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A study on assessment of disability associated with common mental disorders in the slum population of Indore

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ABSTRACT

Background: Changing life styles have increase chance of common mental disorders (CMD) which may lead to disability. **Aims and Objectives:** The aim of the study was (1) to assess CMD in urban slum community and (2) to gain attention of policy makers toward the mental health and its need of the community to address unmet care. **Materials and Methods:** A cross-sectional study was conducted in which 423 people were screened with the help of a pretested questionnaire by Self Reporting Questionnaire (SRQ-20). All the subjects who scored 7 and more in SRQ-20 were further evaluated using Sheehan disability scale. **Results:** Out of 423 subject, 76.12% reported typical response within 7 in SRQ-20 scoring. Common mental disorder was found in 16.07% with SRQ-20 scoring between 7 and 13. Severe distress was found in 7.80% of the population with SRQ-20 score >14. Among psychological distress group, females scored higher with 10.63%. In the severe distress group, again females scored higher with 4.96%, although this was not statistically significant. A total of 101 subjects were found to have CMD after screening the population and its prevalence come to 238.77 per thousand. Mild disability was found in 59.41% of the people with CMD and 34.65% moderate disability and 5.94% reported severely disability, which was not statistically significant. **Conclusion:** On the basis of our study findings, we conclude that their mental health requires attention, which is an essential part of an individual's health. It is essential to design intervention that aim at allaying their distress which can improve their mental health, however, being of a descriptive nature and the study population coming from only one slum the above mentioned finding cannot be generalized.

Key words: Common mental disorder; Sheehan disability scale; Urban slum

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INTRODUCTION

The sociodemographic changes, epidemiological transition, and media revolution consequent to urbanization, industrialization, migration, and changing lifestyles of people along with improvements in health care have brought to the fore the new challenge of behavior-linked, man-made lifestyle-related problems.[1] Indian epidemiological studies were inadequate to diagnose most of the non-psychotic disorders such as panic disorders, social phobia, obsessive compulsive disorders, sexual dysfunctions, and substance abuse in the community.[2] The World Health Organization (WHO) Global Burden of Disease (GBD) study estimates that mental disorders are among the most burdensome in the world and their burden will increase over the next few decades. The disability adjusted life years (DALY) measure combines burden from premature mortality with that from living with disability and provides a comprehensive assessment of the burden of illness. The overall DALY's burden for mental disorders is projected to increase to 15% by the year 2020. The focus has gradually shifted toward understanding the consequences of health conditions in terms of disabilities that are experienced at the level of the body, person, and society.[3] Mental disorders constitute

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a wide spectrum ranging from sub-clinical states to very severe forms of disorders.[4] According to the International Classification of Impairment, Disability, and Handicap (1980), disability is interference with activities of the whole person in relation to the immediate environment.[3-7] Within the ambit of the definition of disability under the Persons with Disabilities Act, 1955, mental illness means a disorder of the mind that results in partial or complete disturbance in the person's thinking, feeling, and behavior which may also result in recurrent or persistent inability or reduced ability to carry out activities of daily living, self-care, education, employment, and participation in social life.[8] The WHO estimates that 10% of the world's population has some form of mental disability and 1% suffers from severe incapacitating mental disorders. As per the National Sample Survey Organization 1991 statistics, 1.9% of India's population is disabled in one way or other.[9] Psychiatric disorders manifest in social context, disability due to them is generally termed as "social disability."[10] This has traditionally been measured in national and international health statistics only in terms of incidence/prevalence and mortality. While these indices are well suited to acute diseases that either cause death or result in full recovery, their use for chronic and disabling diseases poses serious limitations. One way to account for the chronicity of disorders and the disability caused by them is the GBD methodology.[11,12] In 1993, the Harvard School of Public Health in collaboration with the World Bank and WHO assessed the GBD.[6-13] Three neuropsychiatric conditions rank in the top 20 leading causes of DALYs for all ages, and six in the age group 15–44 years. From an analysis of trends in Australia, it is evident that this burden will increase rapidly in the future. Projections indicate that it will increase to 15% in the year 2020.[13]

In a study done in Chandigarh village, disability rate was significantly more in people aged 55 years or more at 31% as compared to 5.4% in 25–54 years and 0.1% in <25 year age group.[14] In a study conducted by Chaudhury et al., on a proportionate basis, dementia and schizophrenia top the list of disability causing disorders. Depression and OCD are the next disability causing disorders.[15] Considering the above scenario, a study was planned to assess common mental disorders (CMD) in urban slum community which can directly reflect the present scenario of the country (migration, unemployment, poverty, and industrialization) and to gain attention of policy makers toward the mental health and its need of the community to address unmet care.

Aims and objectives

This clinical study designed to assess common mental disorders in urban slum community and to gain attention of policy makers towards the mental health and its need of the community to address unmet care.

MATERIALS AND METHODS

Institutional Research and Ethical Committee approval of SAMC and PGI was obtained before starting the study by explaining to them about the aim and importance of the study. It was a community-based and cross-sectional study carried out in an urban slum community in the field practice area of Urban Health Center, Pardeshipura of Shri Aurbindo Medical Colleg and P.G. Institute Indore (M.P). Ganguli H.C. in Bangalore. India concluded that national prevalence rates are 73/1000 population with rural and urban rates of 70.5/1000, respectively.[16,17] The sample size was calculated considering the prevalence of urban population of 70.5/1000 which came to be 294. The reference population is above the age group of 16 years residing in a common residential area. It has a population of 29609 predominantly belonging to Hindu religion. There are four slums in the catchment area of Urban Health Centre. Pancham-ki-Phel is one of the slums which has been selected for the study by random sampling technique using lottery method. The population of Pancham-ki-Phel is 4219. The slum was divided into four quadrants for convenience and 10% population was taken. A total of 150 houses were visited by random sampling of which four houses were found locked and 13 persons were unavailable for interview even after three consecutive visits. Training of the investigator was done in the department of psychiatry of SAMC and PGI for a period of 1 month. Here, necessary skill and knowledge were acquired regarding the requirement of the proforma and subject concerned under study. The training was repeated till the investigator produced consistent results. Training was done under the guidance of the professor in the Department of Psychiatry and also the principle investigator is a postgraduate diploma holder in psychological counseling.

The study was recorded in a pilot tested predesigned validated semi-structured questionnaire about all the family members. A total of 467 people were visited out of which 44 were below 16 years of the age and were excluded from the study. The remaining 423 people were included in the study. Each house was visited and head of the family was informed about the purpose of the study. The head of the family was interviewed to start with the information, followed by individual interview, during the period from March 2014 to March 2015. The core design of the study was door to door enquiry of each family as a unit and each individual member of the family separately. The present study was done in two phases**.** The first phase was the screening phase in which history, general examination, and demographic profile along with Self Reporting Questionnaire (SRQ-20) were administered to measure the presence of mental illness of the patient as approved by WHO. SRQ-20 consists of 20 yes and no questions

with a reference period of the preceding 30 days. (SRQ comprises question related to cognitive symptoms, anxiety, depression, and manifestation as somatic symptoms.) The sociodemographic variables were collected for all the individuals and assessed using SRQ-20. All the subjects who scored 7 and above were selected for the study as per the WHO guide line (2007).[18] All the subjects who scored 7 and more in SRQ-20 were further evaluated using Mini International Neuropsychiatric Interview Plus. A total of 101 people were observed to have CMD for the second phase along with Sheehan Disability Scale (Sheehan 1983).[19] The Sheehan Disability Scale is a composite of three self-rated items designed to measure the extent to which three major sectors in the patient's life are impaired by panic, anxiety, phobic, or depressive symptoms. This anchored visual analog scale uses spatio-visual, numeric, and verbal descriptive anchors simultaneously to assess disability across three domains: Work, social life, and family life. The Sheehan Disability Scale was developed for use in the treatment outcome studies and may also be useful for identifying primary care patients with mental health-related functional impairment.

RESULTS

Common mental disorder among screened people by SRQ-20

The Table 1 shows that 76.12% reported typical response within 7 in SRQ-20 scoring. Common mental disorder was found in 16.07% with SRQ-20 scoring between 7 and 13. Severe distress was found in 7.80% of the population with SRQ-20 score >14. Among psychological distress group females scored higher with 10.63%. In the severe distress group, again females scored higher with 4.96%. The result was statistically not significant.

Total 101 subjects were found to have CMD after screening the population and its prevalence came to 238.77 per thousand. The prevalence of males comes to 176.76 per thousand and in females, it was 293.33 per thousand.

Table 1: Distribution of common mental disorders among screened study subjects

SRQ-20	Male		Female		Total	
	(n=423)					
	N	%	N	%	N	%
Disorder absent	163	38.53	159	37.58	322	76.12
Distress	23	5.4	45	10.63	68	16.07
Severe distress	12	2.83	21	4.96	33	7.80
Total	198	46.81	225	53.19	423	100.00

χ^2=7.93, P=0.019

Table 2: Disability of the people with CMD

Mild disability was found in 59.41% of the people with CMD and 34.65% reported moderate disability and 5.94% reported severely disable. These findings were as per Sheehan disability Scale. The result was not statistically significant.

DISCUSSION

Indian researchers made attempts to overcome the difficulty of diagnosis by assessing the positive cases on screening[15] for final diagnosis using their clinical judgment and available diagnostic guidelines at that time, thus avoiding clinician bias in diagnosis. This raises a query whether the findings can be generalized to even one State in a country like India, which is well known for its geographical, linguistic, and ethnic diversity. Mental health-care priorities need to be shifted from psychotic disorders to CMD such as depression, anxiety disorders, and somatoform disorder which are also associated with high disability in all measures.[12-20] The available evidence suggests that though there has been increase in prevalence rate of psychiatric disorders in the past few decades in India, the changing health scenario has led to imminent epidemic of non-communicable diseases.[21]

The study shows prevalence rate of 238.7/1000 which is high in accordance with the other studies. Prevalence of people found to be suffering from CMD was 24% by Rao study in south India population in 2011,[21] Ganguli[16] in year 2000 in Bangalore Pooled data from 15 selected studies with the prevalence of 73.0/1000. Another study by Premarajan et al.,[17] in 1993 reported a prevalence of 9.94% (99.4/1000). A trend of continuous increase in the prevalence of psychiatric disorders with time can be noted by the above study findings. Substantiating the above observation Murray and Lopez[22] from their study in 1996 found mental and behavioral disorders to be increasing in the population and even the WHO has published similar reports of increase in incidence of psychiatric disorders with time.[16]

Table 2: Distribution of severity of disability among people with common mental disorders

Disability	Male		Female		Total	
	(n=423)					
	N (%)	%	N (%)	%	N (%)	%
Mild	19 (18.81)	18.81	41	40.59	60	59.41
Moderate	12	11.88	23	22.77	35	34.65
Severity	4	3.97	2	1.98	6	5.94
Total	35	34.66	66	65.34	101	100.00

χ^2=2.95, P=0.228

Disability and CMD

In the present study of a slum in Indore, we identified a very high level of CMDs and disability. Even though the psychological issues of slum living are largely a silent issue, it is found that some slum residents clearly acknowledged the mental illness in the community. Articulated by Subbaraman in year 2012[23] showed a better result than our study.

Limitations of the study

A significant disadvantage of Sheehan disability scale is that the three aspects of functioning measured are highly inter correlated. Therefore, the value of the scale as a comprehensive global measure may be limited. Another possible disadvantage is that for some non-working subjects (e.g., retired individuals), the work item is not applicable.

CONCLUSION

Our study concluded that there is a need to consider wider impact of common psychological health problem that urban slum community is facing today which is largely a neglected part of today's modern society CMD can be a major contributor to slum's overall burden of functional impairment. Almost one-third of total population dwelling in urban slum community suffered from CMD which is evident by the prevalence in the current study which came out to be 238.7 per thousand indicating high prevalence of common psychological health problem. As on today these urban slum community is facing major health problem both mental and physical, based on the prevalence of CMD, we conclude that their mental health requires attention, which is an essential part of an individual's health. It is essential to design intervention that aim at allaying their distress which can improve their mental health, however, being of a descriptive nature and the study population coming from only one slum the above mentioned finding cannot be generalized.

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RU- Concept and design of the study, aims and objectives, reviewed the literature, prepared first draft of manuscript, arranged all the references, and this is his own dissertation work; **RS-** Contributed regarding conception or design of the study, developing the consent form, data collection, and manuscript preparation; **AT-** Concept, coordination, and interpretation, preparation of manuscript and revision of the manuscript; **DD-** Statistical analysis, interpreted the results, write the discussion, and conclusion.

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