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# Resources for Mental Health: A Review

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Abstract

*Mental health is one of the most neglected health sectors, not only in India but also in the developed countries. Historical factors, stigma, lack of understanding of the working of the brain and unavailability of effective treatment were some of the reasons for such neglect. Studies have pointed out that mental health has been neglected from either side, i.e., supply of resources for mental health as well as demand for mental health. Supply of resources for mental health deals with various resources like human resource, funding, infrastructure, etc., that are required to provide adequate amount of services for mental health – promotion, treatment and rehabilitation. Demand for mental health refers to how quickly or with what delay treatment for mental health is demanded. This paper takes a review of the state of resources for mental health at the global level and in India and reasons for it.*

Key words: Mental health, resources, India.

## I. Introduction: Huge 'treatment gap' and 'treatment lag'

Even though the prevalence, disability and burden of disease (BOD) of mental illness are heavy, the use of mental health services is much less. This is so not only in the developing countries but also in the developed countries. It is indicated by two measures: treatment gap and treatment lag. 'Treatment gap' is the percentage of people who need treatment but do not receive it, while 'treatment lag' refers to the period for which no treatment is given since the onset of symptoms.

Treatment gap is very large the world over. For the developed countries, it is 20 to 40 per cent, while in developing countries up to 90 per cent of those with mental illness do not receive any treatment (*Movement for Global Mental Health, 2015*). The treatment gap is high even when compared with other physical disorders (Saxena, Sharan, & Saraceno, 2003a; Thornicroft & Patel, 2014). It was found in an Australian study that less than 30 per cent of the patients with depression received acceptable standard care, while 80 per cent and 90 per cent of patients of arthritis and asthma respectively receive such care (Andrews & Titov, 2007). Treatment lag is also high. It varies from few months to several years. It has been found that treatment lag or delay in initiating treatment is higher for developing countries as compared with developed countries and higher for common mental disorders as compared with major mental disorders (Lahariya, Singhal, Gupta, 2010; Jain, et al., 2012; Thompson, Issakidis & Hunt, 2008). This condition is dismal. It is the result of two gaps: supply gap and demand gap in mental health services. Supply gap is deficiency in the variety of resources required while providing mental health services. Resources include funding, human resources, hospital beds, other infrastructure, legislation and policy. Demand gap is the time taken to initiate treatment since the onset of symptoms.

## II. Need of resources for mental health

Resources are required to overcome any deviation from good health. These resources may be internal to the affected persons like his/her will power, hope and efforts or they may be external

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in terms of financial, medical, human resource and other material and infrastructural services[1]. Resources for mental health (external) include mental health policy, plans, legislation, mental health treatment services, infrastructure, community mental health services, human resources and funding. Like any other health sector, mental health sector can perform if adequate resources are made available. Moreover, the resources that are provided have to be used equitably[2] and in an efficient[3] manner. The resources for mental health are discussed below.

*Policy*

Mental health policy is an official statement of the government regarding areas of actions in order to improve the mental health of a population. It includes organized set of values, principles, objectives and areas of action for promotion of mental health, prevention of mental disorders, treatment and rehabilitation. It provides vision for the future and enables a model for action. The policy also indicates the degree of priority that a government attaches to mental health in relation to other health and social policies. Generally, the policy is for a long period, e.g., five to ten years (WHO, 2004; WHO, 2011). Key principles and components remain the same from one country to another even though the content varies according social, demographic and economic conditions (WHO, 2003a). Properly designed mental health policy and its implementation ensure adequacy of services and activities, and their effective coordination. Well-articulated mental health policy is an essential condition for improving mental health status of the population and reduces the burden of disease due to mental illness.

*Plans and programmes*

A mental health plan is a detailed pre-formulated scheme that elaborates the strategies and activities that will be implemented to realize the objectives of the policy. It includes important elements like strategies, time frames, resources required, targets to be achieved, indicators and activities. A mental health plan also clarifies role of different stakeholders, while implementing the plan (WHO, 2011). A mental health programme is an intervention or series of targeted interventions, usually with a short time span for the promotion of mental health, prevention of mental disorders, treatment and rehabilitation. A programme usually focuses on specific mental health priority and like mental health plans needs to be properly designed, budgeted, monitored and evaluated (WHO, 2011; WHO, 2004). Mental health policies and plans (and programmes) are essential and powerful tools to coordinate all services and activities related to it. Without a properly designed policy, plans and programmes for mental disorders, patients are likely to be treated in an inefficient and fragmented manner (WHO, 2004) (WHO, 2003).

*Legislation*

Mental health legislation is necessary for protecting the rights of persons with mental disorder who comprise a vulnerable section of the society. It includes a broad range of issues including admission to a mental facility, quality of mental health care, consent to treatment, freedom from cruel, inhuman and degrading treatment, freedom from discrimination, enjoyment of full range of social, political, cultural and economic rights and provision of legal mechanism to

[1] Even in order to raise internal resources, there is a need for external resources. For example, to have enlightened civil society or informed and empowered stakeholders (users of service, family caregivers and professionals) resources are required to educate the stakeholders, make available necessary platforms and initiate required activities. This will include publication of literature, newsletters, books, release of films/documentaries and self-help activities.

[2] Equity refers to the distribution of resources either in terms of rural-urban or province/district wise or distribution by socio-demographic characteristics. Equitable distribution is necessary in order to have equal opportunity in access to health services for the entire population

[3] For any health issue, there may be a variety of health/treatment services. The principle of efficiency argues that resources need to be allocated in a such way that returns are similar per unit of investment/expenditure on the variety of services.

promote and protect human rights. All the issues relevant to mental health, i.e., mental and general health as well as non-health issues may be included in a single document, i.e., in a dedicated mental health legislation (WHO, 2011). The legislation helps to reinforce goals of mental health policies and plans (WHO, 2011).

*Human resources*

For provision of a health care service, health professionals are essential along with equipment and technology. However, mental health care relies basically on professionals rather than on equipment and advanced technology. Human resource is the most valuable asset of a mental health service and hence it relies on competence and motivation of its personnel. Mental health professionals include psychiatrists, medical doctors, psychiatric nurses, social workers and occupational therapists. Due to a severe shortage of human resources in the mental health sector, other non-specialist resources like health workers, trained volunteers, trained service users like family members and even persons with mental illness are seen and used as a human resource, may be to a limited extent.

*Financial resources*

Finance is another important resource for mental health. Other resources, even if provided adequately, do not have any meaning unless backed by adequate financial support from the budgets of the central, state and local governments. Financial resources enable the government to purchase required human workforce, spend on infrastructure facilities, support education and training facilities, purchase medicines and equipment, and meet other miscellaneous expenses. The WHO (2003b, p.2) asserts that 'without adequate financing, mental health policies and plans remain in the realm of rhetoric and good intentions'.

*Community and family resources*

Community resources that provide mental health care include formally structured bodies like international non-government organizations and indigenous non-government organizations (NGOs), consumer and family associations and informal resources of family, friends and other social network that bear most of the burden of care (Saxena, Thornicroft, Knapp et al., 2007; Patel & Thara, 2003). Community resources include traditional healers, alternative health care systems and community-based social and rehabilitation measures (Saxena, et al., 2007). Each of these resources is essential for improving mental health status of the population.

*Mental health infrastructure*

Mental health infrastructure is related to all physical structures, gadgets and equipment that are required to provide mental health services. It includes mental health outpatient facilities, treatment facilities, psychiatric wards, residential facilities, mental hospital and community-based treatment and rehabilitation centres. These facilities need to exist in adequate number for a given size of population.

## III. Resources for mental health at the global and Indian levels

Tables 1 and 2 indicate an overview of supply of resources at the global level and in India. Most of the information for Table 1 is procured from WHO *Mental Health Atlas 2011* and *2014* (WHO, 2011; WHO, 2014). However, additional references are quoted wherever they are used. Comparing BOD of mental illness and resources allocated clearly indicates that there exists a significant mismatch between BOD of mental illness and resources that are supplied for it. The gap between the percentage of BOD of mental illness (in the total health burden) and percentage of resources supplied for mental health (out of resources for all health issues) is huge and rising.

Table 1: Resources for mental health at the global level – A report card

| Resources | Current status | Details |
|---|---|---|
| Policy | All countries do not have dedicated mental health policy | Sixty per cent of the countries have dedicated mental health policy.<br>However, 76 per cent of them have updated or approved it recently (after 2005).<br>Seventy-seven per cent of the countries report that mental health is mentioned in their general health policy. |
| | Inequality in presence of mental health policy | In low and low middle countries, roughly half of them have approved mental health policy. This percentage is high for high income countries at 77 per cent. |
| Plans and programmes | All countries do not have plan for mental health | Seventy-two per cent of the countries have mental health plan. |
| | Inequality in presence of mental health plan | Sixty-two per cent among low income countries have mental health plan. This percentage rises as one moves from lower income group to higher income group. This percentage is as high as 87 per cent for high income countries. |
| | Inefficiency in mental health plan | Among all the countries that have approved mental health plan, 20 per cent do not have timeline for implementation of the plan, 45 per cent do not provide funding, twenty-four per cent do not state shift from mental hospital to community mental health centres and 12 per do not emphasize integration of mental health with primary care. |
| Legislation | Small percentage of countries have dedicated mental health legislation | Fifty-nine per cent of the countries have dedicated mental health policy. However, almost half of them have enacted or revised it after 2005. |
| | Inequality in mental health legislation | Among low income countries, a small percentage has dedicated mental health policy (39 per cent). With increase in income, this percentage rises. For high income countries it is 77 per cent. |
| Expenditure on mental health in health budget | Low per capita expenditure on mental health and low share of mental health expenditure in health budget | Global median expenditure per capita is $1.63.<br>Global median of government health budget expenditure dedicated to mental health is 2.8 per cent. |
| | Inequality in allocation of funds within the countries | Per capita global median expenditure for low income counties is $0.20 which increases to $44.84 for high income countries. Lower income countries spend 0.53 per cent of their health budget on mental health. This percentage rises as a country moves to the higher income group (5.1 per cent). |
| | Inefficiency in use of resources | Large share of mental health budget expenditure is made on mental hospitals. For low income countries this percentage is more than 73 per cent. This percentage falls to 54 per cent for high income countries. However, even this percentage is high considering ideal norms for allocation of resources. |

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| Human resources | Low availability of human resources in mental health. | Global median rate of health workers in mental health is 10.7 per lakh population. However, this rate varies across different specialties of human resources in mental health. This rate is as high as 5.80 for nurses and 0.05 for occupational therapists per lakh of population. |
| | Inequality in availability of human resources. | Availability of each type of human resources varies across the country income group. In low income countries availability of occupational therapists, psychiatric social workers and psychologists is almost nil or very small. Inequality among low and high income categories is greatest in these specialties. The degree of inequality among low and high income countries is relatively small in the specialties of nurses, psychiatrists and other medical doctors. |
| | Inefficiency in use of human resources | In significant number of countries, psychiatrists and nurses work exclusively in mental hospitals |
| Mental health infra-structure | Availability of beds and other facilities is limited | Globally, the number of outpatient facilities, day treatment facilities, community residential facilities and psychiatric beds are very low per lakh of population. However, these facilities are negligible in low income countries and much more for higher income countries. |
| Community resources and informal resources | Users and family associations are limited | Globally, user and family associations are present in 64 and 62 per cent of the countries respectively. |
| | Inequality | In high income countries the presence of user and family associations is 83 and 80 per cent respectively while in low income countries, they are 49 and 39 per cent respectively. |
| | Inefficiency | Participation of these associations in formulation and implementation of mental health policies, plans or legislation at the national or local level is limited. |
| Insurance | Insurance coverage for mental health is limited | A majority of the countries, particularly low and middle income countries, do not have insurance coverage for mental health. Even in high income countries where insurance coverage is available, several conditions are imposed. |
| Community-based rehabilita-tion (CBR) | | Availability of day care centres, CBR centres and other forms of rehabilitation facilities are limited and unequally distributed among countries and within countries. |

Resources are in short supply in all domains (NHRC & NIMHANS, 2008). However, these shortages vary from one particular type of resource to another, and among both developed and developing countries. *World Mental Health Atlas, 2014* (WHO, 2014) and *National Health Policy 2015* clearly admit that the gap between service utilisation and needs is widest here (in mental health) (GOI, 2014).

*Supply gap in burden of mental illness and resources that are available is huge*

High income countries, which have recently increased their allocation for mental health, now allocate a greater percentage of financial and non-financial resources for mental health. This translates into a higher allocation per capita for mental health in them. As one moves down from them towards lower income group of countries, resource allocation drops down sharply (WHO, 2011). Lower and lower middle income countries allocate a small percentage of their already small budgets for mental health (Saxena, Sharan & Saraceno, 2003a). As a result, the per capita resource allocation for mental health is extremely small in them (Table 1). What is applicable for the share of mental health in health budget is observed in the case of other resources like infrastructure, human resources, etc. These countries allocate meagre resources for mental health, leading to gross neglect of mental health services and violation of human rights of persons with mental illness.

Table 2: Resources for mental health in India: A report card

| Resource | Current status | Details |
|---|---|---|
| Policy | National Mental Health Policy was officially approved for the first time recently (GOI, 2014). | Policy group was formed three years ago and mental health policy was prepared and officially approved. The policy is yet to become functional. |
| Plan and programmes | Mental health plan and programme do exist with principles regarding care and treatment | Cover only 123 districts out of 600 districts in India. There are serious arguments against efficient implementation of this programme. |
| Legislation | Dedicated mental health legislation does exist (GOI, 1987) | This act is now more than 25 years' old. It needs to be replaced by an act, which enshrines modern principles of care and human rights. Mental Health Care Bill (MHCB, 2013), a new legislation consistent with modern principles and values, has been prepared and submitted to the ministry. However, due to diverse views of ideological groups, the progress of the legislation has been stalled. (MHCB, 2013) |
| Share in health budget | Mental health expenditure as a share of total health expenditure is 0.6 per cent (WHO, 2011). This figure is for central government and excludes figures of state and local governments | Share of health in India's budget is low at 1 per cent out of which less than 1 per cent is spent on mental health, which ensures low per capita amount on health and abysmally low per capita amount on mental health. |
| Human resources | There are around 3000 psychiatrists (NHRC and NIMHANS, 2008), 343 clinical psychologists, 290 psychiatric social workers and 523 psychiatric nurses in India (Goel, 2011). | These numbers of mental health professionals are abysmally low when compared with internationally accepted standards. |

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| | Inequity in the distribution of these human resource professionals. | The problem of inadequacy of human resources is compounded by their inequitable distribution in favour of developed states and urban areas comprising 25 per cent of the population which have 75 per cent psychiatrists. Within urban areas they are more concentrated in metropolitan areas. Distances, stigma and low income make access further difficult (Gangadhar, 2008). |
| | Inefficiency in distribution of human resource. | A significant percentage of psychiatrists and other professionals (in public sector) are locked in mental hospitals or institution based care. Limited human resource in the public sector is available for care in the community. |
| Mental health infrastruc-ture | Available mental health beds are too less as compared with the need. | Available beds for mental health in both public and private sectors are 29,000. However, considering the prevalence, size of population and long term needs of patients, 30 to 35 lakh people need hospitalization at any point of time ((NHRC and NIMHANS, 2008, pp. 284). |
| Community resources and informal resources | Limited number of NGOs and their limited participation in policy, planning and legislation (WHO, 2011; (NHRC and NIMHANS, 2008). | There do exist national and international NGOs. Users and family initiatives do exist. NGOs and informal resources provide a variety of activities. However, efforts of most of these initiatives are of recent origin and they are too limited considering the size of our country. Their participation in planning, policy and legislation is too limited (WHO, 2011 (NHRC and NIMHANS, 2008). |
| Insurance | Insurance is not provided for mental health needs. | Mental-neurological and psychiatric disorders are excluded from insurance coverage in India. As a result, there is practically no insurance coverage for mental health needs. (Kalyansundaram, 2008). Moreover, persons with mental illness are likely to experience discrimination even in health insurance coverage. |
| CBR programmes | CBR facilities are limited | CBRs include long term residential facilities, short term residential facilities, day care centres and other facilities. These facilities are extremely limited. Most of them are in the private sector, which runs on a commercial basis and is unaffordable to a majority of the population (Murali & Tibrewal, 2008) |

## IV. Barriers to increasing resources

Various issues are raised (i.e., barriers posed) when the question of greater allocation of resources (investment in mental health) for mental health are taken up. Efficacy and cost effectiveness of treatments, and affordability and feasibility of delivery of mental health services through public health system are some of the main issues that are raised. However, many studies have pointed out that these arguments are not tenable.

### *Efficacy*

Often the society in general and policy makers in particular believe that effective treatments are not available for mental ill-health (Thornicroft & Patel, 2015). This belief is the result of limited research on brain and its disorders. Successful treatment on mental health has become available relatively recently. It has been found that even in low income countries, older generation medication along with psychotherapy session is effective (Brundtland, 2000; Patel, Jenkin & Crick, 2012; Patel & Thornicroft, 2009, Patel et al., 2009; Mari, et.al., 2009; Mbuba & Newton, 2009; Benegal, Chand, & Obot, 2009; Flisher et al., 2010; Prince et al., 2009). It has also

been demonstrated that treatments are available for mental health problems which are as effective as those of high blood pressure, diabetes or rheumatoid arthritis (Thornicroft & Patel, 2015).

*Affordability of treatment for mental illness*

Another issue that is raised is about the expenses that are incurred for treating persons with mental illness. It is argued that treatment is expensive and hence it becomes unaffordable to not only a large number of individuals who avail services from the private sector but also from the public health system. WHO Report, *Investing in Mental Health (2003)*, defines affordability in terms of the cost of treatment in US$ per person. Treatment is affordable, quite affordable, and less affordable if cost per person is less than $0.5, $1.0 and greater than $1 respectively (WHO, 2013). Several studies (e.g., WHO, 2003a; WHO, 2013) indicate that the treatments for many mental disorders are affordable. Table 3 provides information about the affordability of different treatments for mental disorders.

Table 3: Identifying interventions that are cost-effective, affordable and feasible

| Health condition | Interventions | Cost-effectiveness (cost per healthy year of life gained) | Affordability (cost per capita) | Feasibility (logistical or other constrains) |
|---|---|---|---|---|
| Epilepsy | Treat cases with (first-line) anti-epileptic drugs | +++ | +++ | Feasible in primary care |
| Depression | Treat cases with (generic) antidepressant drugs plus brief psychotherapy as required | +++ | +++ | Feasible in primary care |
| Harmful alcohol use | Restrict access to retail alcohol<br>Enforce bans on alcohol advertising<br>Raise taxes on alcohol | +++ | +++ | Highly feasible |
| | Enforce drink-driving laws (breath-testing)<br>Offer counselling to drinkers | ++ | ++ | Feasible in primary care |
| Psychosis | Treat cases with (older) anti-psychotic drugs plus psycho-social support | ++ | + | Feasible in primary care; some referral needed |

Cost-effectiveness:
+++ (Very cost-effective; cost per healthy year of life gained < average income per person)
++ (Quite cost-effective; cost per healthy year of life gained < 3 times average income per person)
+ (Less cost-effective; cost per healthy year of life gained > 3 times average income per person)
Affordability
+++ (Very affordable; implementation cost < US$ 0.50 per person)
++ (Quite affordable; implementation cost <US$ 1 per person)
+ (Less affordable; implementation cost > US$ 1 per person)
Source: (WHO, 2013, p.30).

*Cost effectiveness of treatment for mental illness*

Benefit and cost of treatment for mental illness is another issue that is raised often. Benefit is measured in terms of healthy years gained due to treatment. The cost of obtaining one healthy year from treatment is calculated and it is compared with the average annual income per person. If this cost is smaller than average annual income per person or less than three times of that or greater than three times of per capita annual income, then it is said to be very cost effective, quite cost effective or less cost effective respectively (Table 3).

## V. Feasibility of delivery of services through public health system

It is also argued that for lay people to utilize services for mental health, it should be not only affordable but also feasible to deliver in order to reach all sections of the population. WHO has given four aspects in order to fulfil these criteria. One aspect is reach, i.e., capacity of the mental health system to deliver an intervention to the target population; the second is technical complexity, i.e., simplicity or complexity of technologies needed for an intervention; third is the capital intensity needed for an intervention; and, fourth is acceptability (including fairness and human rights) of the intervention. WHO has produced practical treatment guidelines for use in primary care in low and middle income countries based on the very best evidence that works (*Movement for Global Mental Health, 2015*). In India, since a large percentage of population is poor, public health system is suitable for delivery of mental health service. Various studies show that currently available mental health interventions fulfil these criteria and mental health care can be easily integrated into care for general health system in low and middle income countries (Patel, Jenkin & Crick, 2012; Patel & Thornicroft, 2009, Patel et al., 2009; Mari et al., 2009; Mbuba & Newton, 2009; Benegal, Chand & Obot, 2009; Flisher et al., 2010; Prince et al., 2009). Training can be given to health staff and workers at the primary health centre with simple steps to provide primary mental health care.

In a nutshell, resources that are provided for mental health care are limited (considering the burden of the disease) even though effective, cost efficient, affordable and treatment modalities that are implementable through public health system are available. It has been pointed out by many studies that investment in mental health is a financially prudent decision. P. Satish Chandra says, "Higher investment in mental health care is justifiable because the economic benefits of effective, equitable and accessible care far outweigh cost of disability and loss of livelihood due to mental illness" (Sharma, 2014, p. 1564).

Table 3 provides interventions for various mental illnesses along with the applicability of various criteria. Several other arguments are made about additional investment for mental health. These issues/arguments (and potential arguments) may act as barriers in fulfilling the goal of investing in mental health. WHO Report, *Investing in Mental Health* (2013), gives these arguments which are from different perspectives like public health, economic welfare, equity, productivity, and social, cultural and political influence. However, studies have refuted these arguments with strong evidence. In fact, these studies argue that investing in mental health is a worthwhile decision or 'best buy' for that matter. Table 4 gives potential barriers (arguments) to investment and arguments favouring investment in mental health.

Taking an overview of resources for mental health, at the global level and in India, it becomes evident that there exists a huge gap in the supply of resources for mental health in a number of dimensions. The severity of this gap and consequent deprivation vary from one dimension of resource to another. The extent of deprivation increases as one moves from countries in higher income group to countries in lower income group. However, the lower income countries are much more in need of greater resources for mental health. They have a greater percentage of poverty, and social and economic inequality. Evidence indicates that poverty, women, minority groups and vulnerable groups have greater mental health needs.

## VI. Reasons of supply gap

*Low priority given to mental health as compared with physical health*

Many studies point out that the needs of mental health are given a low priority as compared with physical health needs (Jacob, 2001; GOI, 2002; GOI, 2014; Thornicroft & Patel, 2015; Saxena, Sharan & Saraceno, 2003). Public health importance of mental disorders is not properly understood. Such a low priority to mental health has restrained growth of mental health system (Saxena, Sharan & Saraceno, 2003). Jacob (2001) goes further and using Maslow's

'Pyramid of needs' argues that, in the future also, it seems that physical health needs will be attended first and then mental health needs.

Table 4: Supporting arguments for, and potential barriers against, investment in mental health

| Perspective | Arguments favouring greater investment in public mental health | Potential barriers to greater investment in public mental health |
|---|---|---|
| Public health | Mental disorders are a major cause of the overall disease burden; effective strategies exist to reduce this burden. | Mental disorders are not a leading cause of mortality in populations. |
| Economic welfare | Mental and physical health are core elements of individual welfare. | Other components of welfare are also important (e.g., income, consumption, etc.). |
| Economic growth and productivity | Mental disorders reduce labour productivity and economic growth. | Impact of mental disorders on economic growth is not well known (and often assumed to be negligible). |
| Equity | Access to health is a human right; discrimination, neglect and abuse constitute human rights violations. | Persons with a wide range of health conditions currently lack access to appropriate health care. |
| Socio-cultural Influence | Social support and solidarity are core characteristics of social groupings. | Negative perceptions and attitudes about mental illness (stigma). |
| Political influence | Government policies should address market failures and health priorities. | Low expressed demand/advocacy for better services. |

Source: WHO (2013)

*Poor advocacy*

For promoting any health issue, advocacy of stakeholders is important. It consists of various actions aimed at changing the major structural and attitudinal barriers to achieving positive mental health outcomes in population (WHO, 2003a). It can be of people who are directly involved with the issue or of outsiders. Among the stake holders of mental health problems, consumers and family organizations are of prime importance. In USA, National Alliance for Mentally Ill (NAMI) is one of the biggest organizations of caregivers of persons with mental illness in terms of coverage, membership, number of advocacy initiatives, and rapport with politicians and policy makers. Through their advocacy efforts, these organizations have helped to maintain the share of mental health at 8 per cent of the national health care budget of the country (Hu, 2003) which is one of the highest mental health budgets in the world.

Sustained efforts of these organizations have led to increased budgetary and other resources. They have forced the government to pass 'parity laws' for bringing parity in insurance coverage for mental health with other physical disorders, improve quality of services and reduce discrimination in the allocation of resources (both public and private) for mental health problems. At the same time, by educating people, family members and users as well as by imparting problem management skills, they ensure early detection, treatment and better care at home.

However, the world over (except in high income countries) family and patient movement is weak or almost absent, especially in low income countries (WHO, 2011). Moreover, users and families are not likely to protest or get organised (Saxena, Sharan & Saraceno, 2003a). There is a need for strong and focused users and family organizations to ensure increased resources and improved quality of care. Very few low and low middle income countries have such organizations. However, with an increase in awareness, aspirations and spread of information among users and

family members, these changes are not very far away (Hu, 2003; Department of Health and Human Resources, 1999; Saxena, et al , 2007).

*Lack of evidence based treatment*

Resources that are provided for mental health are extremely limited. One of the reasons is the inability of mental illness to attract and convince donors for releasing more funds. Lack of evidence based treatments is cited as one of the reasons for lower resources for mental health. Government and donors (national or international) provide resources where treatments are available with scientific proof. In mental illness, for a long time such evidence base was mostly available only in developed countries which could not become directly applicable to developing countries due to culture, health system, pharmacokinetic, pharmaco-dynamic, local health and drug policy factors. Developing economies need to have their own evidence base (Patel, 2000).

*Non-availability of successful programmes*

For any disease to receive funding (or for that matter for any social or economic objective), there is a need to have programmes which have proved successful and can be implemented through public health system. It is argued that there is non-availability of such programmes for implementation which makes mental health a less attractive health issue vis-a-vis other health issues.

*Limited success and research in getting breakthrough in understanding mental health problems and its treatments*

Having a better understanding of any health problem and development of treatment for it is very essential. Significant amount of funding makes it possible to achieve a breakthrough via a clearer understanding of the issue having an impact on the prevention, treatment and recovery. Cancer and cardio-vascular diseases which received condition specific funds achieved such an outcome due to increased funding (Cyhlarova, 2010). For mental health also, even though it is now known that social, biological and environmental factors are responsible for it, science still does not know how the treatment works. It has yet to understand fully the functioning of human brain. However, increased funding can make it happen.

*Limited research in economics of mental health and dissemination of it*

For promotion of research in a health issue, it is necessary from the economic point of view to justify the need for additional expenditure on it, comparative advantage of such expenditure vis a vis other health issues and knowledge of the most economical treatment modality within such issue (Hu, 2003). However, very little research is being done on mental health in general and economics of mental health in particular. Moreover, whatever is being done, limited effort has been made to disseminate it.

*Lack of competitiveness of research in mental health vis-a-vis other health issues*

It is also said that competitiveness of research in mental health as compared with other health issues is lower due to several characteristics related to research in mental health (Cyhlarova, 2010). Lack of capacity, i.e., availability of few researches in overcoming complex mental health issues like identification and consent of research participants, stigma, lack of condition-specific financing, and pilot and partnership studies lower competitiveness of research in mental health. Cyhlarova (2010) further argues that these characteristics create a cycle ensuring continous lower investment not allowing the necessary increase in research capacity and skills.

*Shiffman and Smith framework of analysis*

Shiffman and Smith (2007) study the issue of allocation of funds at the global level, i.e., allocation by international health networks and allocations between the governments. They ask why some health issues receive less attention and global funding than others causing a relatively lower burden or mortality. Their study concludes that such an anomaly in the matching between the resources and their burden could be explained with the help of eighteen factors. They are grouped into four broad categories, viz., (1) Strength of actors involved in the initiative; (2) Power of ideas they use to portray the issue; (3) Nature of the political context in which they operate; and, (4) Characteristics of the issue itself.

To obtain greater funding, it is necessary to act and bring about a change in these factors (Shiffman & Smith, 2007). For generating greater resources, mental health lobby needs to work on all of the above categories. Tomlinson and Lund (2012) provide suggestions using this framework: there is a need for greater mental health community cohesion in order to ensure unified voice, providing evidence-based and scalable interventions in order to create impact on policy makers, innovative strategies for treatment, stigma reduction and a social and human rights approach. Broadly, for generating greater resources, mental health issues have to be positioned and showcased in such a way that policy makers will understand their importance, severity and outcome if they choose to provide more resources.

## VII. Policy response to the supply gap

Tables 5 and 6 take an overview of steps taken by various committees/reports and their impact on resource allocation for mental health at the global level as well as in India. The recommendations of these committees and reports (Tables 5 & 6) have certainly made an impact in improving resource allocation for mental health in India. But most of the major improvements and reforms in mental health have come whenever there was any serious violation of human rights of persons with mental illness (basically in mental hospitals) or some disaster like *Erwadi* event[4] and media covered it extensively, or whenever there was any judicial inquiry, the Government has paid attention to it and provided more resources. However, even now resources for mental health are extremely inadequate. Additional resources for mental health cannot be secured as a response to a disaster or on moral grounds alone but can be secured by addressing mental health issues from the economic point of view and supported by evidence base.

Treatment gap and treatment lag is huge for mental health which is basically due to supply and demand gap in mental health. The focus of this paper was on supply gap, i.e., inadequacy of resources for mental health and it has tried to understand its nature, extent and determinants with the help of secondary data. It concludes that even now resources for mental health are extremely inadequate and there is an urgent need to address mental health issues from the economic point of view.

[4] *Erwadi* is a small village in Ramanathapuram district of Tamil Nadu. On 6th August 2001, 28 chained inmates of a home for mentally ill were charred to death in a fire from which they cannot escape. The tragedy shook the conscience of the nation and caught the attention of human rights activists all over the world and also resulted in structural changes in mental healthcare in India.

Table 5: Steps taken that helped to improve resources for mental health at the global level

| Publication/Report | Year | Highlights/recommendations | Impact on resource allocations for mental health |
|---|---|---|---|
| Global Burden of Disease Report (Murray & Lopez, 1996) | 1993 | Developed a new health matrix-DALY. It is a comprehensive measure which includes premature mortality and disability due to a disease. | With this new measure, mental disorders became a disease with one of the highest burdens. The report helped to highlight the burden of mental disorders which became a basis for highlighting deprivation of resources for mental health vis-a-vis burden due to it. |
| Mental Health: A Report of the Surgeon-General (DHSS, 1999) | 1999 | Comprehensive report covering all aspects of prevention, treatment, rehabilitation, science, resources, financing, human rights and action of a caring society. | The report by providing most scientific and evidence based information helped to change the attitude of all the stakeholders that influence the flow of resources. |
| World Health Report (WHO, 2001) | 2001 | Gave ten recommendations: provide mental health treatment in primary care centre; make psychotropic medicines available; give care in the community; educate the public; involve communities, families and consumers; establish national policies, programmes and legislation; develop human resources; link with other sectors; monitor community mental health; and support more research. | This report, using GBOD methodology, gave a clear, comprehensive and authentic picture of plight of mental health in the public and private domain and provided evidence based recommendations for improvement in mental health services. With this report, WHO, as a steward for nations???, created a favourable platform for changing attitude of the nations. The report became a basis for advocacy groups for demanding higher amount of resources. |
| Mental Health Atlas (WHO) | 1999 2005 and 2011 2014 | Collected and published a report based on data about mental health services, resources and infrastructure for mental health. This data are further classified according to WHO regions and World Bank income groups | These reports by providing data on various dimensions of resources, enabled a comparison of resources by regions and income groups. It became a basis for advocacy groups, domestic and international, for improving the quantity and quality of services and resources. |
| Reports on Investment in Mental Health (WHO) | 2003a & 2013 | The reports do not stop simply by saying that there is a mismatch between the burden due to mental illness and resources for it, but show that the treatment for it is cost effective and efficient from the economic point view. Moreover, they show that the care for mental health can be distributed through public health system. | By making scientific and convincing arguments, the reports show that making investment in mental health is a worthwhile decision. |
| Dollars, Dalys and Decisions (WHO, 2006) | 2006 | Highlights the need for and relevance of an economic dimension to decision-making and summarises | Greater resources for mental health are expected. |

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| | | results from existing mental health economic analyses. | |
| Macroeconomics and Health (WHO, 2007) | 2007 | Highlights the importance of health in general and mental health in particular as an important input. | |
| Lancet publications (special issues on mental health) | 2007 and 2011 | These special issues, with the help of research, draw attention to several aspects of mental health like neglect of mental health in resources, human resources, human rights, vicious circle of poverty and mental health, etc. | The articles in this special issue make arguments based on scientific research. Politicians, policy makers and opinion leaders are influenced by such arguments. |
| Movement for Global Mental Health (Patel, et al., 2011; Prince, M. 2008) | 2011 | Network of individuals and institutions. | Through large membership and their networking, knowledge sharing, initiating and experimenting with new ideas, it helps to disseminate information, create conducive attitude and indirectly influences greater resources for mental health. |
| WISH Report (Patel, Saxena, De Silva et.al., 2013) | 2013 | Took overview of burden and resources for mental health, especially in low and middle income countries and gave concrete suggestions to change the scenario. | This report gives multiple suggestions for overcoming current deprivation in mental health. Moreover, it points us to innovative and evidence based solutions that have been experimented with in different countries. Moreover, by emphasizing that these innovations are efficient and cost effective, it helps to influence attitudes of policy makers and administrators. |
| Comprehensive Mental Health Action Plan (WHO, 2013) | 2013 | Calls action to change attitude, stigma and discrimination, and expansion of services | Government and international donors are expected to increase flow of resources. |
| Sustainable Development Goals (United Nations, 2016) | 2016 | Inclusion of mental health as a target in sustainable development goals. | Flow of resources for mental health from international donors is likely to increase. |

Table 6: Steps taken in India to improve mental health services

| Publication/ Report | Area of focus | Suggestions/recommendations | Suggestions/impact related to resources |
|---|---|---|---|
| Bhore Committee (1946) | Compre-hensive | Creations of mental health organization; improvement of mental hospital; training of medical and non-medical personal; and establishment of department of mental health in the proposed All-India Institute. | Recognized that mental health has received a low priority. All the recommendations will need greater resources. |
| Mudaliar Committee (1961) | | Setting up preventive mental health services; expansion and improvement of curative institutions; providing training to medical and non-medical personnel; and greater research in various dimensions. | Each one of the recommendations will need greater resources. |
| National Mental Health Programme (1982) and District Mental Health Programme (1996) | | Objectives: to ensure availability and accessibility of minimum mental health care; to encourage mental health knowledge and skills in general health care; and to promote community participation. | Each of the recommendations will need greater amount of resources. |
| National Health Policy (GOI, 2002) | | Setting up of network of decentralized mental health institutions to address common mental disorders and upgrading of physical infrastructure of mental health institutions (NHP, 2002. Section 4.13). | Formal acceptance that mental disorders are much more prevalent than as understood and even though they do not contribute significantly to mortality, they influence the quality of life. Acceptance that there are serious shortages of institutions and trained manpower. (GOI, 2002). Section 2.13. |
| National Human Rights Commission Report (NHRC & NIMHANS, 2008) | 1999 2008 | Mental health services should be accessible, equitable and affordable; Government should downsize large mental hospitals; Human resources for mental health must be systematically enhanced; Creation of data base for mental health services and resources; State and central governments should follow a stepped care approach; After care rehabilitation and integration within the society; Convergence of mental health with social, education, labour and legal sectors; Periodic law review and reform; Limitations in insurance coverage should be rectified and Mental health care of vulnerable groups should receive priority. | All the recommendations, if implemented, will need greater amount of resources. |
| First National Mental Health Policy, 2014 | All the issues related to | Suggestions provided are: Comprehensive covering all stakeholders and all related issues; effective | Compliance of any or all the recommendations will require greater resources. |

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| (GOI, 2014) | mental health. | governance; increase in human resources and training facilities to achieve it; universal mental health care facilities; prevention, promotion and treatment; increased infrastructure; increase in awareness; greater participation of stakeholders; and rights based approach. | The policy also calls specifically for increase in financial allocation in a progressive manner. |
| National Health Policy, 2015 (Proposed) (GOI, 2014) | | Action on several fronts is required for improvement in mental health: increase in availability of specialists and those who are willing to work in public systems; integration with primary care; use of tele-medicine linkages; supplementing primary level facilities with counsellors and psychologists in various programmes; de-stigmatising the psychological disabilities; and movement away from institutional care. | Policy unequivocally accepts the sad state of neglect of mental health. Further, it points out that the gap between service availability and needs (resources) is widest here. All the recommendations will need greater resources. |

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