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Mental disorder and its socio-demographic determinate in an urban slum of central India.

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ABSTRACT:
Background: Prevalence of mental and behavioural disorders are common and their occurrence has been increasing tremendously, affecting more than 25% of all people at some time during their life.(1)
Materials and Methods: A cross sectional study was conducted from March 2014 to March 2015 in which 423 people were screened with the help of a pretested questionnaire by SRQ-20. Each house was visited and head of the family was interviewed to start with the information, followed by individual interview.
Result: Prevalence of mental disorders was 238.7/1000 population. Socio-demographic variables were found as the contributing factor. 76.12% reported typical response within 7 in SRQ-20 scoring. Mental disorder was found in 16.07% with self-reporting questioner (SRQ-20) scores between7-13. Severe distress was found in 7.80 % of the population with SRQ-20 score >14. Scores of females were higher in domain of psychological distress [10.63%] as well asin group having severe distress [4.96 %].
Conclusion: Present study concludes 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 mental disorders can be a major contributor to slum's overall burden of functional impairment.
Keywords: mental disorder, urban slum, SRQ-20.

I. Introduction

Mental and behavioural disorders are common and their occurrence has been increasing day by day. Mental illness is affecting more than 25% of people at some time during their life (1) Common mental health disorders are universal, affecting people of all countries, societies, ages, sexes, socio-economic status, from urban and rural environment. They have an economic impact on societies as well as on the quality of life of individuals and families. (2)Epidemiological transition and media revolution consequent to urbanization, industrialization, migration and changing lifestyles along with improvements in health care, has brought to the light, new challenge of behaviour linked problems and lifestyle related problems. The social, biological and psychological strength of the past are slowly being replaced by a fragile life pattern, making them more vulnerable to mental health problems. (3) The prevalence of mental disorders which was reported in previous epidemiological surveys can be considered as lower estimates than accurate reflections of the true prevalence in the population.

Indian population suffer from serious mental health problems requiring psychiatric help. (4)There is a need to carry out population surveys to assess the prevalence of mental disorders among the urban slum community. This study was undertaken to estimate 12-month prevalence rates of mental health disorders (as per ICD-10 of WHO-1993) among the dwellings of urban slum and its correlates. The study attempted to mental health need of the community to address unmet care.

II. Material And Methods

Cross sectional study was carried out in an urban slum community from March 2014 - March 2015 in field practice area of urban health center under SRI AUROBINDO MEDICAL COLLEGE & P.G. INSTITUTE INDORE (M.P). The reference population selected was above age group of 16 years. It has a population of 29609 thousands. Institutional Research and Ethical Committee approval of SAMC & PGI, was obtained before starting the study. Consent was taken from the head of the family and persons who were interviewed during the study. Sample size was 294, calculated considering the prevalence of urban population of 70.5/1000 (5). A total of 150 houses were visited of which 4 houses were found locked and 13 persons were unavailable for interview. Pre-tested semi structured questionnaire SRQ-20 by WHO were used for the screening of mental disorder. A total of 467 people were visited out of which 44 were below 16 years of the age and those not willing to participate in the study were excluded. The remaining 423 people were included for study. Head of the family was interviewed initially, followed by individuals. 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, demographic profile along with SRQ-20 was administered in order to measure the presence of mental illness of the patients. SRQ-20 consists of 20 questions with a reference period of the preceding 30 days. SRQ comprises question related to cognitive symptoms, anxiety, depression and manifestation as somatic symptoms. [6] All subjects who scored 7 and above were selected for the study as per WHO guide line (2007).

Socioeconomic status of the family was evaluated using Kuppuswami Socio-Economic Status Scale, [7] Results were tabulated and statistical analysis was done using Microsoft excel. The statistical evaluation included descriptive statistics, frequencies and percentages were calculated for the data

III. Result

Table 1: Distribution of 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

X^2=7.93, ***p*** value = 0.019

Table 2: Distribution of the study subjects according to Age and Gender, Marital status, Education status, Family type with mental disorders.

Age in years	Male		Female		Total	
	(n=101)					
	N	(%)	N	(%)	N	(%)
16-25	1	0.99	7	6.93	8	7.92
25-35	3	2.97	22	5.20	25	24.75
35-45	9	8.91	17	16.83	26	25.74
45-55	16	15.84	8	7.92	24	22.77
55-65	5	4.95	10	9.90	15	14.85
Above 65	1	0.99	2	1.98	3	2.97
Married	1	0.99	19	18.81	20	19.80
Unmarried	5	4.95	7	6.93	12	11.88
Widow/widower	13	12.87	21	20.79	24	23.76
Single/Divorce	16	15.84	19	18.81	35	34.65
Illiterate	13	12.87	45	44.55	58	57.43
Primary	11	10.89	13	12.87	24	23.76
10th class	6	5.95	7	6.93	13	12.87
12th class	2	1.98	1	0.99	3	2.97
Diploma / ITI	3	2.97	0	0	3	2.97
Nuclear Family	25	24.75	46	45.54	71	70.29
Joint Family	7	6.93	19	18.81	26	25.74
3rdGeneration Family	3	2.97	1	0.99	4	3.97

Table3: Distribution of study subject with mental disorder according to Socio-economic status and Occupation.

Class	**Score**	Male		Female		Total	
		(n=101)					
		N	%	N	%	N	%
Upper (I)	**26-29**	-	-	-	-	-	-
Middle/Upper Middle (II)	**16-25**	1	0.99	1	0.99	2	1.98
Middle/Lower middle (III)	**11-15**	9	8.91	17	16.83	26	25.74
Lower /Upper lower(IV)	**5-10**	14	13.86	23	22.77	37	36.63
Lower(V)	<5	11	10.89	25	24.75	36	35.64
Student	1	0.99	2	1.98	3	2.97	0.0024

Unskilled	11	10.89	9	8.91	20	19.80	4.55
Semiskilled	7	6.93	1	0.99	8	7.92	10.71
Skilled	5	4.96	1	0.99	6	5.94	6.67
Business/self employed	1	0.99	0	00	1	0.99	0.35
Unemployed	10	9.90	53	52.47	63	62.38	26.08

The table 1 shows 76.12% reported typical response within 7 in SRQ-20 scoring. Mental disorder was found in 16.07% with SRQ-20 scoring between7-13. 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 with4.96 %.this is statically significant.

Total 101 subjects were found to have Mental after screening the population and its prevalence come to 238.77 per thousand. And the prevalence of male comes to 176. 76 were as in female it was 293.33 per thousand.

This table 2 describes the distribution of age among the people found to be suffering from mental disorders. 25.74% of the total population was found in age group of 35-45, followed by 24.75 % among 25-35 age groups. 22.77% of the populations are in 45-55 age groups. Among the people with mental disorders 65.34% was found in females and 34.66% in males. The marital status of the people with mental disorders has been described in the above table with 19.80% belonging to married group and 23.76 % among the widow group and unmarried constituted 11.88% and highest in single or divorce group with 34.65%.The educational status among the various groups. Among the people screened 57.43% were illiterates, 12.87% had completed high school. Only 2.97% had education up to 12th standard. Among graduation and post graduation degree holders no subject was found. Among illiterates 44.55% are females and 12.87 were male. This shows that illiteracy is more among females in the study group. The type of family among the people with mental disorders.70.29% belonged to nuclear family and 25.74 % belonged to joint family and 3.97% people belong to 3rd generation.

This table 3describes the socioeconomic status of the people with mental disorders, with clustering among lower middle III class (25.74%) and upper lower class IV(36.63%)and 35.64% of the people belong to lower class V and 1.98% in upper middle class II. The occupation status of the people with mental disorders has been described in the above. 62.38 % of the people were unemployed or housewives or retired. 19.80% were unskilled laborers. Among unemployed group 52.47% was females. Among unskilled group 10.89% was males and 8.91 % was females.

IV. Discussion

Prevalence of mental disorders in slums is found at higher rates as compared on population-based surveys from non-slum communities in India, even when our data were compared with that of other study disaggregated by age and gender to allow for more precise comparisons. The other population based study was done in Mumbai, and the results was similar to that of our study.(Jain & Aras,[8] 2007, Ramnath Subbaraman,2012[9])These findings suggest that slums may suffer from a higher burden of mental disorders than non-slum communities indicating role of various co morbid factors in its causation.

Prevalence of people found to be suffering from mental disorder was24% by T. S. Sathyanarayana Rao et al 2011[10], Ganguli H.C. et al. [5]2000 in Bangalore Pooled data from 15 selected studies with the prevalence of 73.0/1000, Another study by Premarajan *et al*.[11] 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 and our study findings.

V. Socio-Demographic Variables

1. Age

In the present study highest rate of mental disorder was found in the age group 25-45 years with a percentage of 50.49 because of higher prevalence of addiction in males and depressive disorder in females of this age group. Followed by 22.77% in 45-55 age group. An increase in morbidity rate was seen in age group of 25-45 commonly in females. However in our study if all age group are considered together the trend of mental disorder initially increase in both males (upto 45-55 year) and females (upto 25-35 year) , which is similar to the other studies of Elnagar et al, 1971,[12] Nandi et al, 1978.[13] Psychiatric morbidity increased with advancing age has been reported in the study by Premarajan et al.[11]Another study conducted in urban slum of Mumbai by Ramnath Subbaraman et al, in year 2012 [9] show that 59.7 % people with the age group of 18-44 have mental disorder also showed with increase with age increase chances of mental disorder, But our study reflect such trends initially and there is decline after the age group of 55 and above . Study by T. S. Sathyanarayana Rao[10]

in South India population in 2011 shows more than 50% people having psychiatric disorders in the age group of 18-50 and increase with the age.

2. Gender

Based on gender, depression and anxiety disorders were more common among females (24.79%), substance abuse/dependence were more common among males. Sethi *et al*.[14],S. Sathyanarayana Rao (25.00%)[10]**,** Ramnath Subbaraman et al, 2012 (26.7%)**,**[(9)] and Nandi *et al*.[(13)] have also reported a higher psychiatric morbidity particularly of neurosis and depression among females. Reddy. MV [15] findings were similar to our study; that depression and anxiety disorders are more prevalent among females than males. Males constituted 34.66% of the mental disorder whereas females around 65.34%. Females showed a higher prevalence 293.33/1000 compared to males 176.76/1000. Females in general show a higher mental morbidity than males Dube (1970)[16] in his field survey in Uttar Pradesh and Nandi et al (1975)[13] in their survey in West Bengal reported higher mental morbidity in females

3. Marital status

In adult males as well as females, morbidity was19.80% in the married group when compared to those who were unmarried (11.88%).Widows had the morbidity of 23.76% , but divorce or separated (34.65%) had higher percentage of mental disorder than those of married, unmarried and widows. This is in general agreement with other studies by Sethi B B Mental Health and urban life1974[15]. Dube KC (at rural and urban population in) 1970 [17],Thacore VR[17] at North India in 1975, Ramnath Subbaraman et al [(9)]observed, in year 2012Mumbai (21.6%) in married people and (29.2%) in unmarried. But study by T. S. Sathyanarayana Rao [(10)] in South India population in 2011 shows (33.30%) in married and (13.00%) in unmarried which was different from this study.

4. Socioeconomic status

The relationship between social class and mental illness has been studied by many workers this studies found a positive relationship between the social class and mental illness, with a higher morbidity in the poorer class, conducted in India. Ramnath Subbaraman et al[(9)], in year 2012 Mumbai, T. S. Sathyanarayana Rao [(10)]in South India population in 2011, Pai S et al in 1981[(18)], Verghese A et al in Vellor (1976)[(19)]. Which is similar to our study25.74% of the people belonging lower middle class and 72.27% belong to lower class which had highest morbidity. There was a corresponding decrease in the morbidity with socioeconomic status group. Contrary to the above findings, there are studies by Gopinath PS et al in Banglore (1968) [(20)]and Elnager MN in 1971[(12)] which did not find any positive relationship between social class and mental illness.[12,22] Thacore 1975 [(18)]found higher morbidity in middle and upper social class. Where a study by Hollingshead and Redlichin in the New Haven found that higher the social class, higher the neuroses and lower the social class, higher the psychoses.[19]

5. Education

The highest rate of mental disorder was found among those who did not have any schooling that is 57.43 %. This is in general agreement with other studies Rao, et al Suttur in 2011[(10)] showed 41.10 % people with psychiatric disorder belong to illiterate group , 32.9% people in study of Ramnath Subbaraman et al in year 2012[(9)] and Dube KCin 1970.[(17)]

6. Occupation

The highest prevalence was noted among housewives and retired (62.38 and 9.98 respectively) followed by unskilled workers (19.08%). Rao et al at Suttur in 2011[(10)] found it to be higher in unemployed (53.30%)and in homemaker it was 34.00%, 41.10% in unskilled worker. Ramnath Subbaraman et al in year 2012 [(9)]Mumbai showed 24.8% with psychiatric disorders belonging to unemployed groups similarly ,Dube KCin 1970 [(17)]and Sethi B B Mental Health and urban life1974 showed the same .[15]

7. Family structure

The prevalence of mental disorder seemed to be more in nuclear families (70.29%) as compared to joint families (25.74%), This is in general agreement with other studies Rao et al at Suttur[10] in 2011found to be higher in nuclear family (24.70%) and, Ramnath Subbaraman et al [9]in year 2012Mumbai showed 29.4% with psychiatric disorders belonging to nuclear family similarly Dube K C in 1970[17],Sethi B B Mental Health and urban life1974 showed the same .[18]

VI. Conclusion

Our study conclude 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. mental disorder 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 mental disorder which is evidence of psychological health problem. We found that the impact of socio-demographic variable have been directly attributing to the causation of mental disorder. We also found that mental disorder was commonly affecting the middle age group (25-55), low socio-economic status, female gender, uneducated, unemployed, co-morbid medical condition, substance abuse, unmarried, widow and persons with poor marital harmony were the major sufferer's. As on today these urban slum community is facing major health problem both mental and physical , based on the prevalence of mental disorder, we conclude that their mental health requires attention, which is an essential part of individual's health.

REFERENCES

[1]. W.H.O report: Chapter 2; Burden of Mental and Behavioral Disorders. 2000.
[2]. Kishose. J Text book of National Health Program of India. 10th Edition New Delhi Century Publication. 2011
[3]. Chandrashekar R, Sudhir kumar C T, 'Epidemiology of Mental disorders' in Vyas and Ahuja. Textbook of Postgraduate Psychiatry, 2nd Edition 2004 pg no 28-41.
[4]. Math SB, Chandrashekar CR, Bhugra D. Psychiatric epidemiology in India. Indian J Med Res Sept 2007; 126:183-92.
[5]. Ganguli H C. Epidemiological findings on prevalence of Mental Disorders in India. Indian J Psychiatry 2000; 42:1 4-20.
[6]. W.H.O A User's Guide to Self Reporting Questionnaire SRQ-20, Division of Mental health world health organization geneva 1994.
[7]. Kumar Ravi BP, Dudala Reddy Shankar, Rao AR. Kuppuswamy's Socioeconomic Status Scale- A Revision of Economic Parameter for 2012. International Journal of Research and development of Health .2013; vol1 (1): 2-4
[8]. Jain & Aras,[(8)] 2007
[9]. Mumbai by Ramnath Subbaraman et al, in year 2012
[10]. T.S Sathyanarayana Rao, Darshan M.S et al An epidemiological study of psychiatric disorders in south Indian rural population. Indian J Psychiatry 2015; 56(3): 238-245.
[11]. Premarajan KC, Danabalan M, Chandrasekhar R, Srinivasa DK. Prevalence of psychiatric morbidity in an urban community of Pondicherry. Indian J Psychiatry 1993; 35:99-102.
[12]. Elnager MN, Maitra P, Rao MN. Mental health in an Indian rural community. Br J Psychiatry 1971; 118:499-503.
[13]. Nandi DN, Banerjee G, Ganguli H, Ajmany S, Boral GC, Ghosh A, Sarkar S. he Natural history of mental disorders in a rural community: A longitudinal field - survey. Indian J Psychiatry 1978; 21:390-6.
[14]. Sethi B B, Gupta SC, Mahendru RK, Kumari P; Mental Health and urban life; A study of 850 families.Br J Psychiatry 1974; 124; 243-6.
[15]. Reddy. MV Chandrashekar.C.R Prevalence of mental and Behavioral disorders in India; a Meta analysis. Indian J Psychiatry 1998; 40:149-157.
[16]. Dube KC. A Study of prevalence and biosocial variables in mental illness in rural and urban community in Uttar Pradesh, India Acta Psychiatr Scand 1970;46: 327-59.
[17]. Thacore VR, Gupta SC, Suraiya M.Psychiatric morbidity in North Indian community.British Journal of Psychiatry 1975;126:364-369.
[18]. Pai S, Kapur RL. The burden on the family of a psychiatric patient: development of an assessment scale. Br J Psychiatry 1981; 38:332-5.
[19]. Verghese A, Beig A, Senseman LA, Sunder Rao SS, Benjamin V. A social and psychiatric study of representative group of families in Vellore town. Indian Journal of medical Research 1973;61:608-620.
[20]. Gopinath PS. Epidemiology of mental illness in an Indian population (Unpublished). MD thesis submitted to Banglore University,Banglore, 1968.
[21]. Park K. Park's Textbook of Preventive and Social medicine. 23th Edition Jabalpur. Banarsidas Bhanot 2015.