Economic Barriers to Mental Health: Policy Development and Implementation

Anoushka Hooda¹, Abeer Asad², Samir Kumar Singh³, Anurag Kakkar⁴

¹Anoushka Hooda, Academic Affiliations (Student, Department of Economics, Kirori Mal College, University of Delhi, New Delhi, Delhi, India, anoushkahooda06@gmail.com)

²Abeer Asad, Academic Affiliations (Student, Department of Economics, Hansraj College, University of Delhi, New Delhi, Delhi, India, abeerasad01@gmail.com)

³Samir Kumar Singh, Academic Affiliations (Assistant Professor, Department of Economics, Kirori Mal College, University of Delhi, New Delhi, Delhi, India, samirkmc@gmail.com)

⁴Anurag Kakkar, Academic Affiliations (Assistant Professor, Department of Economics, Hansraj College, University of Delhi, New Delhi, Delhi, India, anurag@hrc.du.ac.in)

Abstract

The purpose of this article is to delineate the challenges facing effective mental health service provision. We demarcate the process into the policy development and policy implementation stages to distinctively highlight the shortcomings in each. The article begins with reiterating the need for prioritization of mental health services. Dispensation of mental health services in the low, middle, and high-income countries has been discussed with a view of understanding the several problems that lead to the mental health sector receiving less attention. The problems faced during policy development include gaps in the evidence base, non-transferability of existing data, poorly defined parameters, non-cashable savings, and a lack of international investment. Whereas barriers to effective policy implementation include underfunding and inadequacy of resources, misallocation of resources, the imbalance between gross domestic product per capita, and direct care costs per patient, and increased burden on private spending. Several social factors are also mentioned in this article such as stigma around mental health that leads to marginalization and invisibility of the people suffering from mental health disorders. We conclude with an emphasis on the priorities for future research and development and the way forward in the field.

Keywords: Economic Challenges, Low- and Middle-Income Countries, High Income Countries

Introduction:

A mentally healthy person is someone who is "functioning at a satisfactory level of emotional and behavioural adjustment". Mental health is broadly defined to not only encompass the

absence of mental disorders/symptoms but also to support the overall welfare and productivity of individuals. It is an indispensable part of the public healthcare sector and significantly affects the human, social and economic capital

ISSN: 2582-9777

of countries across the world. The mental capital that comes along with good mental health in terms of increased emotional capabilities and cognitive flexibility is vitally important for the healthy functioning of

families, communities, and society at large.

Mental health has an intricate and bidirectional association with economics. For one, mental illhealth adversely impacts the economy, costs, and consequences of which may be direct or indirect. Direct ones include both medical (such as hospitalization fee, medication, diagnostic services, rehabilitation. residential community service costs, etc.) and non-medical costs (such as transportation for treatment and care). Whereas indirect costs comprise of unemployment, loss of productivity, increase in school/college dropout rates, social support expenses, violence, substance abuse, increased pressure on the family, early mortality, and other intangible costs like an emotional burden [41]. The World Economic Forum projected those mental illnesses will account for US\$6 trillion by 2030, which would be over 50% of the global economic burden attributable to noncommunicable diseases [39].

Conversely, a poor economy itself reinforces and exacerbates mental health problems [12]. Poor economic conditions are linked with a greater likelihood of mental instability, possibly because of added exposure to risk factors such as social exclusion and inaccessibility to education and/or a complex cycle of poverty, unemployment, and a downward shift in social

class (drift hypothesis ¹) [22]. Recessionary pressures and economic slump periods are associated with even greater vulnerability [5], especially for populations where mental disorders were already highly prevalent. All these factors aggravate mental health problems through growing socioeconomic risks such as financial strain, debts, job-related problems, and unemployment [29].

ISSN: 2582-9777

Economics deals with allocating scarce resources optimally to produce goods and distribute services and to them for consumption. Economic evidence can aid the process of policy formation and decision making. Commonly used types of such analyses in mental health studies include: Cost impact studies - to raise awareness of the overall impact of the illness on the population; Budget impact studies or cost-minimization studies - to check current affordability/save money; Cost-offset studies - to check current or future affordability of an investment; Costeffectiveness, cost-benefit or similar studies - to examine the efficiency and see if the investment is worth it; Cost-utility analysis - to estimate the ratio between the cost of the intervention (health-related) and the benefit it produces in terms of the number of years lived in full health by the beneficiaries; Behaviour or nudge

individual's deteriorating m low social class attainment.

¹ It hypothesizes that the circumstances of one's social class do not cause the onset of a mental disorder, but rather, an individual's deteriorating mental health occurs first, resulting in

studies – to understand how incentives might change behavior for the better.

Despite the huge global burden of mental illhealth as well as the growth in the accumulation of economic evidence, there are still several economic challenges to successful policy development and implementation. In this paper, we will discuss the major economic barriers to mental health. We will distinguish and discuss the challenges in the context of low and middle-income countries (LMICs) and high-income countries (HICs) wherever necessary. The paper is divided into two sections for addressing the challenges confronted in the process of policy formulation and those in the process of implementation separately. We conclude with an emphasis on priorities for future research development and the way forward in the field.

Challenges to Policy Development:

Despite the adverse socio-economic impact of poor mental health, it has historically appeared to be given lower priority than other health-related conditions by both external donors and national policymakers. Even when they do have the intention to, policymakers face difficulties while developing models that may prove to be effective in the future. These difficulties threaten the effectiveness of the policies even before they are implemented. In this section, we consider the barriers that are a hindrance to the policymaking process.

A primary barrier is simply the breaches in the

evidence base. We have a limited understanding of the long term economic costs and consequences of mental illnesses and their treatments. Even though there has been a rapid growth in the studies of its cost-effectiveness in recent years, there are some areas that remain unexplored. Data elements that are necessary to measure the quality of mental healthcare are often incomplete or even missing in a few settings. The infrastructure needed to provide the epidemiological data is not significant [25]. There is also a high inconsistency amongst the data collected by different organizations which creates confusion. [21] Several essential areas still prove to be relatively neglected from the research. For example, while there economic studies on ways to support recovery and safeguard the rights of the individual, topics like prevention and early intervention have been overlooked. Research on families of the person suffering from mental health problems is also scarce despite the role they play in aetiology (a branch of medical science concerned with the origin and causes of diseases), recovery, and support. The most challenging of all, though, is the lack of economic evidence in many condition-specific areas such as maternal mental health, child and adolescent mental health, dementia in older people, depression, or even psychosis for LMICs. [23]

Moreover, the *non-participation of all stakeholders* in the policymaking process presents its own set of problems. When the decision-makers are assessing the needs, it is important to consider the views of all the stakeholders and not rely

solely on the epidemiological evidence. Yet the participation of people with mental health illness or their advocates is rare in informing the policy process [25]. As a result, it's often the case that insufficient emphasis is given to measures that hold the potential for alleviating some of the wide-ranging impacts of mental disorders (for example, lost opportunities of participating in education or working).

Each country in the LMICs group is in the process of realizing the burden of mental health issues, gaining acceptance from the society and policymakers, and allocating its resources for the development of mental health services. The existing data sources are often not robust enough for reliable decision and policymaking or implementing the recommendations. In several cases, the available data evidence is not transferable to contexts other than the one it was collected in, especially to other countries. For example, the evidence of cost-effectiveness is harder to transfer to other contexts in comparison to clinical evidence [23]. While most countries share the problem of balancing high needs and scarcity of infrastructure, workforce, and available financial resources for mental healthcare, there is a startling difference in the presence of the mental health workforce of psychologists, social workers, psychiatrists, and nurses between high- and low-income countries [33]. Therefore, there is wide variability in the presence of economic evidence which then entails a disparity in the provision of mental health services.

A lack of visible core indicators is another factor that contributes to mental health issues receiving low priority by the policymakers. More often than not, several parameters are poorly defined (for example definitions of intervention fidelity, psychotherapy, treatment engagement, or recovery are not well described) [11]. Existing data sources are often short of sufficient information for successfully establishing the numerators and denominators for the quality measure (the numerator, which is also called the measure focus, describes the target process, condition, event, or outcome expected for the targeted population whereas the denominator defines the population being measured) [21]. Some quality measures often include strict exclusion criteria that often do not apply to the majority of at-risk patients (for example indicators for newly diagnosed depression). Due to this reason. internationally agreed indicators of health needs, progress, and outcomes do not mention mental health indicators. This further leads to the marginalization and invisibility of people suffering from mental health issues. [16]

ISSN: 2582-9777

International stakeholders play a significant role in stimulating appropriate mental health policy development and practice in the LMICs. One of them is the World Health Organization (WHO). The active Mental Health Division is responsible for encouraging research in various fields and developing an array of advisory documents for other stakeholders and governments (WHO report in 2001 proved to be a stimulant, setting out an extensive framework for developing mental health

services in low-, middle- and high-income countries [39]). However, WHO is unable to invest in the development of mental health programs due to its limited capacity. This is because WHO's principal mandate is not as a donor. A large portion of its financing comes from international voluntary contributors. More often than not these donors are ringfenced for specific areas such as child and maternal health or health systems. This influences the priorities of the headquarters, regional, and country offices. In several countries, the average biennial budget specific to mental health per low-income countries of the WHO country office is devoted to advocacy events (like the celebration of World Mental Health Day, consultation events for stakeholders, etc) or office equipment (like computers) for the mental health division in the Ministry of Health. While these expenses are crucial to the Ministry, they lead to a *shortage* of funds that are needed to significantly facilitate

As mentioned before in this paper, mental health indicators seldom make an appearance in the internationally agreed indicators of health needs. As countries work towards meeting the internationally agreed standards of healthcare. resource allocation development priorities are deployed towards meeting these targets. As a result, areas such as mental health and even cancer do not benefit from international investment. This lack of international investment in mental health research, infrastructure, and information

the development and expansion of systemic

mental health services in LMICs.

systems often cripples the ability of the Ministries of Health to present a cost-effective case to the Ministries of Finance [16].

ISSN: 2582-9777

Another major challenge is when intervention is cost-effective and is generating outcomes that may be considered sufficient to justify the higher cost involved in achieving it but is still out of reach due to insufficient budgets or lack of staff skilled enough to suitably deliver Therapeutic breakthroughs (such medications that follow new and better modes of action) may show potential for fewer symptoms, modification of the disease, or a better quality of life. But if they are not simultaneously cost-reducing, they just exert added strain on already stretched out healthcare budgets. The decision-makers are therefore always looking for strategic interventions that provide outcomes that are better or at par with the outcomes provided by the standard care, but at a lower cost.

A related challenge is that of *non-cashable* savings. More often than not, the apparent savings discussed in research studies turn out to be "non-cashable" in the real world. An example of this is a study done in 2019 which showed that effective support interventions for family carers might reduce their stress levels or time inputs, but it does not release any resources that are transferable to other uses [28]. Similarly, another study in 2015 found that early intervention programs for people suffering from psychosis might reduce the use of inpatient services. Though useful, this will not generate actual savings unless some of the inpatient beds are closed or excess staff laid off

[10].

There might be substantial consequences of effective treatments of mental illness outside of the immediate treatment setting. For example, there is a possibility of a reduction in the cost of other clinical areas if the treatment of mental illness also helps the patient in managing their co-morbid conditions in a better way [36]. It gets more complicated when the greatest impact (economic or other) of good mental health treatment is outside the health sector. For instance, the impact and costs of effective depression treatment are higher in the employment sector than in the healthcare sector [40]. Apart from that, the treatment for childhood mental illnesses is mostly a healthcare sector responsibility even though they have their major public sector costs in schools [37]. Since there are separate budgets in different sectors or specialties within the healthcare sector, it might get difficult to align the benefits and costs. This in turn makes it difficult to portray the treatment as an economically attractive one.

The already low-perceived priority is often exacerbated by the *stigma* around mental health issues. Considering the stigma is important while developing the policies as it leads to mental health issues getting less attention from the public and the ministries. Subsequently, there is a lack of resources allocated in the mental health sector, this leads to poor staff morale and leadership, inadequate information systems, decaying institutions, and inadequate legislation. Stigma is detrimental not just to the people suffering from mental illness who are

socially excluded, but also to the well-being of society as a whole [17].

Many mental illnesses are chronic and, as a result, their economic consequences are long-term. That is, full pay-offs from a new and improved treatment system might not be observed for some years. This makes it harder to persuade the decision-makers who are working to shorter time scales and achieving short term goals (linked to the election process) to invest in the prevention of mental health issues now, even if there could be substantial gains in the future. These reasons create the inimical complication of a double disincentive for the mental health sector, wherein spending on interventions by one sector now leads to benefits or savings mainly in the future years and mainly in other sectors [23].

Challenges to Policy Implementation:

Despite the growth in the research for economic evidence for mental health policy formulation over the past 30 years, as seen above, the hurdles in development are still pervasive. By 2017, only 72% of the member states of WHO had a stand-alone policy for mental healthcare [27]. But more so, multifaceted functional challenges persist in the operation of the so developed policies too. In this section, we consider general barriers to the implementation of mental health policies across the world.

A primary problem associates with the *underfunding* of mental health programs already in place, prominently within LMICs.

Funding may be directed towards the operational aspects of policies ranging from general specialist care to administration/management to training/awareness/promotional programs. In India for example, over 150 million people suffer from some mental illness of which 85-90% receive no treatment, yet funds allocated to India's National Mental Health Program (NMHP) were a mere 0.05% of the total budget in FY20. Global median expenditure per capita on mental health in 2017 was US\$2.5, an estimated 2% of the global median expenditure on total government healthcare. An overall glaring gap between HICs and LMICs was also noted. For example, mental health expenditure per capita in the European region was more than 20 times higher than the African and Southeast Asian Region [27]. Overall public spending for policy implementation is meagre

The broad reasons for underfunding are: (i) Poor economic conditions (developing country/recession/socio-economic conflict etc.) prompts the government to allocate resources to more "urgent" needs and not prioritize mental health. The low urgency, as discussed in the previous sections, is wrongly portrayed due to a lack of cost impact studies and the complicated nature of returns [41]. (ii) The stigma around mental health prevalent within societies especially in several developing countries [1, 2, 3, 6, 14, 20, 38] which could lead to low willingness to pay or seek treatment [8]

across the world and the scale is more

pronounced in LMICs. This leads to stagnation

of the system despite policies being in place.

making the policies less cost-effective and discouraging further investment. In this case, nudge studies in compliance with educational programs and rigorous legislation could lessen the stigma and help incentivize the population. (iii) Structural barriers with bureaucratic government departments and rampant corruption [22].

ISSN: 2582-9777

Subsequently, one can find a severe inadequacy of resources to deliver efficient services. Talking about human resources, the median number of health workers varies from below 2 per 100,000 people in LMICs to over 70 in HICs, with a global median at 9 [27]. A leading reason for low participation is the stigma around psychiatry as a profession and a lack of incentive for people to join [34]. A secondary reason for the low ratio within LMICs relates to the migration of psychiatrists for better incentives. In a study in 2010 [16], it was found that a large number of psychiatrists originating from key LMICs (India, Pakistan, Bangladesh, Philippines, Nigeria, Egypt, Sri Lanka) were registered in the UK, US, New Zealand, and Australia, with concomitant impact on the psychiatrist to population ratio in the mentioned developing countries. Studies also indicate that even within the already small number of workers, a huge number lacks training and/or motivation conducive to the provision of sufficient care [8]. The lack of motivation is a barrier in itself which is coupled with a high burnout rate among mental health workers [30, 32]. This is linked to their overburdening, sense of reduced personal accomplishments, and ironically their depleted mental wellness [30].

Coming back to insufficient resources, not only humans but also the capital and infrastructural resources are inadequate to meet the needs of effective implementation. This problem is extremely severe in the case of LMICs. The median number of mental health beds per 100,000 people ranges below 7 in LMICs and to over 50 in HICs. Equally large disparities exist for outpatient services, child and adolescent services, and social support. Globally, the median number of child and adolescent beds is less than 1 per 100,000 population and ranges from below 0.2 in LMICs to over 1.5 in HICs. This is the case when institutional care gets as much as 80% of the total funds allocated to mental health. Other areas of primary care and community services are hardly given any attention and are highly neglected [27].

A further barrier relates to the *misallocation of resources* i.e., the already scarce resources being underutilized due to their inappropriate allocation. There are three major dimensions to this:

Firstly, even though there has been a process of deinstitutionalization of mental healthcare in the developed world over the past three decades, as discussed above, the maximum portion of total spending on mental health still goes to mental hospitals. There is an evident bias biomedical towards the approach, especially within developing countries, which fails to address the problem appropriately. A solo focus on institutionalization is criticized for ignoring the socio-cultural factors associated with the illness of patients as well as the provision of care that considers their

psycho-social status [8, 14, 20, 35]. An optimal mix of services, according to WHO, should include Primary Care, Community care as well as care through Mental Health Hospitals in accordance with the contextual needs [8, 39]. Some investments in mental hospitals are also seen as sunk costs as they might not be used in any alternative way. This could be an economic barrier to the substitution of old hospitals with suitable community-based more care. Resources may get released when large facilities are closed down to fund other suitable services. However, there still are extra shortterm costs and resource requirements in addition to the time lags for management of the closure that together makes the process rather complicated [8].

ISSN: 2582-9777

Secondly, resources are misallocated when the policies don't suit local contexts or stakeholders' opinions aren't considered. These problems directly arise from the policy development challenges of data not being complete or robust enough. And thirdly, the fact that many people with subthreshold disorders are cured while people with severe cases aren't, shows that unmet need for treatment among severe cases is not only because of scarce resources but also because they are misallocated to non-priority areas [15].

Another major burden on states, especially LMICs comes with the *imbalance between gross domestic product (GDP) per capita and direct care costs per patient*. [8, 24, 34]. As suggested earlier, direct costs hardly constitute a real picture of the burden of mental illnesses since indirect costs (loss of productivity, school dropouts,

crimes, etc.) are much higher [8, 41].

However, since spending on mental health is very low compared to the illness burden associated with it (a major part of which stays limited to psychiatric hospitals rather than psycho-social rehabilitation resources), the imbalance makes the treatment gap more noticeable in poorer countries and leads to an increase in private spending on mental health and out-of-pocket expenses for families [8, 24, 34].

This then brings us to a leading barrier to mental healthcare access in LMICs which is the high treatment costs for patients. The highest is hospitalization the cost of which unaffordable to private individuals and largely to the system itself [8]. Comparative research of France, India, Israel, and Spain showed that more than half of medical services in France and almost a third in Israel are privately provided; in India, it is mainly provided via private psychiatrists; and in Spain. there is a vast network of private medical services administered by health insurance companies [4]. For all these cases expenses are directly required of individuals and families for hospital stays, outpatient appointments, and medicines. This becomes particularly problematic in the light of evidence to show the high vulnerability of the poor to mental health illnesses and how they are strongly linked to social and economic marginalization [13, 23].

Then lastly are a set of social problems that hamper the effectiveness of policies. One huge problem is the conditions within mental hospitals. Time and again, studies have thrown light on the *deplorable treatment* that patients have been subjected to across the world including extreme isolation, abuse, neglect, and dehumanization [23]. The economic problem of people's low willingness to seek treatment comes from social stigma and *alternative beliefs* and practices they follow. Many Indians and people in certain African regions seek help from spiritual healers. [1, 6, 19]. The lack of awareness of mental health and the effects of religious, cultural, and contextual settings contribute to the non-adoption of professional mental healthcare.

ISSN: 2582-9777

Conclusion

We sought to highlight the main economic barriers to global mental health policy development and implementation through this paper. The main barrier to policy development is the lack of reliable, robust, and generalizable evidence. Even in the case of availability, its inaccessibility to LMICs remains an issue. Training and treatment programs in LMICs need to be responsive to cultural contexts. In terms of implementation, both LMICs and HICs face challenges yet LMICs are worse off especially due to lack of funds and unskilled human resources. A number of these barriers can be tackled with political will and strengthened legislation, through educational programs and awareness campaigns. Scaling up mental health services requires strategic resource allocation methods, flexible policies that include constructive engagement of the common population, increase in relevant

resources as well as administrative goodwill.

Conflict Of Interest:

Both the authors contributed equally to this work. This article could not have been completed without any of them. There are no conflicts of interest declared by the authors.

Acknowledgement:

We would also like to extend our sincerest gratitude to Dr. Rama, principal of Hansraj College, Delhi University, and Dr. Vibha Singh Chauhan, principal of Kirori Mal College, Delhi University for providing us with this opportunity.

References

- 1. Ambikile, J. S., & Iseselo, M. K. Mental health care and delivery system at Temeke hospital in Dar es Salaam, Tanzania. BMC Psychiatry, 2017;17(1):109
- 2. Arandjelovic, K., Eyre, H. A., Forbes, M. P., Bauer, R., Aggarwal, S., Singh, A.B., Ng, C. et al., Mental health system development in Asia: Does Australia have a role? Australian & New Zealand Journal of Psychiatry, 2016;50(9):834–841
- 3. Azman, A., Jamir, P. S., & Sulaiman, J. The mentally ill and their impact on family caregivers: A qualitative case study. International Social Work, 2019;62(1):461–471.
- 4. Balhara, Y. P. S., Lev-Ran, S., Martínez-Raga, J., Benyamina, A., Singh, S., Blecha, L., & Szerman, N. State of training, clinical services, and research on dual disorders across France, India, Israel, and Spain. Journal of Dual Diagnosis, 2016;12(3–

- 4):252-260
- 5. Bambra C, Gibson M, Sowden A, Wright K, Whitehead M, Petticrew M. Tackling the wider social determinants of health and health inequalities: evidence from systematic reviews. J Epidemiol Community Health. 2010;64(4):284–91.
- 6. Bee, P., Price, O., Baker, J., & Lovell, K. Systematic synthesis of barriers and facilitators to service user-led care planning. The British Journal of Psychiatry, 2015;207(2):104–114.
- 7. Bloom DE, Cafiero ET, Jané-Llopis E et al. The global economic burden of noncommunicable diseases. Geneva: World Economic Forum, 2011.
- 8. Carbonell, A., & Navarro-Pérez, J. J. The care crisis in Spain: an analysis of the family care situation in mental health from a professional psychosocial perspective. Social Work in Mental Health, 2019;17(6):743–760.
- 9. Caulfield, A., Vatansever, D., Lambert, G., & Van Bortel, T. WHO guidance on mental health training: A systematic review of the progress for non-specialist health workers. British Medical Journal Open, 2019;9(1):1–16
- 10. Faiz H. Afghanistan mental health care and psychosocial support program. In: Mental Health and Development Aid. Amsterdam, The Netherlands: Global Initiative on Psychiatry, 2009.
- 11. First MB, Pincus HA, Schoenbaum M. Issues for DSM-V: adding problem codes to facilitate assessment of quality of care. Am J Psychiatry. 2009;166:11–13.
- 12. Frasquilho, D., et al. BMC Public Health 2016;16:115
- 13. Funk M, Drew N, Knapp M. Mental

- health, poverty and development. J Public Mental Health 2012;11:166-85.
- 14. Hanlon, C., Eshetu, T., Alemayehu, D., Fekadu, A., Semrau, M., Thornicroft, G., Alem, A. et al. Health system governance to support scale up of mental health care in Ethiopia: A qualitative study. International Journal of Mental Health Systems, 2017;11(1):38.
- 15. JAMA, June 2, 2004; Vol 291:21
- 16. Jenkins R, Kydd R, Mullen P, Thomson K, Sculley J, et al. International Migration of Doctors, and Its Impact on Availability of Psychiatrists in Low and Middle Income Countries. PLoS ONE 2010;5(2):1-11
- 17. Jenkins R. Supporting governments to adopt mental health policies. World Psychiatry. 2003;2(1):14-19.
- 18. Jenkins R, Baingana F, Ahmad R, McDaid D, Atun R. What action can national and international agencies take?. Ment Health Fam Med. 2011;8(2):97-99.
- 19. Kaur, R., & Pathak, R. K. Treatment gap in mental healthcare: Reflections from policy and research. Economic and Political Weekly, 217;52(31):34–40
- 20. Keynejad, R., Semrau, M., Toynbee, M., Evans-Lacko, S., Lund, C., Gureje, O., Hanlon, C. et al. Building the capacity of policy-makers and planners to strengthen mental health systems in low-and middle-income countries: A systematic review. BMC Health Services Research, 2016;16(1):601.
- 21. Kilbourne AM, Keyser D, Pincus HA. Challenges and opportunities in measuring the quality of mental health care. Can J Psychiatry. 2010;55(9):549-557.
- 22. Knapp M, Thorgrimsen L, Patel A et al. Cognitive stimulation therapy for people with dementia: cost-effectiveness analysis.

- Br J Psychiatry 2006:4-9
- 23. Knapp, M., Wong, G., World Psychiatry 2020;19:3–14
- 24. Malik, M. A., & Khan, M. M. Economic burden of mental illnesses in Pakistan. Journal of Mental Health Policy and Economics, 2016;19(3):155–166.
- 25. McDaid, D., Knapp, M., Raja, S.Barriers in the mind: promoting an economic case for mental health in low- and middle- income countries. 2008;IMP 14 47:79-86.
- 26. McDaid D, Park AL, Knapp M. Commissioning cost-effective services for promotion of mental health and wellbeing and prevention of mental ill-health. London: London School of Economics and Political Science, 2017:1-7
- 27. Mental health atlas 2017. Geneva: World Health Organization; 2018.
- 28. Ministry of Health. Circular dated 26 April 2010. Kampala: Ministry of Health, 2010.
- 29. Modrek S, Stuckler D, McKee M, Cullen MR, Basu S. A review of health consequences of recessions internationally and a synthesis of the US response during the great recession. Public Health Rev. 2013;35:1
- 30. Morse, G., et al. (2012). Burnout in Mental Health services :A Review of the Problems and Its Remediation. Adm Policy Ment Health September 2012;39(5):341-352.
- 31. Organization of services for mental health. Geneva, World Health Organization, (Mental Health Policy and Service Guidance Package), 2003;9:1-11
- 32. Paris M Jr, Hoge MA. Burnout in the mental health workforce: a review. J Behav Health Serv Res. 2010 Oct;37(4):519-28
- 33. Rathod, S., Pinninti, N., Irfan, M.,

- Gorczynski, P., Rathod, P., Gega, L., & Naeem, F. Mental health service provision in low-and middle-income countries. Health Services Insights, 2017;10:1–7.
- 34. Sahithya, B. R., & Reddy, R. P. Burden of mental illness: A review in an Indian context. International Journal of Culture and Mental Health, 2018;8:1-11
- 35. Saymah, D., Tait, L., & Michail, M. An overview of the mental health system in Gaza: An assessment using the World Health Organization's Assessment Instrument for Mental Health Systems (WHO-AIMS). International Journal of Mental Health Systems, 2015;9(1):4.
- 36. Simon G, Katon W, Lin E et al. Diabetes complications and depression as predictors of health service costs. Gen Hosp Psychiatry 2005;27:344-51.
- 37. Snell T, Knapp M, Healey A et al. Economic impact of childhood psychiatric disorder on public sector services in Britain: estimates from national survey data. J Child Psychol Psychiatry 2013;54:977-
- data. J Child Psychol Psychiatry 2013;54:977-85.
- 38. Vigo, D. V., Kestel, D., Pendakur, K., Thornicroft, G., & Atun, R. Disease burden and government spending on mental, neurological, and substance use disorders, and self-harm: Cross-sectional, ecological study of health system response in the Americas. The Lancet Public Health, 2019;4(2):e89–e96
- 39. World Health Report 2001. Mental health: new understanding, new hope. Geneva: World Health Organization, 2001.
- 40. Woo JM, Kim W, Hwang TY et al. Impact of depression on work productivity and its improvement after outpatient

- treatment with antidepressants. Value Health 2011:14:475-82.
- 41. Yerramilli*, S., Bipeta*, R. Economics of mental health: Part I Economic consequences of neglecting mental health an Indian perspective. APJ Psychological Medicine 2012; Vol.13(2)- July-Dec:80-86.