence of mental diseases requires the implementation of preventive strategies and mental health promotion initiatives. Though disease prevention and health promotion are widely accepted public health concepts, it is frequently unclear how to apply them strategically to mental health. Furthermore, it is alarming that preventive mental health interventions are not being integrated, especially in light of the strong connections between physical and mental health. To effectively implement mental health promotion and preventive measures, especially among those with chronic physical diseases, policymakers and health

professionals need to be made aware of these links (18). The reality that 10–20% of young people worldwide suffer from depression serves as a stark reminder of the seriousness of mental health concerns (22). As was previously indicated, adverse health (e.g., substance abuse), social (e.g., delinquency), academic (e.g., school failure), and economic (e.g., elevated chance of poverty) outcomes in adulthood are linked to poor mental health in childhood (23). Adolescence and childhood are critical times for promoting mental and physical health (22). Positive psychology-based interventions can therefore give young people the tools and chances they need to reach their full potential and overcome obstacles in life. Evidence supporting the positive physical and psychological effects of comprehensive mental health efforts including families, schools, and communities is primarily from high-income countries (HICs) (24–28).

On the other hand, these kinds of interventions are frequently disregarded in public health planning for LMICs, which are disproportionately affected by mental health concerns and have a large treatment gap (29, 30). Given that global development goals such as the Millennium Development Goals (MDGs) acknowledge the importance of mental health, this issue requires immediate attention (31). Furthermore, studies continuously show that people from socioeconomically poor households are more likely to experience mental illness and its detrimental effects, in part because mental health services are not distributed fairly (32–35).

The current state of mental health promotion and prevention and its scope

A variety of preventive mental health therapies that target risk and protective variables for a spectrum of mental disorders have been shown to be effective by the literature (18, 36–42). Programs that emphasize early detection and treatment for serious mental diseases (such as schizophrenia and bipolar disorders) as well as common disorders (such as depression and anxiety) are also moderately supported by the evidence (43–46). The cost-effectiveness of these preventive measures has been evaluated, with positive findings. Furthermore, successful results have been obtained from creative treatments including digital-based programs and innovative therapies (such adventure therapy, community pharmacy initiatives, and home-based nurse family partnerships). While the majority of current research and treatments are still focused on HICs, evidence is also coming from LMICs that suggests mental health promotion programs are at least somewhat beneficial (47). Therefore, it is crucial to create culturally appropriate therapies and validate these approaches in LMIC environments. Positively, over the past few decades, there have been notable developments in preventive psychiatry that have piqued the interest of scientists, practitioners, governments, and legislators in utilizing these tactics to improve the accessibility, usability, and availability of mental health services in local communities.

The Preventive Psychiatry Concept
Preventive psychiatry's beginnings

The origins of preventive psychiatry can be discovered in the early 1900s, when the mental hygiene movement, the Committee on Mental Hygiene in New York, and the National Mental Health Association were founded (48). This movement

brought attention to how important it is for medical personnel to develop empathy and spot mental illness early on, which in turn raised awareness of the significance of mental health prevention (49). However, there has been a tendency to view preventive psychiatry with skepticism, especially in the past when the underlying causes of many psychiatric diseases were either poorly known or not fully understood. Advances in neuroimaging and electrophysiological techniques, together with new insights into the phenomena linked to psychiatric diseases, have rekindled interest in preventative psychiatry (1).

Degrees of Preventive Measures

In essence, "prevention" refers to taking steps to stop unfavorable things from happening (50). Preventive measures can include lowering the likelihood of contracting an illness, postponing its commencement, or decreasing the frequency of recurrences or related disability. The idea first surfaced in the treatment of infectious diseases, where tactics like mass vaccination and good hygiene have shown to be successful in delaying the onset and death of disease. Primary, intermediate, and tertiary stages of prevention were distinguished in the 1957 preventive framework put forth by the Commission on Chronic Illness (48).

The Principal, Secondary, and Tertiary Prevention Concept

Primary prevention targets populations prior to sickness onset during the pre-pathogenesis period, whereas secondary and tertiary prevention concentrate on post-onset intervention (51). These prevention stages address distinct components of the disease trajectory. While secondary and tertiary prevention require early diagnosis and treatment together with initiatives to lessen impairment and promote rehabilitation, primary prevention focuses on health promotion and particular protective measures (51). Primary prevention seeks to avoid mental health morbidity and the social and economic consequences that accompany it by providing help to those who are at risk of developing mental disorders as a result of bio-psycho-social variables. These tactics usually go for certain at-risk groups or the broader public. Secondary and tertiary prevention methods, on the other hand, target those who have already received a diagnosis and work to reduce morbidity and impairment as quickly as feasible. These actions, however, frequently arrive after the sickness has already begun, bringing about unavoidable agony, and they might not always be effective in controlling the condition. Therefore, those who have already been impacted by or diagnosed with a mental disease are the target audience for secondary and tertiary prevention.

The main strategy for prevention focuses on people whose bio-psycho-social traits put them at risk of mental illness. It functions as a preventative measure to lessen mental health morbidity and its related social and economic repercussions. These tactics usually aim to reach a broad audience or particular at-risk demographics. Secondary and tertiary prevention measures, on the other hand, target those who have already shown symptoms of the illness in an effort to reduce morbidity and disability as soon as possible. These actions, however, frequently pertain to those who are already afflicted, which may restrict their ability to treat or manage the illness. Hence, people who have received a diagnosis

or have been exposed to mental health issues are the target audience for secondary and tertiary prevention.

The Principle of Individually-Specific, Universal, and Selective Prevention

The traditional division of health prevention into primary, secondary, and tertiary categories is a little restrictive because it emphasizes the cause of sickness rather than taking into consideration the interplay between risk factors and underlying causes. Gordon presented a different preventive model that places an emphasis on individual risk levels to determine the level of intervention that is necessary. According to this approach, preventative techniques can be classified as universal, specific, or recommended. Regardless of a person's risk, universal prevention (e.g., supporting healthy, substance-free lifestyles) aims to reach the entire population. Groups that are more vulnerable than the general public, such as those from socioeconomically disadvantaged backgrounds (migrants, victims of natural disasters, the poor), are the focus of selective prevention. Those who are at high risk of developing a mental condition and who exhibit known risk factors—such as those with a family history of mental illness, a history of substance abuse, or specific personality traits—are the target of indicated prevention. But the main focus of these two frameworks is on physical diseases with well-established causes or risk factors (48).

A new paradigm for classifying primary preventive approaches into recommended, selected, and universal interventions was developed by the Institute of Medicine (IOM) Committee on Prevention of Mental Disorders in 1994. According to this paradigm, primary prevention can only be applied to activities carried out before mental illness manifests (48). On the other hand, treatment and maintenance initiatives are included in secondary and tertiary prevention. This paradigm aims to dispel the myth that prevention can take place at any stage of mental health management, despite the fact that the lines between prevention and treatment are frequently blurred (48). By focusing on modifiable factors linked to the development of mental disorders through a variety of general and targeted initiatives, preventive measures can successfully delay the onset of mental illnesses by lowering risk factors and boosting protective factors. These initiatives can last the entirety of a person's life, providing advantages that go beyond just postponing or lessening the severity of disease (48).

Universal preventive interventions assist both the general population and certain subgroups since they target the entire population without identifying risk factors. Examples that promote both physical and mental wellness are children immunizations and prenatal care. Target populations with a markedly higher risk of mental problems than the whole population—such as low-birth-weight babies, kids with learning disabilities, or abused victims—are the focus of selective preventive interventions. Home visits for low-birth-weight babies, preschool programs for kids in underserved areas, and support groups for senior citizens in need are a few examples of specific tactics. The indicated preventative interventions are designed for high-risk individuals who, although not meeting the criteria for a formal diagnosis, have subtle but observable symptoms or genetic predispositions for mental disease. One illustration would be a program for training parent-child interactions that is intended to assist kids whom parents

have identified as having behavioral issues. Reducing the number of new cases while postponing the development of mental illness is the main goal of mental health promotion and prevention. These initiatives are complimentary rather than antagonistic and combining them into a public health framework can lower stigma, increase cost-effectiveness, and have a variety of beneficial effects (18).

How Psychiatry Differs From Other Medical Disorders in Terms of Prevention

Compared to physical ailments, diagnosing mental illnesses is more difficult because objective assessment methods like diagnostic equipment and biomarkers are not available. As such, assessors' subjective viewpoints have a considerable impact on the diagnosis of mental disorders. Furthermore, if there is obvious malfunction, mental diseases can still be identified in people who do not fit the official diagnostic criteria set forth by classification systems. It is frequently unclear and inconclusive when exactly a condition manifests itself or when a subclinical state gives way to a clinical one (48). As a result, whereas prevention techniques for physical illnesses are well known, those for mental health are not as much so.

Mental Health Promotion and Protection

The term "mental health promotion" presents definitional complexities, as it is interpreted differently by various stakeholders. For some, it refers to the treatment of existing mental illness, while for others, it focuses on preventing the onset of mental disorders. Additionally, some view it as enhancing the ability to cope with frustration, stress, and challenges by bolstering resilience and coping skills (54). Essentially, mental health promotion emphasizes valuing mental health and enhancing individuals' coping capacities rather than solely alleviating symptoms or deficits. Mental health promotion is a comprehensive concept that targets the entire population. It advocates for a strengths-based approach and addresses broader determinants of mental health, aiming to reduce health inequalities through empowerment, collaboration, and community participation. Increasing evidence supports that mental health promotion interventions not only enhance mental health and decrease the risk of developing disorders (48, 55, 56) but also yield socioeconomic benefits (24). Additionally, these initiatives seek to enhance an individual's psychosocial well-being and capacity to adapt to adversity (11).

However, the concepts of mental health promotion, protection, and prevention are closely interconnected. Most mental health conditions arise from complex interactions between risk and protective factors rather than singular etiologies. Facilitating the achievement of developmental milestones throughout an individual’s life is essential for fostering positive mental health (57). Although mental health promotion and prevention are vital components of public health with extensive benefits, their practical implementation is often hindered by financial and resource limitations. Moreover, the scarcity of cost-effectiveness studies, particularly from low- and middle-income countries (LMICs), further restricts the realization of these initiatives (47, 58, 59).

Despite the critical importance of mental health promotion and prevention, and a substantial body of literature on the subject, there remains a lack of comprehensive reviews that cover these concepts while discussing various interventions, including innovative approaches delivered across different life stages and settings. This review seeks to evaluate existing literature on diverse mental health promotion and prevention interventions and their effectiveness. Furthermore, it aims to highlight the implications of such interventions in resource-limited contexts and suggest future directions for research. This literature will contribute to the broader discourse on mental health promotion and prevention, offering insights into the effectiveness, feasibility, and replicability of these interventions across various environments.

Summary of Mental Health Promotion and Prevention Strategies
Current Landscape of Research

The majority of studies on mental health promotion and prevention are quantitative and experimental in nature, with randomized controlled trials being the most common. These studies often focus on school-aged populations and young females, while emerging research is beginning to address interventions for the elderly, particularly regarding conditions like dementia. Most research adopts a broad perspective on mental health promotion, though some specifically target universal or selective prevention strategies. Examples of interventions include:

- **Resourceful Adolescent Program (RAPA):** Implemented in schools, utilizing cognitive-behavioral and interpersonal therapies to significantly reduce depressive symptoms.
- **ZIPPY's Friends:** Focuses on enhancing resilience and coping skills.
- **Writing for Recovery (WfR):** Aims to assist war-affected children in improving psychological health through expressive writing.

Research has predominantly been conducted in developed regions, with low- and middle-income countries (LMICs) lagging in both interventions and related studies. However, culturally tailored approaches, particularly school-based programs involving local resources, have demonstrated higher effectiveness.

Innovations in Digital Technology

With advancements in digital technology, novel methods for delivering mental health interventions are emerging. Internet- and mobile-based interventions (IMIs) have increased accessibility and engagement, particularly among youth. Blended care models combining face-to-face interventions with digital support have shown promise in managing mental health issues. New interventions have also focused on:

- **Community and Workplace Initiatives:** E.g., mental health literacy programs for teachers and guided e-learning for workplace managers.
- **Preventive Strategies for Chronic Conditions:** Targeting individuals with severe mental illnesses through web-based interventions that encourage healthy lifestyle choices and improve coping skills.

Implementation Challenges

Despite the potential of novel interventions, challenges remain, especially in LMICs. Issues such as low digital literacy, privacy concerns, and cultural stigma can hinder the uptake of these strategies. Customization of interventions to fit local contexts is crucial, along with increased funding and resources.

Future Directions
The path forward includes:

- **Personalized Approaches:** Using machine learning and biological research to tailor interventions for at-risk populations.
- **Enhanced Research:** Focusing on prevention strategies that account for pre-existing risk factors and stressors.
- **Broader Accessibility:** Ensuring interventions are less stigmatizing and more relevant for individuals with chronic health conditions.

Recommendations for LMICs

To optimize mental health promotion and prevention in low-resource settings, several recommendations include:

- Increasing mental health literacy through education and communication efforts.
- Involving community leaders and non-specialist professionals in mental health initiatives.
- Incorporating mental health education into medical curricula.
- Utilizing digital platforms for telepsychiatry and training community workers.
- Allocating more financial and human resources to support mental health initiatives.

Involving individuals with lived experiences in the planning and delivery of mental health services can enhance effectiveness and acceptance.

Conclusion

The increasing prevalence of mental health disorders represents a significant global public health challenge, necessitating urgent and effective responses. As outlined in this article, developing mental health support programs that prioritize prevention and promotion can mitigate the severe social and economic consequences associated with untreated mental illnesses. The evidence reviewed highlights the importance of early intervention strategies, which can address the underlying risk factors and bolster protective factors throughout an individual's life. Effective mental health promotion encompasses a broad spectrum of strategies aimed at enhancing overall well-being and resilience, particularly among vulnerable populations such as children and adolescents. Notably, interventions grounded in positive psychology and community engagement have shown potential in improving mental health outcomes. The growing body of evidence supporting innovative digital interventions further expands the toolkit available for mental health promotion, making these resources more accessible and adaptable to various contexts. However, significant barriers remain,

particularly in low- and middle-income countries (LMICs) where mental health services are often underfunded and poorly integrated into existing health systems. Addressing these disparities requires a concerted effort from policymakers, healthcare providers, and communities to prioritize mental health in public health agendas. Future research should focus on refining these interventions, ensuring cultural relevance, and exploring the role of technology in enhancing service delivery. In conclusion, fostering a comprehensive approach to mental health that emphasizes prevention, early intervention, and community involvement will be critical in addressing the global mental health crisis. By aligning mental health initiatives with broader public health strategies, we can work towards reducing the burden of mental disorders and promoting mental well-being across all demographics.

References

1. Trivedi JK, Tripathi A, Dhanasekaran S, Moussaoui D. Preventive psychiatry: concept appraisal and future directions. *Int J Soc Psychiatry.* (2014) 60:321–9. doi: 10.1177/0020764013488570
2. Ng M, Fleming T, Robinson M, Thomson B, Graetz N, Margono C, et al. Global, regional, and national prevalence of overweight and obesity in children and adults during 1980–2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet Lond Engl.* (2014) 384:766–81. doi: 10.1016/S0140-6736(14)60460-8
3. Allen J, Balfour R, Bell R, Marmot M. Social determinants of mental health. *Int Rev Psychiatry Abingdon Engl.* (2014) 26:392–407. doi: 10.3109/09540261.2014.928270
4. Organization IL. *Mental Health in the Workplace. Introduction*. Geneva: International Labour Organization (2000). Available online at: https://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=4954519 (accessed, 2022).
5. Scott S, Knapp M, Henderson J, Maughan B. Financial cost of social exclusion: follow up study of antisocial children into adulthood. *BMJ.* (2001) 323:191. doi: 10.1136/bmj.323.7306.191
6. Chen H, Cohen P, Kasen S, Johnson JG, Berenson K, Gordon K. Impact of adolescent mental disorders and physical illnesses on quality of life 17 years later. *Arch Pediatr Adolesc Med.* (2006) 160:93–9. doi: 10.1001/archpedi.160.1.93
7. McCrone P, Knapp M, Fombonne E. The Maudsley long-term follow-up of child and adolescent depression. Predicting costs in adulthood. *Eur Child Adolesc Psychiatry.* (2005) 14:407–13. doi: 10.1007/s00787-005-0491-6
8. Fergusson DM, Horwood LJ, Ridder EM. Show me the child at seven: the consequences of conduct problems in childhood for psychosocial functioning in adulthood. *J Child Psychol Psychiatry.* (2005) 46:837–49. doi: 10.1111/j.1469-7610.2004.00387.x
9. Wood AM, Joseph S. The absence of positive psychological (eudemonic) well-being as a risk factor for depression: a ten year cohort study. *J Affect Disord.* (2010) 122:213–7. doi: 10.1016/j.jad.2009.06.032
10. Burton NW, Pakenham KI, Brown WJ. Feasibility and effectiveness of psychosocial resilience training: a pilot study of the READY program. *Psychol Health Med.* (2010) 15:266–77. doi: 10.1080/13548501003758710

11. Kalra G, Christodoulou G, Jenkins R, Tsipas V, Christodoulou N, Lecic-Tosevski D, et al. Mental health promotion: guidance and strategies. *Eur Psychiatry J Assoc Eur Psychiatr.* (2012) 27:81–6. doi: 10.1016/j.eurpsy.2011.10.001
12. Min JA, Lee NB, Lee CU, Lee C, Chae JH. Low trait anxiety, high resilience, and their interaction as possible predictors for treatment response in patients with depression. *J Affect Disord.* (2012) 137:61–9. doi: 10.1016/j.jad.2011.12.026
13. Thunedborg K, Black CH, Bech P. Beyond the Hamilton depression scores in long-term treatment of manic-melancholic patients: prediction of recurrence of depression by quality of life measurements. *Psychother Psychosom.* (1995) 64:131–40. doi: 10.1159/000289002
14. Lopez AD, Mathers CD, Ezzati M, Jamison DT, Murray CJ. *Global Burden of Disease Risk Factors*. Washington, DC: World Bank (2006). Available online at: http://www.ncbi.nlm.nih.gov/books/NBK11812/ (accessed, 2022).
15. World Health Organization. WHO European Ministerial Conference on Mental Health (1st : 2005 : Helsinki F, World Health Organization. Regional Office for Europe. Mental health action plan for Europe : facing the challenges, building solutions. In: *First WHO European Ministerial Conference on Mental Health, Helsinki, Finland. (EUR/04/5047810/7)*. (2005). Available from: https://apps.who.int/iris/handle/10665/107627 (accessed January 12–15, 2005).
16. Green Paper. *Improving the Mental Health of the Population Towards a Strategy on Mental Health for the European Union*. Brussels. p. 30.
17. Cuijpers P, Van Straten A, Smit F. Preventing the incidence of new cases of mental disorders: a meta-analytic review. *J Nerv Ment Dis.* (2005) 193:119–25. doi: 10.1097/01.nmd.0000152810.76190.a6
18. Saxena S, Maulik PK, World Health Organization. *Prevention and Promotion in Mental Health*. Geneva: World Health Organization (2002).
19. Herrman H. The need for mental health promotion. *Aust N Z J Psychiatry.* (2001) 35:709–15. doi: 10.1046/j.1440-1614.2001.00947.x
20. Ryff CD, Singer B. Psychological well-being: meaning, measurement, and implications for psychotherapy research. *Psychother Psychosom.* (1996) 65:14–23. doi: 10.1159/000289026
21. Monshat K, Herrman H. What does “mental health promotion” mean to psychiatry trainees? *Australas Psychiatry Bull R Aust N Z Coll Psychiatr.* (2010) 18:589. doi: 10.3109/10398562.2010.500330
22. Kieling C, Baker-Henningham H, Belfer M, Conti G, Ertem I, Omigbodun O, et al. Child and adolescent mental health worldwide: evidence for action. *Lancet Lond Engl.* (2011) 378:1515–25. doi: 10.1016/S0140-6736(11)60827-1
23. Jenkins R, Baingana F, Ahmad R, McDaid D, Atun R. Social, economic, human rights and political challenges to global mental health. *Ment Health Fam Med.* (2011) 8:87–96.
24. Jané-Llopis E, Barry M, Hosman C, Patel V. Mental health promotion works: a review. *Promot Educ.* (2005) 12(Suppl.):9–25. doi: 10.1177/10253823050120020103x
25. Nores M, Barnett WS. Benefits of early childhood interventions across the world: (Under) Investing in the very young. *Econ Educ Rev.* (2010) 29:271–82. doi: 10.1016/j.econedurev.2009.09.001

26. Baker-Henningham H, López Bóo F. *Early Childhood Stimulation Interventions in Developing Countries: A Comprehensive Literature Review*. Bonn: Institute for the Study of Labor. (2010). doi: 10.2139/ssrn.1700451 Available online at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1700451
27. Stewart-Brown SL, Schrader-McMillan A. Parenting for mental health: what does the evidence say we need to do? Report of Workpackage 2 of the DataPrev project. *Health Promot Int.* (2011) 26(Suppl.1):i10–28. doi: 10.1093/heapro/dar056
28. Weare K, Nind M. Mental health promotion and problem prevention in schools: what does the evidence say? *Health Promot Int.* (2011) 26(Suppl.1):i29–69. doi: 10.1093/heapro/dar075
29. Barry MM, Clarke AM, Jenkins R, Patel V. A systematic review of the effectiveness of mental health promotion interventions for young people in low and middle income countries. *BMC Public Health.* (2013) 13:1–19. doi: 10.1186/1471-2458-13-835
30. Patel V, Flisher AJ, Nikapota A, Malhotra S. Promoting child and adolescent mental health in low and middle income countries. *J Child Psychol Psychiatry.* (2008) 49:313–34. doi: 10.1111/j.1469-7610.2007.01824.x
31. Miranda JJ, Patel V. Achieving the millennium development goals: does mental health play a role? *PLoS Med.* (2005) 2:e291. doi: 10.1371/journal.pmed.0020291
32. Fryers T, Melzer D, Jenkins R. Social inequalities and the common mental disorders: a systematic review of the evidence. *Soc Psychiatry Psychiatr Epidemiol.* (2003) 38:229–37. doi: 10.1007/s00127-003-0627-2
33. Jenkins R, Bhugra D, Bebbington P, Brugha T, Farrell M, Coid J, et al. Debt, income and mental disorder in the general population. *Psychol Med.* (2008) 38:1485–93. doi: 10.1017/S0033291707002516
34. Lund C, Breen A, Flisher AJ, Kakuma R, Corrigall J, Joska JA, et al. Poverty and common mental disorders in low and middle income countries: a systematic review. *Soc Sci Med.* (2010) 71:517–28. doi: 10.1016/j.socscimed.2010.04.027
35. Blas E, Kurup AS. *Equity, Social Determinants and Public Health Programmes*. Available online at: https://apps.who.int/iris/handle/10665/44289 (accessed, 2022).
36. Durlak JA, Wells AM. Primary prevention mental health programs: the future is exciting. *Am J Community Psychol.* (1997) 25:233–43. doi: 10.1023/A:1024674631189
37. Durlak JA. Primary prevention mental health programs for children and adolescents are effective. *J Ment Health.* (1998) 7:463–9. doi: 10.1080/09638239817842
38. Lecic-Tosevski D, Christodoulou G, Herrman H, Hosman C, Jenkins R, Newton J, et al. WPA consensus statement on psychiatric prevention. *Dyn Psychiatr Dyn Psychiatry.* (2003) 36:307–19.
39. Kolbe LJ. Meta-analysis of interventions to prevent mental health problems among youth: a public health commentary. *Am J Community Psychol.* (1997) 25:227–32. doi: 10.1023/A:1024622614351
40. Olds DL, Eckenrode J, Henderson CR, Kitzman H, Powers J, Cole R, et al. Long-term effects of home visitation on maternal life course and child abuse and neglect. Fifteen-year follow-up of a randomized trial. *J Am Med Assoc.* (1997) 278:637–43. doi: 10.1001/jama.1997.03550080047038

41. Andrews G, Wilkinson DD. The prevention of mental disorders in young people. *Med J Aust.* (2002) 177:S97–100. doi: 10.5694/j.1326-5377.2002.tb04865.x
42. HEALTHEVIDENCE. *The Prevention of Mental Disorders in School-Aged Children: Current State of the Field*. Available online at: https://www.healthevidence.org/view-article.aspx?a=prevention-mental-disorders-school-aged-children-current-state-field-15455 (accessed, 2022).
43. Marshall M, Rathbone J. Early intervention for psychosis. *Cochrane Database Syst Rev.* (2011) 6:CD004718. doi: 10.1002/14651858.CD004718.pub3
44. Cuijpers P, van Straten A, Smits N, Smit F. Screening and early psychological intervention for depression in schools : systematic review and meta-analysis. *Eur Child Adolesc Psychiatry.* (2006) 15:300–7. doi: 10.1007/s00787-006-0537-4
45. Neil AL, Christensen H. Australian school-based prevention and early intervention programs for anxiety and depression: a systematic review. *Med J Aust.* (2007) 186:305–8. doi: 10.5694/j.1326-5377.2007.tb00906.x
46. Merry S, McDowell H, Hetrick S, Bir J, Muller N. Psychological and/or educational interventions for the prevention of depression in children and adolescents. *Cochrane Database Syst Rev.* (2004) 1:CD003380. doi: 10.1002/14651858.CD003380.pub2
47. Zechmeister I, Kilian R, McDaid D. Is it worth investing in mental health promotion and prevention of mental illness? A systematic review of the evidence from economic evaluations. *BMC Public Health.* (2008) 8:1–11. doi: 10.1186/1471-2458-8-20
48. Mrazek PJ, Haggerty RJ. *Institute of Medicine (US) Committee on Prevention of Mental Disorders. Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention Research*. Washington, DC: National Academies Press (US) (1994). Available online at: http://www.ncbi.nlm.nih.gov/books/NBK236319/ (accessed, 2022).
49. Meyer A. The mental hygiene movement. *Can Med Assoc J.* (1918) 8:632–4.
50. Cambridge. *Prevention Meaning in the Cambridge English Dictionary*. (2022). Available online at: https://dictionary.cambridge.org/dictionary/english/prevention (accessed, 2022).
51. Baumann LC, Karel A. Prevention: primary, secondary, tertiary. In: Gellman MD, Turner JR, editors, *Encyclopedia of Behavioral Medicine*. New York, NY: Springer (2013). p. 1532–4. Available online at: https://doi.org/10.1007/978-1-4419-1005-9_135 (accessed, 2022).
52. Commonwealth Department of Health and Aged Care. Introduction. In: D. Rickwood editor. *Promotion, Prevention and Early Intervention for Mental Health – A Monograph*. Canberra: Mental Health and Special Programs Branch, Commonwealth Department of Health and Aged Care (2000). p. 1–8.
53. Hodgson R, Abbasi T, Clarkson J. Effective mental health promotion: a literature review. *Health Educ J.* (1996) 55:55–74. doi: 10.1177/001789699605500106
54. Sartorius N. Health promotion strategies: keynote address. *Can J Public Health Rev Can Santee Publique.* (1988) 79:S3–5.
55. Jané-Llopis E, Hosman C, Jenkins R, Anderson P. Predictors of efficacy in depression prevention programmes. Meta-analysis. *Br J Psychiatry J Ment Sci.* (2003) 183:384–97. doi: 10.1192/bjp.183.5.384

56. World Health Organization. *Prevention of Mental Disorders: Effective Interventions and Policy Options: Summary Report* [cited 2022] (2004).
57. Min JA, Lee CU, Lee C. Mental health promotion and illness prevention: a challenge for psychiatrists. *Psychiatry Investig.* (2013) 10:307. doi: 10.4306/pi.2013.10.4.307
58. Drummond MF, Sculpher MJ, Torrance GW, O'Brien BJ, Stoddart GL. *Methods for the Economic Evaluation of Health Care Programmes*. Oxford University Press (2005). Available online at: https://econpapers.repec.org/bookchap/oxpobooks/9780198529453.htm (accessed, 2022).
59. Wanless D. *Securing Good Health for the Whole Population: Population Health Trends*. London: HM Treasury (2003). p. 51.