Socio - Cultural perspectives of depression

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Abstract
Around 23 million adults would need care for DD in India at any given time. Since productive population is affected most, DD entails considerable socioeconomic impact at individual and family levels. This is a clariion call for all the concerned stakeholders to scale up services under National Mental Health Programme in India along with integrating care for DD with other ongoing national health programmes.

Keywords: Depressive disorders, Prevalence, Disability, Socioeconomic impact, India, national mental health survey

Introduction
Depression is a common mental disorder cutting across age, gender and socioeconomic status in India and across the world. Globally, the burden of depression has been rising and major depressive disorder (DD) was the third leading cause of disability in 2015. Estimated global prevalence of depressive episode/DD varies from 3.2% to 4.7%. The global pooled period prevalence of mood disorders was 5.4% and its prevalence in WHO-World Mental Health Survey ranged from 0.8% to 9.6% across countries. By 2030, unipolar depression is predicted to be the second leading contributor to the global burden of disease. Burden of depression is further amplified by its ‘cause and consequence’ relationship with many non communicable diseases (NCDs) and thus has a huge impact on individuals, families and societies.

Depression is one of the most commonly diagnosed mental disorders in primary care settings. In India, it is estimated that nearly one-third of patients seeking help from healthcare facilities could have symptoms related to depression, and the crude prevalence rate of mood disorder was estimated to vary from as low as 0.5 to as high as 78 per 1000 population. Previous epidemiological studies on depression in India have been conducted using differing methodologies, sample sizes, sampling techniques, study instruments, case definitions and on different study populations at different time periods. Thus, reliable state and national level estimates of depression prevalence are not available for the country.

Evidence-based interventions and cost-effective treatment options are available to reduce the burden of depression and the failure to implement them can have considerable socioeconomic impact at both household and national levels. The National Mental Health Policy and National Mental Health Programme of India (NMHP) optimistically envisions reducing the burden of mental illness including depression by providing accessible, affordable and quality health and social care within a rights-based framework. With a need for good quality data to plan, programme, finance and deliver mental health services, a large-scale population-based National Mental Health Survey (NMHS) was undertaken to provide reliable evidence to strengthen mental health programme in India. The present paper describes the prevalence, characteristics, treatment gap and socioeconomic impact of DD in the Indian adult population, based on the findings from NMHS.

The NMHS was a multisite population-based study conducted across 12 Indian states during 2015–2016 using a uniform, standardised and robust methodology. The detailed methodology of the NMHS is available at and elsewhere.
participating states also obtained ethical clearance from their respective Institutional Review Boards. States representing different geographical areas and the cultural diversity of India were selected for the NMHS, so as to be able to generate state level and pooled national estimates of the prevalence of mental disorders, including DD. Selection of partner institutions in the identified states for conducting NMHS was contingent on the presence of experts in mental health and public health disciplines at these sites, a previous record of conducting large-scale surveys, representation of different geographical regions as well as the availability of diagnostic tools in the concerned regional language. An NMHS pilot study, undertaken in the Kolar district, of the southern Indian state of Karnataka, helped to refine and finalise the methodology and logistical planning for the conduct of a larger national survey (unpublished report).

Utilising standard statistical procedures used for sample size estimation in population-based surveys, it was determined to interview 3000 adult (>18 years of age) respondents in each state with a total of 36,000 adults from 12 states. The survey adopted a multistage, stratified, random cluster sampling technique, with random selection based on probability proportionate to size at each stage. As per the Census of India 2011 [16], each named inhabited village and ward constituted a rural and an urban cluster, respectively. Urban areas were categorised as cities with less than one million population and cities with population >1 million. All inhabited households within the selected clusters were listed and numbered serially to form the sampling frame for subsequent selection of households through systematic random sampling. Primary respondents of the households selected for survey were interviewed after obtaining informed consent to collect sociodemographic information of all the individual members who were ordinarily residing for a minimum period of 6 months. Temporary visitors/visiting relatives who were not members of the selected households were excluded. All the eligible respondents (individuals aged >18 years) were interviewed using the standard set of study instruments. In case an eligible member was not available even after three visits, he/she was declared a nonresponder.

The Mini International Neuropsychiatric Interview (MINI) schedule V.6 [17] was used for diagnosing psychiatric disorders, including DD in the study population. The MINI is a structured psychiatric diagnostic instrument widely used in epidemiological studies. It is short, simple, reliable, easy to administer and is also available in multiple Indian languages. It is also available on electronic data-entry platforms with built-in diagnostic algorithms generating diagnoses compatible with the International Classification of Diseases, tenth revision (ICD-10) and Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV). Disability owing to mental disorders, including DD across three dimensions of work, social and family life was assessed using the Sheehan disability scale, which is compatible with and present on the MINI platform [19]. A separate set of validated questions was used to assess the health treatment, care seeking pattern and socioeconomic impact associated with DD. All study instruments used in NMHS were validated at four levels viz. at NIMHANS with clinical subjects in outpatient settings, during the pilot study, before initiation of the main study and during the survey through re-interview of 5% of the interviewed sample by the respective state team. Leveraging information technology, NMHS adopted computer-assisted personal interviews that were found to be faster, reliable, valid, cost-effective and easier to monitor the data collection process, when compared with traditional paper and pencil Instruments. A robust three-tier monitoring mechanism was deployed at field, state and central levels to ensure collection of good quality data. These included spot checks, supervisory field visits and weekly and monthly review meetings. Re-interviews were conducted on 5% of the original interviews. Data collected in each state were periodically transferred onto a dedicated server maintained at NIMHANS. The collected data were checked for errors, cleaned and compiled to form the final edited dataset. Diagnosis of DD was done on the basis of ICD-10, diagnostic criteria for research. In the present study, DD is defined to include mild to moderate depression, severe depression with/without psychosis and recurrent depressive episodes. Current prevalence corresponds to the presence of DD within previous 2 weeks of the survey. Considering unequal probability of selection and non-response rate, weighted prevalence estimates were derived for DD. All estimates are presented with 95% CIs. Multiple logistic regression analysis was undertaken considering DD as the dependent variable and sociodemographic characteristics (like gender, age, place of residence, education, employment status, marital status and household income quintile) as the independent variables for identifying factors associated with DD. Adjusted odds ratios calculated using the model reflected the risk of having DD for each of the selected group of participants against the risk in the reference group. In addition, analysis on co-occurrence of other diagnostic categories of MINI (schedule V.6.0) among individuals with DD was undertaken. SPSS V.22.0 [19] was used for all analyses.

The NMHS 2015–2016 is one of the largest population-based survey conducted in India to assess the burden of mental disorders in a comprehensive manner using robust methodology. The study was conducted across 12 states during one time period, using uniform methodology, sampling technique, sample size and study instruments. Notably, field data collectors were of similar background and underwent uniform training in all the study sites. Robust supervision and monitoring mechanism were strictly implemented. Thus, by overcoming the limitations of the previous epidemiological studies, NMHS provides accurate estimates of burden of DD both at state and national levels. The lifetime and current prevalence of DD in India was estimated at 5.25% and 2.68%, respectively, and the prevalence varied across the 12 NMHS states. The observed lifetime and current prevalence of DD in India is comparatively lower than the global estimates. Meta-analysis, of studies conducted across globe, reported the aggregate lifetime prevalence of depression as 10.8% [20]. The lifetime prevalence estimate of major depression is observed to vary widely across countries, with prevalence generally higher in high income versus low–middle income countries [21]. The average lifetime prevalence estimates of DSM-IV Major depressive episode were 14.6% in the 10 high income countries and 11.1% in 8 low to middle income countries [22]. The global 12-month prevalence of depressive episode (3.2%), DD (4.4%) and point prevalence of major depressive disorder (4.7%) were higher when compared
with current prevalence of DD in NMHS [23]. The average 12-month prevalence estimates of DSM-IV major depressive episode was 5.5% in the 10 high income and 5.9% in the 8 low to middle income countries. However, Ustun et al. (2004) have observed the 12-month prevalence of major depressive episodes in south east Asia region to be 2.96% among females and 1.74% among males [24]. The lower prevalence estimate of DD in NMHS resonates with estimates from other large population-based studies conducted in India. The multisite epidemiological study conducted in India as part of the world mental health survey has reported mood (depressive) disorder (12-month) prevalence of 1.44% [25]. Similarly, a study conducted in a large city in India has observed the lifetime and 12-month prevalence of depression to be 3.14% and 1.75%, respectively [26]. However, prevalence of major depressive disorder in a study conducted in rural area of south India was 6.62% [27]. Several factors including sociocultural factors are known to influence the occurrence of depression, and the differential distribution of these factors across regions could probably explain the lower prevalence of current DD in India and also the variation across states in NMHS [28]. In addition, varied definitions of depression, different diagnostic tool used to ascertain depression and the reference period for current prevalence could also contribute to the variation in prevalence between the present finding and the studies conducted in India and globally. The current prevalence of DD in NMHS corresponds to prevalence in the previous 2 weeks of the survey period, which we consider as the most reliable point estimate as it is less affected by recall bias when compared with 12-month prevalence of DD.

Association between urbanisation and depression has been inconsistent in the literature. Meta-analysis of Indian psychiatric studies and a similar analysis of the studies conducted in high income countries report significantly increased risk of depression/mood disorder in urban when compared with rural area [29]. Lim et al. observed that the prevalence of depression in rural settings (13.0%) was lower than in urban settings (17.7%), however, the difference was not statistically significant. Similarly, a review of Indian studies observed no such difference in prevalence of depression between urban and rural areas. In the NMHS, cities with population >1 million (5.17%) had statistically significant higher prevalence of current DD, when compared with cities with population <1 million (1.90%) and rural area (2.15%). The prevalence of current DD was somewhat similar in cities with population <1 million (1.90%) and rural area (2.15%). These findings suggest that mega cities/cities with population >1 million may have a higher influence and association with occurrence of depression compared with smaller cities and rural area. Diverse factors broadly included under urban physical, social, cultural, economic and macro–micro environmental factors like concentration of poverty, changes in the family structure, social isolation and loneliness, economic stress, work–life imbalance, substance use and others are associated with urban life patterns, which in turn might set a platform for higher prevalence of mental disorders. [30] As a significant number of people in India, Asia, Africa and other low to middle income countries will be residing in urban areas by 2030, the burden of DDs will be significant in the absence of appropriate interventions and continuing urbanisation. Considering this, countries in these regions should develop and implement urban-specific strategies (under their health, mental health, NCD and all other socioeconomic welfare programmes) to develop an integrated approach to reduce the burden of DD. The National Urban Health Mission in India provides an opportunity to develop such approaches for implementing evidence-based promotive and curative services, specially aimed at vulnerable segments of the population.

Depression is a disabling condition, leading to difficulties in work and carrying out household tasks. It produces much greater decrements in health when compared with other chronic diseases. In 2010, major depressive disorder was the 11th and 6th leading contributor to global disability-adjusted life years (DALYs) and years lived with disability (YLDs), respectively. In India, the DALY rates for DD increased significantly between 1990 and 2016, and DD featured in the top 10 causes of YLD in 2016. In the present study, nearly one-fifth of the DD-affected individuals reported significant difficulties in activities of daily life. This assumes greater significance considering the treatment gap of almost 80.0% for DD in India, which is in concordance with other Indian studies. Low perceived need, attitudinal barriers (desire to handle the problem on one’s own) and stigma associated with mental illness are the major barriers to help seeking and staying in treatment among individuals with common mental disorders worldwide. In addition, scarce mental health resources with inequitable distribution and limited reach, increasing cost of care contribute equally to high treatment gap for mental illness in India. DD entails substantial disability, and untreated DD can significantly affect the individual’s ability to lead a socially and economically productive life. Low income and middle income countries, where the treatment gap is high and mental health resource is scarce, should strengthen their health system on priority to expand services, increase coverage and improve quality of care for individuals with DD. Integrating care for DD within the primary healthcare, using community health workers to deliver the care and improving the number and quality of mental health-related human resources in the country will contribute to the reduction of treatment gap for DD.

This survey is not without limitations. NMHS was planned to be undertaken in a phase-wise manner, and phase I study included only 12 states. However, the 12 states were selected such that they were representative of different regions with diverse ethnicity and varied cultural characteristics. Hence, results of NMHS are likely to be nationally representative. Second, large cities of India with population of more than 10 million (metropolises) were not included in this survey. Since it was recognised that metropolises require different methodology, they would be surveyed in NMHS phase II (in Progress). Phase III will cover the remaining states of India. Finally, children <13 years were not included in NMHS due to lack of clear understanding of mental disorders from a population perspective and absence of suitable and culture-specific instruments. However, on pilot basis, adolescents aged 13–17 years were assessed for mental morbidity including depressive episode in four states of India to aid development of appropriate methodologies for future studies. The NMHS data provide ample evidence to recognise DD as a major public health problem in India. This is a clarion call for all the concerned stakeholders to scale up mental health services at different levels of the healthcare delivery system.
under the NMHP in India and strengthen its implementation arm, the District Mental Health Programme, with a specific focus on DD. Evidence-based packages of services including pharmacological and non-pharmacological treatments that are acceptable and affordable should be made accessible to all. DD is prevalent in all age groups and is more often than not, associated with NCDs, suicide and substance use disorders. This underscores the need for integrating care for DD within other relevant national health programmes. Interventions to promote mental health spanning across health and other related sectors should be effectively implemented to substantially reduce the burden of DD. In terms of absolute numbers, India would contribute considerably to the global burden of depression. Sustainable, broad-based and integrated programmes for DD that resonate with National Mental Health Policy and WHO Mental Health Gap Action Programme will enable India and other countries to progress towards Sustainable Development Goals (SDG) 2030.

References


