

Major depression in Jalal Pur Jattan, district Gujrat, Pakistan: Prevalence and gender differences

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Abstract

Objectives: To assess the prevalence of depression along gender lines in the general population.

Methods: Using multistage stratified proportionate sampling, the cross-sectional study was conducted in four Union Councils of Jalal Pur Jattan in Gujrat, Pakistan from November 2011 to November 2012. From each stratum, two samples were taken: adults and adolescents. Then each sample was divided into adult males and adult females (20-45 years); adolescent boys and adolescent girls (13-19 years). The questionnaire was developed on the basis of diagnostic criteria given in the revised version of the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders.

Results: Of the total population of 28,259, 1117(3.6%) were approached for the study. Of them, 1110(99.3%) people participated. Overall, 173(15%) were found to be vulnerable to psychological problems whereas 59 (5.31%) were found as vulnerable cases to depression. However, the diagnosis of major depression was handed to 38(3.4%) respondents. Of these 38 subjects, 7(18.42%) persons were suffering from mild; 22(57.89%) from moderate, and 9(23.68%) from severe symptoms. Further, 30(78.9%) of these subjects were women.

Conclusion: Major depression was prevailing in the community of Jalal Pur Jattan in almost the same ratio as in other places around the globe, and, therefore, the inhabitants need psychiatric services.

Keywords: Gender difference, Prevalence, Major depression, Multistage stratified proportionate sampling, Diagnostic interviews. (JPMA 65: 292; 2015)

Introduction

Pakistan is a developing country and presently Pakistani people are facing political, economic and social crisis in addition to security threats. It has been observed that social, political and economic instability and feelings of insecurity in general create distress which seriously affects the mental health of an individual. For the last two decades, electronic and print media have created awareness about psychological problems and psychiatric disorders in the general public. It was reported in 'Pakistan Today' that psychological disorders are on the rise, and mental illnesses are reaching alarming proportions as 50 to 60 patients visit the psychiatric department in hospitals on a daily basis. Moreover, the report of Human Rights Commission of Pakistan (HRCP) indicated that 34% of country's population is suffering from some form of mental illness.¹

In a depressive episode, individuals not only experience changes in mood but it also affects the other areas of life. It disturbs individual's ability of thinking, concentration, motivation, physical activity

and other areas of functioning.²

Unipolar depression is more common among females than males.³ About twice as many females as males meet the criteria for major depressive disorder or dysthymic disorder at some time in their lives.⁴ The absolute prevalence of depression varies substantially across cultures and nations, but differences in depression vis-a-vis gender remain significant across most demographic and cultural groups. The World Health Organisation (WHO) estimated that depression is the leading cause of disease-related disability for females in the world today.⁵ Further gender-wise differences in depression have been reported across 29 countries. They used the data from the World Values Survey across 20 countries. Through multilevel logistic models to examine gender differences in depression, they found that there is no country where the males are more likely to be depressed than females.⁶ Similarly, it is also found that females were approximately two times more likely to report a lifetime episode for Major Depressive Disorder than males in young adults (n=1197, 528 males and 669 females) of urban, Afro-Americans with an age range of 19--22 years.⁷ Further, gender differences in depression were also investigated in urban south Indian population. The odds ratio (OR) for depression in female subjects was 1.20 [confidence intervals (CI):1.12-1.28; p<0.001] compared to the male

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subjects.⁸ Further, it is concluded that females were more depressed than males among medical students at Nishtar Medical College, Multan, Pakistan.⁹

A systematic review was conducted about risk factors, prevalence and treatment of anxiety and depressive disorders in Pakistan. Results showed that female gender is a positively associated risk factor for anxiety and depressive disorders. The ratio of the prevalence for females was 66% and 33% for males.¹⁰ Similar results were found by other researchers among households in three capital cities of Pakistan.¹¹

The cross-gender differences in depression are in line with the functional mechanism of Pakistani society. In Pakistani culture, females are considered to be fully responsible for all kinds of household activities: chores as well as for child-rearing. Males are deemed to be responsible only for earning for the family. Females are also considered emotionally weak and dependent on males, but at present, the scheme of things has changed as most of the females have started working but even then household activities and child-rearing still remain the responsibility of the females. Dual responsibilities of housekeeping and job performance are patent factors which make them more vulnerable to psychological disturbances and disorders.

The objectives of the current study were to find the prevalence of major depression as well as to explore the gender-wise differences in a Punjab town.

Subjects and Methods

Using multistage stratified proportionate sampling, the cross-sectional study was conducted in four Union Councils of Jalal Pur Jattan in Gujrat, Pakistan from November 2011 to November 2012. The sample size was determined on the basis of literature.¹² Proportional allocation method was used to determine the sample size from four strata depending on the proportional contribution of each stratum in the target population. From each stratum, two samples were taken: adults and adolescents. Using random sampling each sample was further divided into adult males and adult females (20-45 years); adolescent boys and adolescent girls (13-19 years). The sample was the 4% of the total population. The respondents were mostly from the same religious background, but their profession, educational level, socioeconomic group and other characteristics were different.

Those not willing to participate in the study, those who were not permanent residents of Jalal Pur Jattan, and those with some terminal physical illness were excluded.

The study questionnaire was developed on the basis of

diagnostic criteria given in the revised version of the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR).¹³ The questionnaire consisted of three parts: demographic variables; screening questions for major depression; and diagnostic questions related to major depression based on DSM-IV-TR criteria. A cut-off score of 8 was set for major depression. Such cases were categorised as mild, moderate and severe based on their obtained scores on each question on 4 point Likert scale which was validated by five experienced clinical psychologists. First two parts of the questionnaire were administered to all of the respondents, but the third part was administered only to those who were screened as vulnerable cases for major depression.

Structured clinical diagnostic interviews were conducted to collect data from the participants. In order to get their willingness to participate in the study, verbal consent was taken from the respondents before the administration of the questionnaire. The diagnostic interviews were subsequently conducted.

For descriptive analysis of data, frequencies and percentages were computed. The ratio of mild, moderate and severe cases within the diagnosed cases was also worked out. Mann-Whitney test was used to compare the diagnosis of participants with respect to their gender.

Results

Of the total population of 28,259 of the study area, 1117(3.6%) were approached for the study. Of them, 1110(99.3%) people participated. Overall, 173(15%) were found to be vulnerable to psychological problems whereas 59 (5.31%) were vulnerable to depression. However, the diagnosis of major depression was handed to 38(3.4%) respondents. Of these 38 subjects, 7(18.42%) persons were suffering from mild; 22(57.89%) from moderate, and 9(23.68%) from severe symptoms (Table-1).

Table-1: Participants at Stage I, Stage II, and Stage III.

Cases	N	%
Screening(n=1110)		
Vulnerable cases of psychological problems other than depression	173	15%
Vulnerable Cases of depression	59	5.31
Screened Cases (n=59)		
Non-Diagnosed Cases	21	35.59
Diagnosed Cases	38	64.40
Could not Count due to Physical Illness/Death of Loved One or Substance Abuse	3	5.08
Severity of Diagnosed Cases in Major Depression (n=38)		
Mild(1-20)	9	23.68
Moderate (21-40)	22	57.89
Severe (41-60)	7	18.42

Table-2: Demographic Characteristics (n=38).

Variables	F	%
Age in Years		
13-19	5	13.2
20-45	33	86.8
Gender		
Female	30	78.9
Male	8	21.1
Family System		
Nuclear	25	65.8
Joint	12	31.6
Residence		
Personal	34	89.5
Rented	4	10.5
Social Class		
Lower Class	16	42.1
Middle Class	18	47.4
Upper Class	4	10.5
Marital Status		
Unmarried	13	34.2
Married	21	55.3
Widow	3	7.9
Divorced	1	2.6

Table-3: Mean Comparison of Diagnosis with Respect to Participants' Gender (n=59).

Gender	Mean Rank	U	P value
Males	21.65	190.500	0.021*
Females	31.77		

*P < .05.

There were 1051(94.68%) non-vulnerable cases that did not have any indication of major depression through screening. Of the 59 vulnerable cases, 21(35.59%) had some symptoms of major depression but they were not diagnosed as depressive as they scored below the cut-off point for diagnosis. Only 3(2%) cases could not be counted as having independent psychiatric illness because they had the history of physical illness, death of loved one or substance abuse.

Further, 30(78.9%) of the diagnosed depressive cases were women against 8(21.1%) men (Table-2) and this comparison was statistically significant (U =190.500; p<0.05) (Table-3).

Discussion

It was the first study in Jalal Pur Jattan to explore the prevalence and gender-wise distribution of major depression in the general population. The results are almost in line with the WHO report¹⁴ which concluded that 10% of global population is suffering from mental

health problems and major depression is only one of them. It further says that this ratio is higher in developing countries. In the current study, 15% people were found to be vulnerable to psychological problems. Besides, 59 respondents were found to be vulnerable to depression only, but 38 were diagnosed with major depression.

Another major finding of the study was the statistically significant difference in the diagnosis of major depression with respect to female gender. The findings are consistent with literature.^{6, 8-11,15}

There could be different possible factors for such gender bias in different cultures. One of the reasons could be the greater amount of stress that females experience in their lives.¹⁶ It is reported that females face a number of chronic burdens in everyday life as a result of their social status and roles compared to males, and these strains could contribute to their higher rates of depression.¹⁷ They do have to shoulder nearly all the child-care and domestic work of the home, including caring for the sick and elderly family members. This overload contributes to a sense of "burn-out" and general distress, including depressive symptoms, in females.

In Pakistani society, females also face a greater amount of stresses because they are considered solely responsible not only for household affairs but also for the upbringing of children. Further, it is also expected of them to take care of all other family members as well.

The present research had its limitations as it was a cross-sectional study conducted only in one city of district Gujrat. Due to time constraints it could not be done across the district. Another problem related to language. Though the structured diagnostic interviews were based on the translated Urdu version, for some respondents, interviewers had to be conducted in Punjabi language.

Despite the limitations, however, the study's findings underscore the need for preventive, therapeutic and rehabilitation programmes for females.

Results indicate that the social structure of Jalal Pur Jattan is depicting increasing trend of major depression regardless of gender, and preventive measures need to be taken across the board. One of the ways to approach the issue is by way of training general health practitioners to differentiate and identify mental health issues from physical problems. Besides, there should be a system of referral of such cases to psychiatrists and clinical psychologists. In the light of the WHO¹⁴ report which says depression is suspected to become a major reason of mortality by 2020, the significance of the study is evident, and there is a need for future studies to focus on gender-

associated factors in major depression, and to explore the causal factors of major depression and its social correlates in order to prevent the future cases of depression.

Conclusion

Almost 10% study population is suffering from mental health problems in general, and 5% of them have major depression. There is a need of serious attention for provision of psychiatric services to deal with such problems in the community.

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