

Prevalence of Depression and the associated Risks Factors among Adult Women in a Fishing Community

N. Nisar (Hamdard College of Medicine and Dentistry, Hamdard University, Baba-Bhitt Health Project* and Department of Psychiatry,Hamdard University Hospital**, Karachi.)

N. Billoo (Hamdard College of Medicine and Dentistry, Hamdard University, Baba-Bhitt Health Project* and Department of Psychiatry,Hamdard University Hospital**, Karachi.)

A. A. Gadit (Hamdard College of Medicine and Dentistry, Hamdard University, Baba-Bhitt Health Project* and Department of Psychiatry,Hamdard University Hospital**, Karachi.)

Abstract

Objective: To determine prevalence of depression and its associated risk factors with depression among adult women in a fishing community

Methods:This study was conducted in Sualehabad, a small community with a population of 5000 of Manora Island in two stages. In first stage door to door survey was conducted and about 1200 women were screened for depression by using Mini International Neuropsychiatric Interview by Sheehan which was supplemented by ICD-10 Diagnostic Classification. In order to determine the associated risk factors, 91 controls were selected among the non-depressed women randomly from the same community with the 91 identified cases of depression. In second stage, a semi-structured questionnaire was administered to both the cases and controls, which was then subjected to reliability and validity exercises. The total duration of the study was six months.

Results: The point prevalence of depressive disorder was 7.5%. Only 13% reported treatment from government facility and 14% reported previous consultation with a psychiatrist. Sixteen percent of women were aware about mental health facility available in the area. Twenty seven percent reported that they got relief from alternative treatment. The characteristics that demonstrated a statistically significant association related to risk factors were increasing age, being married, more than four children in family, illiteracy and financial difficulties at home. There was a significant association observed in reporting social, behavioral and relational factors related to depression by cases as compared to control group.

Conclusion: The prevalence of depressive disorder among adult women of the fishing community was 7.5% which is at a high magnitude keeping in view the prevalence rate of the country and the global estimates. There is a need for more community based studies in order to assess the magnitude of depression which is posing one of the major public health problems (JPMA 54:519;2004).

Introduction

Women bear the major brunt of the family and suffer in silence. Depression is an inexplicable agony among women, almost unidentified among mental health problems in Pakistan. Global Burden of Disease study identified major depression as the fourth leading cause of worldwide disease burden in 1990, ranking ahead of ischaemic heart disease, cerebrovascular disease, and tuberculosis.^{1,2} Even more striking is the projection that major depression will become the second leading cause of disability worldwide by 2020.³

According to the WHO Global Burden of Disease 1996 statistics, the leading cause of disease burden for women in 1990 was Unipolar depression, amounting to 13% of all causes of disease burden in women of developing countries. Epidemiological studies report that major depression has an annual

prevalence varying from about 1% to 6% in community samples worldwide with evidence that it is becoming more prevalent over time in younger cohort.⁴⁻⁶ The position of women in Pakistan can be easily ascertained from the very fact that the male female ratio population wise is 108 males to 100 females of 140 million in Pakistan.⁷ Women constituted 48% of the total population and 22% of women are in reproductive age group and 26% are less than 15 years. Women have low literacy rate i.e. 24% majority of women are housewives and are economically dependent on men and not conscious of their legal rights. The psychosocial stresses of Pakistani women are present throughout their life cycle from childhood to adolescence adulthood, middle age and old age. Studies carried out in developing countries have shown reasonably

consistent high rates for depressive and anxiety disorders particularly high rates among women in Pakistan have been reported.⁸⁻¹¹ As per local studies, identified predisposing factors for mental illness in Pakistan are: low socioeconomic conditions, illiteracy, unemployment or poor job conditions, denial of justice or lawlessness, social discrimination, loosening of cohesion in society and violations of human rights.¹² There is need to explore social and cultural factors contributing in depression because incidence of mental illness is rising in our country and the general awareness about existence and causation of mental illness is lacking.¹³ In Pakistan people give more importance to evil eye, possession, magic and Jinnic influence as being the major causes of mental distress and usually approach a shaman or a traditional healer for seeking treatment.^{14,15}

Our study attempts to identify the prevalence of depression and associated risk factors among women in a community setting. Previous studies have been conducted in Pakistan are hospital based and did not reflect the true prevalence of depression.¹⁶ Few descriptive studies that were conducted in community settings did not look for depression exclusively and others were based on secondary data analysis.¹⁷

This analytical study determines the statistical association of depression with various risk factors involved biologically and socially. Mental health problems particularly depression needs attention of policy makers, planners and researchers, to determine magnitude of depression and make efforts for its prevention and control.

Patients and Methods

This study was conducted in Sualehabad, a small community with a population of 5000 of Manora, an Island near Karachi in Arabian Sea with a population of 25000. Manora Health Project was launched in 2000 and is working with an objective to improve the health status of the population in general and with special emphasis on improvement of mental health status. The study was conducted in two stages for duration of two months.

Stage 1

Door to door survey was conducted for all four hundred households. In each household women of 18 years age and above were included in the study. A total of 1200 women were screened for depression by using Mini International Neuropsychiatric Interview by Sheehan which was supplemented by ICD-10 Diagnostic Classification. In order to determine the associated risk factors, 91 controls were selected among the non-depressed women

randomly from the same community with the 91 identified cases of depression.

Stage 2

A semi-structured questionnaire which was pre-tested, translated and back-translated was administered to both cases and controls which were then subjected to reliability and validity exercises. The questionnaire included socio-demographic information, knowledge attitude and health seeking behavior of study subjects. The interviews were conducted by co-investigators themselves under the supervision of a psychiatrist after a week of rigorous training.

Results

Twelve hundred women of 18 years age and above, residents from the 400 households of Sualehabad were approached for detecting depression. Out of these 1200 women, 91 cases of depression were detected. Ninety-one controls were been taken from the same community. The point prevalence of depressive disorder among adult women calculated was 7.5%.

In Table 1 socio-demographic characteristics of the two groups are compared. The study subjects were studied in two groups on the basis of either depressed or non-depressed status. Age, marital status, duration of marriage, ethnicity, education, number of children and individuals in the household, number of children in the family, type of family, income of the household and financial difficulties were compared. The characteristics that demonstrated a statistically significant association were increasing age, being married, more than four children in family, illiteracy and financial difficulties at home.

In Table 2 knowledge about causes and cure of depression and other behavioral characteristics of the study subjects are compared. There was a significant association observed in reporting causes and cure of depression by cases as compared to control group. The depressed women found dissatisfied with life were 26.5 times more as compared to control group. Depressed women found their friends and relatives unhelpful 3.76 times more as compared to non-depressed women. They did not visit friends and relatives twice as compared to controls. Relationship with parents found not good and 5.82 times high in cases as compared to control group. Married women did not have good relationship with their spouse five times higher as compared to married control women. Relationship with children were twice bad among depressed as compared to non depressed women. Unmarried depressed women reported 6 times more not good relationship with their family members as compared to controls. The odd of reporting fear is

5.96 times higher in cases as compared to controls. The cases reported getting anguish easily was 14 times more as compared to control. Depressed women reported addiction thrice higher than control. In Table 3 health seeking behavior of depressed women is described. Only 13% women received treatment from government facility while majority (87%) of women reported treatment from private facility. Only 14% depressed women had previous consultation from psychiatrist while 86% did not. Sixteen percent women were aware about mental health facility available in the area while 85% denied the existence of mental health facility in the area despite objective evidence of wider propagation about the health care project. 16.5% found mental health facility available in the area also affordable. On asking question regarding utilization of mental health service 25.3% reported positively that it should be utilized if found available in the area. Regarding seeking treatment from Pir/Faqir 35% depressed women reported positively and were of opinion that it should be utilized for treatment of

Table 1. Association of depression with women Socio-demographic characteristics.

Variables	Cases (n=91)	Control (n=91)	Odds ratio	95% confidence interval
Age of the women				
>29 years	43	22	2.81	1.43 - 5.56
<29 years	48	69		
Marital status				
Married	60	41	2.36	1.24 - 4.50
Unmarried	31	50		
Ethnicity				
Sindhi	58	54	1.20	0.63 - 2.29
Balochi	33	37		
No. of children in the household				
>4	12	9	1.38	0.51 - 3.81
<4	79	82		
No. of individual in the household				
>10	27	21	1.41	0.69 - 2.88
<10	64	70		
No. of children in the family				
>4	8	1	8.67	1.07 - 188.05
<4	83	90		
Type of family				
Nuclear	35	32	1.15	0.60 - 2.20
Joint	56	59		
Duration since marriage				
>10 years	39	22	1.35	0.54 - 3.38
<10 years	21	16		
Education				
Illiterate	57	41	-	-
Literate	20	27	1.88	0.88 - 4.03
>5 years schooling	14	23	2.28	0.96 - 5.53
Occupation of women				
Employed	8	4	2.10	0.54 - 8.65
Unemployed	83	87		
Income of household				
>5000	69	67	1.12	0.55 - 2.31
<5000	22	24		
Financial difficulties				
Yes	81	22	6.20	3.23 - 11.97
No	41	69		

depression. Twenty seven percent of women reported that they got relief with alternative treatment. Type of alternative treatment included amulets (Taawiz) 15%, holy-water/oil/sand/flower 12%, niaz 14% and 53% reported no treatment.

Discussion

In Pakistan, health services are poor in general, but they are particularly deficient for mental health leading to

Table 2. Association of depression with women knowledge about depression and behavioral characteristics.

Variables	Cases (n=91)	Control (n=91)	Odds ratio	95% confidence interval
Knowledge about cause of depression				
Yes	44	30	2.42	1.25-4.71
No	37	61		
Knowledge about cure of depression				
Yes	50	20	4.33	2.17-8.71
No	41	71		
Satisfaction with life				
No	34	12	3.93	1.77-8.83
Yes	57	79		
Friends helpful				
No	37	14	3.77	1.76-8.14
Yes	54	77		
Visit to Friends and relative				
Yes	41	11	5.96	2.66-13.64
No	50	80		
Relationship with parents				
Yes	17	4	5.83	1.73-21.64
No	62	85		
Not alive	11	1		
Relationship with spouse				
Yes	12	2	5.35	1.04-36.90
No	46	41		
Relationship with children				
No	10	2	4.46	0.84-31.40
Yes	46	41		
No children	33	50		
Relationship with family members if unmarried				
Yes	16	4	6.48	1.78-25.67
No	29	47		
Married	46	40		
Fear				
Yes	41	11	5.96	2.66-13.64
No	50	80		
Anguish				
Yes	71	18	14.40	6.66-31.60
No	20	73		
Addiction				
Yes	55	27	3.62	1.87-7.04
No	36	64		

Table 3. Health seeking behavior of women suffering with depression.

Variables	Frequency	Percentage (n=91)
Place of treatment		
Government	12	13.2
Private	79	87.8
Previous consultation from Psychiatrist		
Yes	13	14.3
No	78	85.7
Knowledge about mental health facility available in the area		
Yes	14	15.4
No	77	84.6
Affordability of mental health service		
Yes	15	16.5
No	76	83.5
Opinion regarding utilization of mental health service		
Yes	23	25.3
No	68	74.7
Going to Pir/Faqir and Dargha		
Yes	32	35.2
No	59	64.8
Getting relief From Pir/Faqir Treatment		
Yes	25	27.5
No	66	72.5

adverse outcomes. Mental health is a fundamental human right and its importance cannot be denied. Depression is a major unidentified disease of people, especially among women living in small communities of Pakistan. Depressed female patients face problems of different varieties including; social, economic and lack of autonomy in making decisions. Depression is a reliable indicator of mental health status of a country. It is a serious but treatable disorder characterized by symptoms such as: low mood, disturbed appetite, insomnia, loss of interest and energy, weeping tendencies, death wishes etc, with a duration of at least two weeks affecting social, personal and occupational life. In primary care setting, the point prevalence of major depression ranges from 5-9% among adults, but half of the depressive illnesses go un-recognized.¹⁸

The findings of our study showed that among the depressed women only 13% reported previous consultation by psychiatrist and majority consulted a general practitioner. In Pakistan general practitioners are backbone of health care system. About 90% of the people first seek consultation from a GP before seeing a specialist.¹⁹

Findings from some other studies revealed that increasing age of women is significantly associated with depression.^{20,21} Our study supported this finding; odds of reporting 29 years and above age was 2.8 times among depressed women as compared to controls.

In our study Illiteracy was associated with depression as compared to women having 5 or more than 5 years of schooling. Education is likely to enhance female autonomy: women develop greater confidence and capabilities to make decisions regarding their own health. Education with formal years of schooling, has a lower incidence of depression which is consistent with findings of our study.^{8,16,21,22}

Our study showed that being married and having 4 or more children under 12 years of age was associated with depression. Several other studies have reported similar findings.^{8,16,22-24}

There was no significant association observed between the two groups regarding ethnicity, number of children and number of individuals in the household. In our study, no association was observed when type of family was compared between two groups. Type of family is a contributing factor to women's mental health. Nuclear family in urban family system lack extended family support.²⁵ Women having larger number of children are particularly associated with depression. In our study odds of reporting more than four children in family is 8.6 in cases as compared to control. Another study conducted in a village of Rawalpindi Pakistan reported similar findings.²⁶ Economic status is an important factor that is associated for mental health. Our study did not show statistically significant association when income of the household was compared between cases and controls. The reason could be that both depressed and non-depressed women belong to the same lower socioeconomic class. But interestingly when questions

Questionnaire.

1 Age of the women in years

2 .Marital status: Married/ Unmarried

3 Ethnicity: 1.Sindhi 2.Balauchi 3.Mahajir4.Panjabi
5.Pathan 6.Others

4 Total No of children in the Household

5 Total No: of Individual in the household

6 Total No of children in the family

7 Type of family Nuclear / Joint/extended

8 Duration since marriage in years if married

9 Education : Illiterate / Literate / >5years of schooling

10 Occupation of women: Employed / Unemployed

11 Total monthly Income of the household (in Rupees)

12 Do you have Financial difficulties at home? Yes / No

13 Do you Know what is the cause of depression? Yes / No

14 Do you Know what is the cure of depression? Yes / No

15 Are you Satisfied with your present life style? No / Yes

16 Are your Friends helpful to you? No / Yes

17 Do you Visit to your friends and relative? Yes / No

18 Do you have good Relationship with your parents? Yes / No/ Not alive

19 Do you have good Relationship with your spouse? Yes / No

20 Do you have good Relationship with your children? No /Yes / No children

21 If not married do you have good Relationship with other family members? Yes / No /Married

22 Are you Feared of anything? Yes/No

23 Did you get anguish easily? Ye / No

24 Where did you get Treatment? Government / Private facility

25 Do you have any Previous consultation from Psychiatrist? Ye s/ No

26 Do you Know any health service which offer mental health facility in your area? Yes / No

27 Do you think that the mental health services offered are affordable to the community? Yes / No

28 Do you think that any one sick in the community should utilize this service? Yes / No

29 Do you Go for treatment to Pir/Faqir & Dargha? Yes / No

30 Do you get relief From Pir/Faqir Treatment? Yes / No

31 What kind of treatment you get by Pir/ faqir and Dargha?

Scale for detecting depression.

1 Have you been consistently depressed or down, most of the day, nearly every day, for the past two weeks? Yes / No

2 In the past two weeks, have you been less interested in most things or less able to enjoy the things you used to enjoy most of the time? Yes / No

3 Do you have disturbed appetite? Yes / No

4 Do you have disturbed sleep? Yes / No

5 Do you feel fatigue most of the time? Yes / No

6 Do you often have complaints of pain in any part of the body? Yes / No

asked about severe financial difficulties at home, the odds of reporting severe financial difficulties was 25 times higher among cases as compared to controls. Similar findings had been reported in another study conducted in Pakistan.²⁶

Substance abuse is common among psychiatric patients. The odds of reporting addiction of Hukka were 3.62 times among depressed women as compared to controls. In Pakistan private health sector accounts for at least two thirds of the total expenditure. The health services from private sector are expensive and out of the reach of the common man, while government provides health services at very subsidized rates. In this study a very small proportion (13.2%) of women utilize government health services while a much higher proportion (87.8%) reported care received from a private health facility. Our finding is consistent with other study finding.²⁷ In Pakistan mental health services available are far from satisfactory as a stigma attached to the utilization of these services. Our sample showed that only 14% of women suffering from depression reported previous consultation from psychiatrist and majority did not report psychiatric consultation. In this study area a mental health facility is available which provides consultation and medicine, only 15% of the cases were aware of this facility and reported that this is affordable and 25% were of opinion that mental health services should be utilized.

Pseudo-religious, cultural, social and political factors contribute to the mental health problems of females and determine health-seeking behavior. Faith healers/priest or mullahs are approached mostly for mental health problems. Women having mental symptoms are considered magic spell or 'Asar'. They are taken to 'Maulvis' or 'Pirs' (Priests or traditional healers). But if they have somatic (physical) complaints they are

taken to homeopaths or hakim or doctors. Women are likely to seek help, as it is a continuation of their dependent role. In our study 35% of women reported visiting a Pir/Faqir and 27% reported relief from their treatment and the most popular treatment reported was amulet (Taawiz), oil, water, sand and flowers and some also reported getting Niaz and other things. About half women did not report such type of treatment but they got treatment from Dua and Dam. It is concluded that the prevalence of depression among adult women of the fishing community is 7.5% which is of a high magnitude keeping in view the prevalence rate of the country and the global estimates.

The significant risk factors were: increasing age, being married, having more than 4 children, illiteracy and financial difficulties. There is a need for more community based studies in order to assess the magnitude of depression which is one of the major public health problems.

References

- Murray CJL, Lopez AD. Global burden of disease. Cambridge, Mass: Harvard University Press, 1996, p. 84.
- Murray CJL, Lopez AD. Global mortality, disability and the contribution risk factors: global burden of disease study. *Lancet*. 1997;349:1436-42.
- Murray CJL, Lopez AD. Alternative projections of mortality and disability by cause 1990-2020: Global Burden of Disease study. *Lancet* 1997;349:1498-1504.
- Thacore VR, Gupta SC, Suraiya M. Psychiatric morbidity in a North Indian community. *Br J Psychiatr* 1974;126:364-9.
- Weissman MM, Bland RC, Canino GJ, et al. Cross-national epidemiology of major depression and bipolar disorder *JAMA* 1996;276:293-9.
- Cross-National Collaboration Group. The changing rate of major depression: cross-national comparisons. *JAMA* 1992;268:3098-105.
- Access and usage of basic health services in Pakistan. Federal Bureau of Statistics Islamabad, 1997.
- Mumford DB, Nazir M, Jilani FM, et al. Stress and Psychiatric disorders in the Hindu Kush: community survey of mountain villages in Chitral, Pakistan. *Br J Psychi* 1996;168:299-307.
- Mumford DB, Saeed K, Ahmed I, et al. Stress and psychiatric disorder in rural Punjab. Community survey. *Br J Psychi* 1997;170:473-8.
- Hussain N, Creed F, Tomenson B. Depression and social stress in Pakistan. *Psychol Med* 2000;32:32-44.
- Niaz U. (ed.). Women's mental health. Pak Psychi Soc Monograph Series 11,2000.
- Gadit AA, Khalid N. State of mental health in Pakistan- education, Karachi:1st ed. Corporate Printers,2002, p. 41.
- Gadit AA. "Ethnopsychiatry - a review". *J Pak Med Assoc* 2003;53:483-90..
- Gadit AA. Treatment approaches by traditional healers: presented in international conference on cultural psychiatry, Lahore1995.
- Gadit AA. Shamnic concept and treatment of mental illness in Pakistan. *J Coll Physicians Surg Pak* 1998;8:33-5.
- Dodani S, Zuberi WR. Center based prevalence of anxiety and depression in women of the northern areas of Pakistan. *J Pak Med Assoc* 2000;50:138-40.
- Rabbani F, Raja FF. The minds of mother: maternal mental health in an urban squatter settlement of Karachi. *J Pak Med Assoc* 2000;50:306-12.
- Bender KG, Social problem in Pakistan Psychiatric patients. *Int J Soc Psychiatry* 2001;47:32-41.
- Gadit AA. Uses and limitation of Ethnopsychiatry, Published in the proceedings of International Psychiatric Conference, Lahore, 1994.
- Pillay AL, Sargent CA. Relationships of age and education with anxiety depression and hopelessness in a South African community sample percept Mot skills 1999; 89:881-4.
- Mumford DB, Minhas FA, Akhtar I, et al. Stress and psychiatric disorder in Urban Rawalpindi: community Survey. *Br J Psychiatry* 2000;177:557-62.
- Ali BS, Rahbar MH, Naeem S, et al. Prevalence of and risk factor associated with Anxiety and depression among women in a lower middle class semi-urban community of Karachi, Pakistan. *J Pak Med Assoc* 2002;52:513-15.
- Brown GW, Harris T. Social origins of depression: a study of psychiatric disorder in women. Tavistock, London, *J Sociol* 1978;9:225-57.
- Ali BS, Amanullah S. Prevalence of anxiety and depression in an urban squatter settlement of Karachi. *J Coll Physicians Surg Pakistan* 2000;10:4-6.
- Niaz U. Overview of women's mental health in Pakistan. *Pak J Med Sci* 2001,17: 203-9.
- Hussain N, Creed F, Tomenson B. Depression and social stress in Pakistan. *Psychol Med* 2000;30:395-402.
- Obermeyer CM. Culture, maternal health care, and women's status: a comparison of Morocco and Tunisia. *Stud Fam Plann* 1993;24:345

