INTERNATIONAL JOURNAL OF ADVANCE RESEARCH, IDEAS AND INNOVATIONS IN TECHNOLOGY

ISSN: 2454-132X

Impact Factor: 6.078

(Volume 10, Issue 5 - V10I5-1332)

Available online at: https://www.ijariit.com

Evaluating the Effectiveness of the National Mental Health Program in India

Rohana Kohli
mypublishedpaper@gmail.com
Victorious Kidss Educares, Pune

ABSTRACT

The burden of mental health disorders in India has risen in recent decades. To address the shortage of mental healthcare professionals and infrastructure, the Government of India launched the National Mental Health Program in 1982, which promotes community participation and capital expenditure in this industry. However, the NMHP has been widely criticised for budgetary and administrative incoordination. This research paper examines the NMHP to determine its effectiveness in reducing the social costs associated with untreated mental health issues in India.

KEYWORDS:*Mental health, India, National Mental Health Program (NMHP), social costs, mental healthcare infrastructure, externalities, substance use disorder.*

INTRODUCTION

The Current State of Mental Health in India

In India, approximately 15% of the Indian population suffer from mental health issues such as anxiety disorders, depression, bipolar disorder, schizophrenia, and substance use disorder [i]. It is concerning to note that the burden of mental health problems in India is 2443 disability-adjusted life years (DALYs) per 100,000 population[iii], which is substantially higher than the global average of 1426.5 and 1703.3 per 100,000 population for males and females respectively. [iv]. Additionally, the treatment gap for mental health disorders in India ranged from 70 to 92% for different disorders in 2015-16.[v]

There are significant disparities in the prevalence of mental health issues among different socio-economic groups in India. For example, low-income individuals experience a higher prevalence of mental health disorders, as revealed by the National Mental Health Survey. Additionally, in a 2002 study, industrial workers were recorded to have a relatively high 14-37% prevalence rate of mental disorders, with a particularly high prevalence of substance use disorder [vi]. In the aftermath of the COVID-19 pandemic, wage earners due to financial constraints and housewives due to the high rate of domestic abuse accounted for 40% of the total number of suicides in India in 2021. [vii] Despite these social concerns, however, India faces a significant shortage of mental healthcare resources, with the treatment gap being further amplified by stigma and discrimination against persons with mental health issues in the country.

The National Mental Health Programme

The Government of India adopted the National Mental Health Programme (NMHP) in August 1982, making India one of the first developing countries to adopt a national mental health program. The drafting of the NMHP was in accordance with the recommendations of a multi-country collaborative project initiated by the WHO towards the integration of mental health with general health services in developing countries[viii]. The primary objectives of the NMHP included ensuring the availability and accessibility of minimum mental healthcare to vulnerable sections of the population, encouraging the application of mental health knowledge in social development and general healthcare, and promoting community participation in mental health service development. The integration of mental health services with the existing general health services was envisaged as the primary approach to achieving these objectives.The original NMHP was heavily criticised for its lack of budgetary estimates and clarity regarding whether the central government or state governments of India should fund the program. Additionally, the feasibility of implementing the programme in larger populations was questioned, as research and training institutes conducted most pilots in smaller populations of up to 40,000 people[ix].

As a result, the need for the decentralisation of the mental health program was perceived, which led to the launch of the District Mental Health Program (DMHP) in 27 districts in 1996 with an initial budget of INR 280 million[x]. Since its inception, DMHP has been successful in increasing the accessibility of mental healthcare at the district level, emphasising on imparting training to general physicians for the diagnosis and treatment of common mental illnesses by specialists, modernising state mental health hospitals, and ensuring the availability of essential psychotropic drugs and the primary healthcare level viii. Between 1996 and 2023, the coverage of the DMHP grew from 4 districts to 738 but it is yet to achieve 100% coverage in the 766 Indian districts[xi].

Private and Social Costs Associated with Mental Health Issues

An externality occurs when the actions of economic agents give rise to negative or positive side effects on other people who are not part of these actions, and whose interests are not taken into consideration[xii]. Untreated mental health issues create negative externalities, and hence, their social costs exceed their private costs (MSC>MPC).

The private costs of treating mental health issues include direct costs such as the cost of consultations, medicines, investigations, travel, and food, and indirect costs such as the loss of wages for the patient[xiii]. In a study conducted by Kondapura et al. from April 2018 to January 2019 at the National Institute of Mental Health and Neurosciences, Bengaluru, the median annual direct and indirect costs of treating mental health issues amounted to ₹4,907 and ₹12,900 respectively.[xiv] In India, the scarcity of mortality and morbidity data has delayed the provision of a policy for mentally ill patients from insurers, causing most patients to bear the burden of treatment through out-of-pocket (OOP) expenditure.

[xv] OOP expenses in healthcare are the expenses not financed by insurance or public healthcare systems and must be paid through an individual's personal cash reserves xii. Hence, high personal costs of mental health services can drive consumers into poverty and limit the demand for these services in the free market economy.

The external costs (or negative externalities) of untreated mental health issues include the antisocial behaviour exhibited by persons with mental health issues which can directly impact the welfare of their family members and the public[xvi]. Additionally, more than one in four adults living with serious mental health issues such as schizophrenia, major depression, and bipolar disorder also have a substance use disorder (SUD).[xvii] SUDs deplete the human capital of an economy, increasing the risk of heart disease, stroke, cancer, and other mental health conditions among the labour force.[xviii] For instance, 14.6% of the Indian population consumed alcohol in 2017-18, making it the most used psychoactive substance in the country. Between 2011 and 2050, the consumption of alcohol will impose an economic burden of INR 3127 billion on the Indian healthcare system and pose a 1.45% loss of the GDP per year to the Indian economy. Moreover, several recent studies have reported a modest association between mental illness and violence, even when factors such as gender, age, poverty, or substance abuse were controlled[xix]. In a study conducted by Elbogen & Johnson in 2009, there were more people with severe mental illness (33%) in the group with a history of violence than people without mental illness (14%), indicating that severe mental illness had significantly increased the probability of having a history of violence.[xx]

Additionally, there is a significant opportunity cost associated with the time spent by caregivers towards treating persons with mental illness in terms of foregone time they could have spent working in the marketplace[xxi]. 90% of patients with chronic mental health illness live with their family members in India, and rely on these family members as caregivers, as well as for medicine supervision, financial support, and hospital visits.[xxii] This high percentage of family caregiving is a result of both kinship obligations, as well as fragmented and inadequate provision of mental healthcare services in the country.[xxiii] Caregiving obligations can adversely affect the financial position of the family members, including their income levels, career progress opportunities, and job security.[xxv] In a study conducted by Chavan et al. in Punjab in 2015-16, caregivers had to forgo a minimum of 7 days in 3 months to assist their family member grappling with mental illness.[xxiv]. Further, the antisocial behaviour that may be exhibited by persons with mental health issues can also lead to stress for their caregivers.[xxvi] For example, a study conducted by Nagarajan et al. in 2021 revealed that 52.2% of caregivers of patients with schizophrenia, bipolar disorder, and depression experienced a moderate level caregiver burden, especially in terms of disruption to family activities, which was ranked highest in the burden score. [xxvii] Furthermore, mental health disorders and substance use disorders have been ranked as the leading cause of disability at the global level, accounting for 23% of all years lived with disability.[xxviii] Hence, mental disorders result in substantial economic costs, resulting from sickness absence, economic inactivity, reduced unpaid work, such as housework, and output losses resulting from premature mortality.[xxix] For instance, absenteeism and presenteeism contribute to 50-60% of the total economic burden associated with depression. [xxx] While research conducted specifically for India is unavailable, 35-40% of absenteeism in many developed countries is a result of mental health problems.[xxxi]

A study conducted by Nagaraj et al. in South India revealed that for study participants with common mental health disorders, the average absenteeism ranged from 45 to 52 hours per 4 weeks, or a 100% productivity loss of approximately a week in the period of a month.[xxxiv] In addition to absenteeism, presenteeism occurs when workers choose to work despite being physically or psychologically ill, resulting in productivity loss and economic costs.[xxxii] Productivity loss is caused by low stress and frustration tolerance, sleeplessness, poor concentration, and poor communication skills exhibited by such workers.[xxxiii] The same study conducted by Nagaraj et al revealed that productivity of workers with mental disorders was 50% less than that can be expected from a healthy person.[xxxiv] Moreover, economic inactivity among persons with mental health disorders also limits government tax revenue and increases government expenditure towards transfer payments.

The negative externalities of mental disorders discussed above exemplify that the provision of mental healthcare services can create social gains by benefiting employers in the form of higher productivity and lower absenteeism, family members from a lower caregiving burden, judicial systems and the police from a slightly lower incidence of crime, and the government from reduced transfer payments.xvii

Hence, mental healthcare services can be considered as merit goods, since they create positive externalities from their consumption. As merit goods, mental healthcare services are both rivalrous (their consumption reduces the amount available to others at that point

in time) and excludable (it is possible for suppliers to prevent non-payers benefiting from their consumption). Hence, these services tend to be under-consumed in the free-market economy.

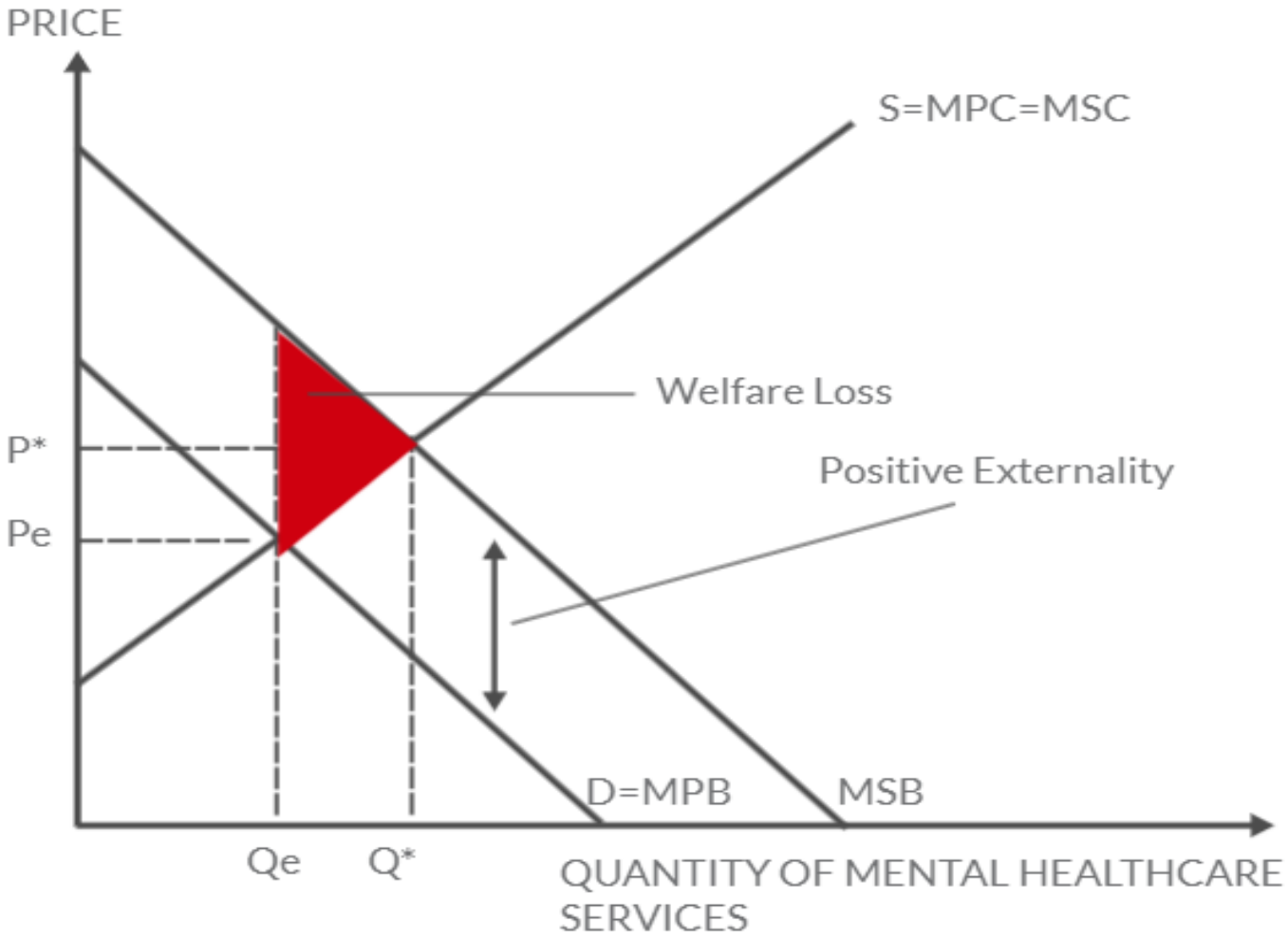

Figure 1: Positive Externalities of Consumption of Mental Healthcare Services

Figure 1 represents the market of mental healthcare services in India. In the free market economy, the level of output of these services occurs at Qe, where MPC=MPB, as individuals choosing whether to pay to receive treatment will not necessarily consider the total effects of the treatment on society, and hence seek to maximise their private benefits xvii. Conversely, the socially optimal level of output occurs at Q*, where MSC=MSB. Hence, Qe < Q*, and mental healthcare services are under-consumed in the free-market economy. This leads to the creation of deadweight loss, as represented by the shaded region in Figure 1, and a situation of market failure prevails. However, this region can also be interpreted as potential gain since the Government of India intervenes in the market through the NMHP to increase the consumption of merit goods to a more socially optimal level and restore allocative efficiency.

The National Mental Health Program as a Government Response to Market Failure

Increasing awareness about mental health issues is crucial in destigmatizing and preventing misinformation about mental illness. Hence, the Government of India has invested in Information, Education, and Communication (IEC) activities under the National MEntal Health Program. Through education and awareness creation, this scheme aims to increase the demand for mental healthcare services to a more socially optimal level and reduce the negative externalities of untreated mental health issues.

The mental health literacy among the Indian population has been found to be low. For instance, in a study conducted by Sekaran et al. in 2016 among college students of Udupi Taluk, only 29.04% and 1.31% of adolescents could clearly identify depression and schizophrenia respectively from described symptoms.[xxxv] Poor knowledge and misinformation surrounding mental illness not only poses a challenge to the delivery of treatment to mentally ill persons, but also leads to discrimination and stigma.[xxxvi] A study conducted by Venkatesh et al. in South India in 2015 revealed the prevalence of stigma towards mentally ill people to be 74.61% by using community attitude toward the mentally ill (CAMI) scale.[xxxvii] Stigma and discrimination can prevent the mentally ill from seeking adequate treatment. This is reflected by the results of the same study conducted by Sekaran et al., where 30.68% and 33.62% of respondents said that they would not seek help for depression and schizophrenia respectively.[xxxviii]

Hence, the IEC activities implemented by the Government of India through the NMHP are expected to increase the demand for mental healthcare services in India. The 12th 5-Year Plan of the DMHP outlines the implementation of IEC activities in the form of a central-level website for information provision and extensive local-level mass-media activities in vernacular languages.[xxxix] At the central level, an amount of Rs. 1 crore is allocated towards IEC activities.[xl]

However, a disadvantage of this government response is that education and awareness creation tend to be time consuming and ineffective as they involve changing the population's ideologies and social behaviours.[xli]

The National Mental Health Program as a Supply-Side Interventionist Policy

Supply-side policies refer to the long-term government strategies used to increase the potential productive capacity of the economy by increasing the quality and/or quantity of factors of production.[xlii] Specifically, interventionist policies are types of supply-side policies and are deliberate attempts made by the government to influence the aggregate supply in the economy.

The NMHP involves imparting training to general physicians for the diagnosis and treatment of common mental illnesses. This provision aims to increase the occupational mobility of healthcare workers to cope with the shortage of psychiatrists in India, whose median number per 100,000 population currently stands at 0.2, compared to a global median of 1.2.[xliii] Moreover, the Government of India is implementing manpower development schemes under the NMHP, which have supported the establishment of 25 Centres of Excellence and 47 Postgraduate Departments in mental health specialties in the country.[xliv] Once the targeted departments are fully established, the projected impact is the emergence of 104 psychiatrists, 416 clinical psychologists, 416 psychiatric social workers (PSW) and 820 psychiatric nurses annually in India.[xlv] Hence, by intervening in the economy to develop India's human capital through training programs under the NMHP, the Government of India is implementing a supply-side interventionist policy.

Secondly, the Government of India has invested a substantial amount in the development and modernisation of healthcare infrastructure through the NMHP. Under the DMHP, state run hospitals are provided with a one-time grant with a Rs.3 crores ceiling for the construction and repair of existing buildings, and purchase of cots and equipment, water- tanks, toilet facilities, etc.[xlvi] By the end of the 10th Five-Year Plan of the policy, the DMHP accomplished the modernization of 23 state mental hospitals.[xlvii] Moreover, the policy provides a one-time grant of Rs.50 lakhs to allow every medical college to meet the minimum requirement of three faculty members and 30 beds in its psychiatry wing, as stipulated by the Medical Council of India.[xlviii] The scheme for manpower development is planned to support the strengthening or establishment of 30 units of psychiatry, 30 departments of clinical psychology, 30 departments of PSW and 30 departments of psychiatric nursing during the plan period, including the provision of basic infrastructure and equipment.[xlix] Hence, government spending on improved infrastructure further classifies the NMHP as a supply-side interventionist policy as it is expected to increase India's productive capacity by facilitating more efficient and productive output.[l]

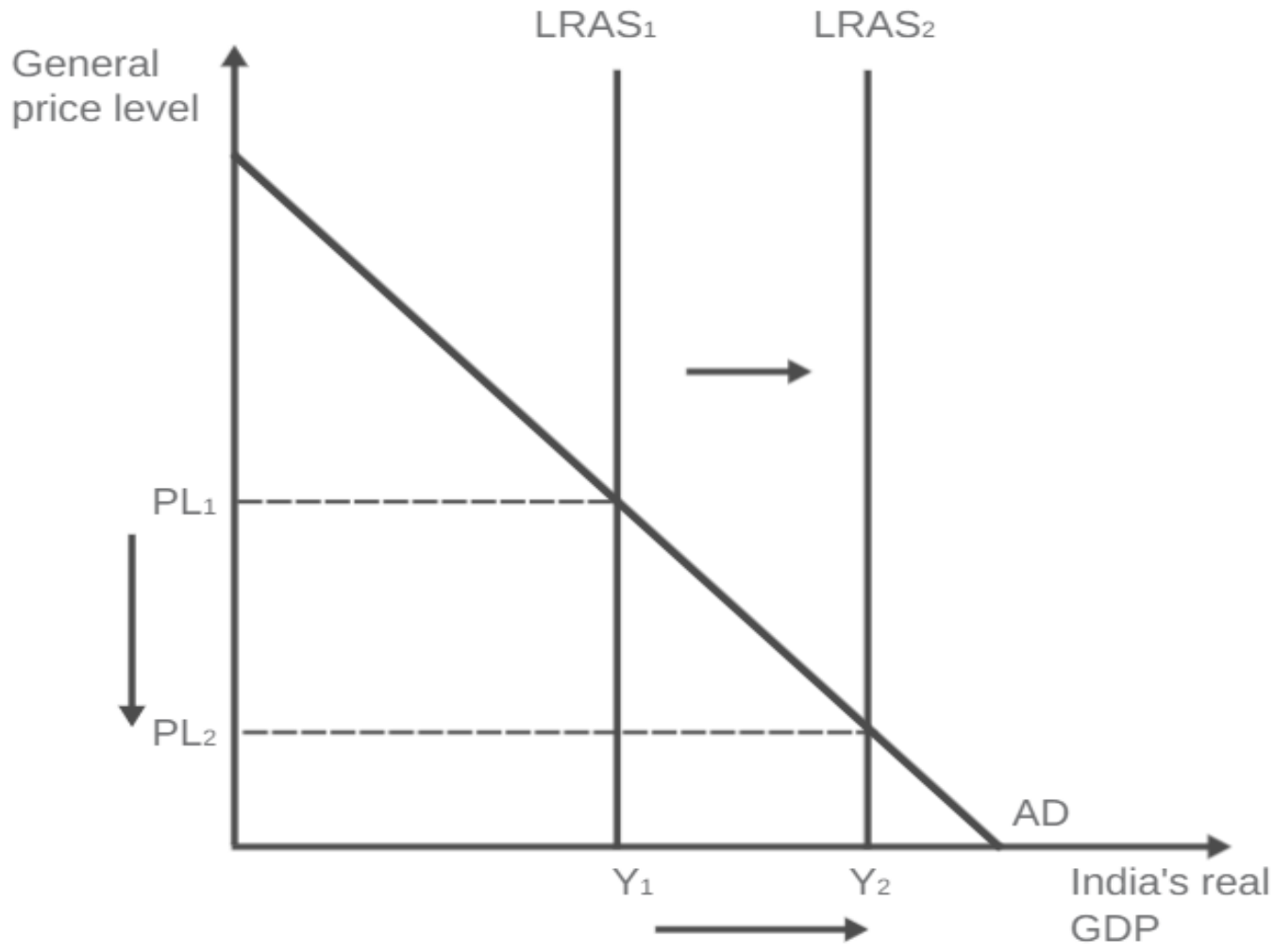

Figure 2: Effect of the NMHP on increasing India's productive capacity

Figure 2 represents the effect of the NMHP on India's long run aggregate supply curve (LRAS curve). The human capital development attained by the implementation of the NMHP should increase the productive capacity, causing the LRAS curve to shift rightwards. Consequently, India's national output should increase from Y1 to Y2, and the general price level should decrease from PL1 to PL2. Hence, India should benefit from both economic growth and benign deflation, which would improve the international competitiveness of the country's exports. Thus, the advantages of the NMHP span beyond reducing the negative externalities of untreated mental health issues in India, to promoting the macroeconomic objectives of human capital development, price stability, and economic growth.

Recommendations for the National Mental Health Programme

The NMHP has been partly successful in increasing community participation in addressing mental health issues and facilitating capital spending towards mental healthcare infrastructure.[li] However, the policy has been widely criticised for its underperformance, caused by poor inter-departmental coordination at the state level, improperly implemented delivery of services, and inadequate funding.[lii]

The long-term effectiveness of the NMHP is limited by its disease-focused strategy, rather than the promotion of a mentally healthy lifestyle and prevention tactics.[liii] Thus, the policy should place greater emphasis on suicide prevention, workplace stress management, adolescent mental health, and college counselling services to sustainably improve the mental landscape in India.[liv] Moreover, the DMHP has been criticized for failing to achieve high levels of community participation, which is one of its strategies to enable early detection and treatment of mental illness.[lv] Hence, in order to enhance its effectiveness, the DMHP should consider the cultural aspects of how mental illnesses are perceived, presented and treated in different regions of India in education and awareness creation programs and the training of healthcare workers.[lvi]

Another significant criticism of the DMHP is the underutilization of allocated funds by states and union territories (UTs). Between 2015 and 2021, only 38% (INR 19854.75 lakhs) of the INR 52,224 lakhs allocated by the central government to the 37 states/UTs of India for the implementation of the DMHP was utilised. Additionally, only 10 states/UTs utilised more than 40% of the allocated funds.[lvii] This underutilisation is a primarily a result of administrative delays caused by poor organisational skills, difficulty in recruiting and training mental healthcare professionals, and the low utilisation of funds in training and IEC components that require heavy groundwork and coordination.[lviii] Thus, to increase the fund utilisation and effectiveness of the DMHP, the Government of India should reduce the administrative and bureaucratic procedures involved in the implementation of the DMHP, thereby increasing efficiency and reducing delays.

Furthermore, evaluations of the DMHP conducted by The National Institute of Mental Health and Neurosciences and the Indian Council of Marketing Research both cited the unavailability of trained and motivated mental health professionals as a crucial limitation of the policy. The number of psychiatrists, clinical psychologists, PSWs, and psychiatric nurses in India currently stand at 3000, 500, 400 and 900 respectively, as compared to the estimated requirement of 115000, 17250, 23000, and 3000. [lix] It is thus crucial for the government of India to increase the availability of mental healthcare workers by streamlining the recruitment and training processes through standardised training material and guidelines. [lx] Further, the evaluations emphasised the need to improve the competency and motivation of mental healthcare workers by establishing a system to monitor the periodicity of training, and initiating provisions to regularly update training curriculum and methods. [lxi] Lastly, the Government of India can engage in greater collaboration with NGOs and other private organisations to benefit from their specialised knowledge and training expertise.

Conclusion

India gaDespite the growing prevalence of mental health problems in India, the country continues to suffer from a shortage of mental healthcare professionals and infrastructure. The Government of India launched the National Mental Health Program in 1982, in collaboration with the WHO as part of a multi-country collaborative project. The NMHP, and subsequently launched DMHP, aimed to increase the accessibility of mental healthcare for vulnerable sections of the population, emphasising the need to train mental healthcare professionals and modernise state mental hospitals. The intervention by the Government of India in the mental healthcare industry can be justified by the social costs associated with untreated mental health issues, including the increased risk of antisocial behaviour and violence being exhibited by persons with mental illness and substance use disorders. Moreover, mental illness poses an economic burden for the country by increasing absenteeism and presenteeism in the workforce and causing output losses from premature mortality and caregiving.

To increase the consumption of mental healthcare services to a more socially optimal level, the Government of India aimed to increase mental health literacy and reduce associated stigma through IEC activities under the NMHP. Furthermore, the government implemented training programs and manpower development schemes to tackle the shortage of Indian psychiatrists. Investments were made to modernise state hospitals and equip them with adequate faculty members and basic infrastructure. However, the NMHP is criticised for its underperformance, partly attributable to low levels of community participation, underutilisation of funds by state governments, and lack of trained and motivated mental healthcare providers. Hence, the policy's effectiveness could be increased by emphasizing the provision of mental health support services that consider cultural factors surrounding mental health in different regions of India. Additionally, the Government of India could benefit by deregulating the mental healthcare system to promote greater fund utilization and updating training content to increase worker motivation and competency.

Overall, this research paper concludes that the NMHP has been only moderately effective in addressing the growing burden of mental health problems in India. Future research must be conducted through cost benefit analyses and policy comparisons to determine if the implementation of the policy justifies its opportunity cost.

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