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Status of Mental Health Among Left Behind Wives of Migrant Workers in North-East Part of Bangladesh

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Abstract

Introduction: Left behind spouses of outmigrants are vulnerable to suffer from anxiety and depression. This study was performed to see the prevalence of anxiety and depression among left behind wives of migrant workers attending gastroenterology outpatient department (OPD). Material and Method: This cross-sectional study was done in Gastroenterology OPD North East Medical College, Sylhet, Bangladesh from January 01 to December 31, 2018. 275 Consecutive patients, ie, wives of migrant workers of sylhet and adjacent districts attending of North East Medical College, Sylhet were included. Socio-demographic and clinical evaluation data was recorded. Then their mental health status regarding anxiety and depression were assessed using the Hospital Anxiety-depression Scale (HAD scale) under the supervision of a senior psychiatrist. Score 1-7 was taken as normal, 8-10 as borderline and above 10 was taken as confirming cases of anxiety and depression. Statistical analysis was done using SPSS version 20 and chi-square test was done to see the difference and P value <0.05 was taken as significant. Result: Out of 275 left behind wives of migrant workers, age varying from 18-50 (mean 30.47). Of them, 247 (88.36%) were from rural family, and 273 (99.27%) were housewives. Among them, 90 (32.72%) had symptom score consistent with anxiety. Depression was found among 78 (28.36%) participants while combined anxiety and depression was found among 54 (19.63%). Anxiety and depression were found to be more prevalent among wives of Higher age group, with longer duration of married life, residing in rural areas, with lower economic and educational background. Conclusion: Anxiety and depression were found in about one-third of left behind wives of migrant workers attending gastroenterology OPD. Both anxiety and depression were found more prevalent among those older age group, with longer duration of married life, member of the rural family, having a lower economic and educational background.

Keywords: Left Behind Wives, Migrant Workers, Anxiety and Depression, Mental Health Status

Introduction:

Migration for economic reason is very common in this modern era with the hope of improvement of economic condition[1]. Although this migration is giving economic benefit to the country and their families. However, the

adverse and unfavourable effect on the mental health of these workers and left behind family members are becoming evident and reported from Srilanka and Pakistan [2,3]. An Indonesian report survey between 1993-2007 regarding psychosocial consequences of out-migration, which showed that the left behind spouses is more prone to suffer from a stress-related disorder like hypertension and depression[4]. Several studies suggest that stressful life events trigger episodes of depression[5]. Reports from developing countries show that aging parents of migrant workers are additionally tasked with caring for grandchildren of left behind family precipitating increase health problems[6]. Studies also show that spouses of out-migrants have increased physical and mental health problems including depression[7]. In case of overseas migration, wives of migrants feel temporary loss because of separation, loneliness, insecurity, feelings of anxiety because of a communication gap with their husbands, the problem in children's upbringing and extra workload and become vulnerable to develop symptoms of depression, anxiety, and stess[8,9]. Studies on Filipino wives[10] and Gulf wives in India[11] showed increased numbers of stress-related symptoms. A study from Pakistan reports a negative impact on children and left behind spouses of migrant workers[12].

Like other developing countries, people from Bangladesh are also migrating abroad for the economic cause. In 2014, 4,26,000 people migrated from our country to work in another country[13], of them about 83% were male. In 2018, up to April, about 273,304 workers left our country as migrant workers mostly on temporary labour contact. Remittance from these workers constitutes more than nine percent of the country's GDP[14]. Almost all of this worker in our country leave their families behind and support them financially.

But there is no report regarding the mental health of left behind spouses in our country. With this background, this study was designed to see the prevalence of mental health disorder namely anxiety and depression among left behind wives of Bangladeshi migrant workers attending gastroenterology outpatients department in a tertiary centre in Sylhet, Bangladesh.

Material and method:

This was a cross-sectional study done in North East Medical College, Sylhet, Bangladesh from January 01 to December 31, 2018, within a period of one year. 275 Consecutive patients, i.e. wives of migrant workers, attending gastroenterology OPD were included in this study. After taking informed written consent, socio-demographic data, presenting symptoms, clinical and laboratory evaluation reports were recorded on a predesigned data sheet. Mental health status regarding anxiety and depression were assessed using the Hospital Anxiety-depression scale(HAD scale) [15] under the supervision of a senior psychiatrist. Score 1-7 was taken as normal, 8-10 as borderline and above 10 were taken as confirmed cases of anxiety or depression. Statistical analysis was done using SPSS version 20. Chi-square test was done to see the differences and P value <0.05 was taken as significant.

Result:

The present study included 275 left behind wives of migrant workers of Sylhet division. Age of them varied from 18 years to 50 years (mean 30.47 and SD 6.74) of them 247 (88.36%) and 273 (99.27%) were from rural family and housewives respectively. Among them, 197 (60.73%) had more than two physical symptoms leading them seeking consultation for health care. According to HAD scale, 90 (32.72%) of them had symptoms consistent of anxiety. Anxiety was more prevalent among age 36 years and above group (48.14%), and among those who were from rural family (33.33%). The highest prevalence of anxiety symptoms was found among them the whose duration of married time more than 15 years(39.47%) followed by 11-15 years group 35.29% and then up to five years (32.85%). Prevalence of anxiety symptoms were more among women with lower education level than that of higher education level (36.419% vs. 27.43% and women of poor and middle-class economic group than those of higher economic group (33.46% vs22.22%) . in this study 72 (31.55%) women living in in-laws house had symptoms consistent with anxiety while 19 (38.0%) women residing in fathers house had anxiety.

In this study, 78(28.363%) women were found to have symptoms score consistently of depression and prevalence was highest among 36- 45 years age group 35.18%) and followed by up to 25 years age group (27.27%) and 26-35 years age group (26.62%). Prevalence of depression was 30.45% and 12.5% among women

of rural and urban origin respectively, and the difference was significant (<p=0.1). Prevalence of depression was found directly related with the duration of married time. It was found 35.52%, 29.41%, 26.92% and 21.428% among women married for more than 15 years group, 11-15 years, 6-10 years and up to five years group respectively and p value was 0.023. Prevalence of depression was significantly higher among women with educational level primary and below than those with SSC and above (37.65% vs. 15.04% with p value <0.01). Women from poor and middle-class families were found suffering from depression than the rich group (29.96% vs. 5.55%and p value <0.01). Depression was more prevalent among Women having more than two physical symptoms than those having one or two symptoms (30.96% and 21.79% with p value 0.034). In this series, depressive symptoms were found among 64 (28.44%) and 14(28%) women residing in in-laws' house and fathers house respectively. Combined anxiety and depression were found among 54 (19.63%) in this study.

Univariate logistic regression analyses with various factors with anxiety and depression presented in table 2 & 3. Multivariate analysis showed that left behind wives living in a rural area and having age more than 36 yrs are 2 times more vulnerable to develop anxiety than their counterparts(table 4). In multivariate logistic regression left behind wives living in a rural area, having lower economic condition and lower education levels are two times more vulnerable to develop depression(table 5).

Discussion:

In our study prevalence of anxiety among left behind wives was higher than that of depression. But the prevalence of depression reported from Pakistan was higher than that of anxiety[16]. The difference in social situation and the inclusion of a specific group of patients may be the cause of this difference. This study reveals that the prevalence of anxiety and depression were higher among left behind wives with a higher age group. This may be explained as with aging they have to face different types of family events, increased responsibility of children education and guidance and also having age-related physical problems. All these may be a stressor for them and may affect their mental health. In addition to aging awareness of husbands' health and safety abroad also increases. In multivariate analysis subjects having age, more than 36 years were found two times more vulnerable to anxiety than their counterparts. Our study found a higher prevalence of anxiety and a significantly higher prevalence of depression with increasing duration of married life. This can be explained as stressful life events like loneliness, extra responsibility and emotional stress due to enforced separation precipitated mental health related disorder especially depressive disorder[12]. But in multivariate analysis increasing duration of married life was not found an important predictor of anxiety or depression.

In this series, the prevalence of depression was significantly higher among wives of lower and middle-class families, wives from rural families and among those with a lower level of education. In multivariate analysis, this above mentioned two factors along with lower education level also found as independent predictors of depression in the left behind wives. This can be explained as most of the rural migrants were from the relatively lower economic group and unskilled, had to make debt before migration and involved in jobs with lower income. Wives of them have to repay that debt from their low and sometimes irregularly sent remittance. Wives of the rural community are mostly housewives, and they have no extra source of income. Lack of opportunity to have a job in rural areas and lower educational states make them more vulnerable to stress-related disorders. In this series, anxiety was more prevalent among rural women with lower economic and educational background[17]. This study also reveals that a number of physical symptoms were higher among those having anxiety and significantly higher among those suffering from depression. It is consistent with an earlier report which concluded that left behind wives of overseas migrant have increased rate of physical and mental health problems including depression[7]. Other studies show that nonworking left behind wives has more chance of depression as compared to working women[18,19,20]. As almost all respondent in our study were housewives, no good correlation and conclusion could be made in this regards. In our study 50 (18.18%) women are found to live in fathers' house, and 225(81.82%) live in in-laws house. And the prevalence of anxiety and depression among both groups do not differ significantly. But other studies show a higher prevalence of depression among those residing in a joint family (in in-laws family). This can be explained as this study includes a specific group of women with small sample size.

Table 1: Prevalence of anxiety and depression in different categories

	Anxiety				Depression			
	Normal (%)	Borderline (%)	Confirmed (%)	P value	Normal (%)	Borderline (%)	Confirmed (%)	P value
Age Category								
Up to 25 years (n=77)	38(49.35)	16(20.77)	23(29.87)	0.107	44(57.14	12(15.58)	21(27.27	
26-35 years (n=139)	61(43.88)	39(28.05)	39(28.05)		69(49.64)	33(23.74)	37(26.62)	0.323
36-45 years (n=54)	16(29.62)	12(22.22)	26(48.14		20(37.04)	15(27.77)	19(35.18)	
>45 years (n=5)	1(20.0)	2(40.0)	2(40.0		2(40.0)	2(40.0)	01(20.0)	
Residence								
Rural (n=243)	97(39.91)	62(25.51)	84(33.33)	0.089	111(45.68)	58(23.868)	74(30.45)	0.007
Urban(n=32)	19(59.37)	7(21.87)	6(18.75)		24(75.0)	4(12.5)	4(12.5)	
Occupation								
Housewife (n=273)	116 (42.49)	68(24.90)	83(32.60)	0.088	134(49.08)	62(22.71)	77(28.205)	0.675
Service (n=2)	0	1(50.0)	1(50.0)		1(50.0)	0	1(50.0)	
Married for								
Up to 5y (n=70)	36(51.42	11(15.71)	23(32.85)		46(65.71)	9(12.57)	15(21.428	
6-10 y(n=78)	38(34.71)	21(26.92)	19(24.35		39(50.0)	18(23.076)	21(26.92	0.023
11-15y(n=51)	18(35.29	15(29.41)	18(35.29		19(37.25)	17(33.33)	15(29.41)	
>15 y(n=76)	24(31.57	22(28.94	30(39.47		31(40.79)	18(23.68)	27(35.526)	
Education								
≤primary (n=162)	59(36.42)	44(27.16)	59(36.41	0.067	61(37.65)	40(24.69)	61(37.65)	0.000
>above (n=113)	57(50.44	25(22.12	31(27.43		74(65.486)	22(19.469)	17(15.04)	
Economic condition								
Poor(n=10)	2(20.0)	2(20.0)	6(60.0)	0.288	1(10.0)	1(10.0)	8(80.0)	
Middle class (n=247)	104(42.11	63(25.5	80(32.88		119(48.178	59(23.88)	69(27.93)	0.000
Rich(n=18)	10(55.55)	4(22.22)	4(22.22		15(83.33)	2(11.11)	1(5.55)	
Number of symptoms								
≤2(n=78)	36(46.15)	21(26.92)	21(26.92)	0.433	48(61.54)	13(16.66)	17(21.79)	0.034
>2 (n=197)	80(40.61	48(24.36)	69(35.02		87(44.16)	49(24.87)	61(30.96)	
Staying at house of								
In-laws (n=225)	91(40.44	63(28.0	71(31.55)	0.061	107(47.55)	54(24.0	64(28.44)	0.415
Father (n=50)	25 (50.0)	6 (12.0)	19 (38.0)		28(56.0)	8(16.0)	14(28.0)	

Table 2. Univariate analyses to show the association of various factors with anxiety in left behind wives.

	Significance	OR	95% confidence interval
Rural residence	.080	2.289	.907-5.780
Age more than 36 years	.019	2.069	1.126-3.801
Lower level of education	.119	1.515	.898-2.555
Lower economic condition	.331	1.760	.562-5.509
Married life more than 15 years	.012	1.956	1.156-3.309
More than 2 symptoms	.198	1.463	.820-2.612

Table 3. Univariate analyses to show the association of various factors with depression in left behind wives.

	Significance	OR	95% confidence interval
Rural residence	.082	2.411	.894-6.503
Age more than 36 years	.273	1.424	757-2.678
Lower level of education	.000	2.988	1.662-5.372
Lower economic condition	.101	3.486	.783-15.527
Married life more than 15 years	.035	1.789	1.043-3.071
More than 2 symptoms	.096	1.687	.912-3.121

Table 4. Multivariate analysis showing the association of various factors with anxiety in left behind spouses

	Sig.	OR	95.0% C.I.for EXP(B)	
			Lower	Upper
Rural residence	.127	2.093	.811	5.402
Education below primary	.322	1.324	.760	2.306
Poor & middle class	.580	1.404	.423	4.662
More than 2 symptoms	.309	1.362	.751	2.469
Married life >15yrs	.763	.881	.386	2.009
Age more than 36yrs	.076	2.248	.920	5.494

Table 5 : Multivariate analysis showing the association of various factors with depression in left behind wives

	Sig.	OR	95.0% C.I.for EXP(B)	
			Lower	Upper
Rural residence	.209	1.929	.692	5.375
Education level primary or below	.003	2.534	1.375	4.671
Poor & middle class	.406	1.931	.409	9.126
More than 2 symptoms	.173	1.558	.823	2.947
Married life > 15 years	.498	1.332	.582	3.052
Age more than 36 years	.869	1.081	.430	2.717

References:

1. Swing WL. The state of migration current realities, future frontiers. Proceeding s of 100th IOM council session 5-7 December 2011
2. Dissanayaaka D. Savings and investment of Srilanka returnee migrant s after employment abroad. Srilanka J Pop Study 2003;6:41-60
3. UnESCAP. The high level dialogue on international migration and development 2006
4. Lu Y. Household migration, social support, and psychological health: the perspective from migrant – sending areas. Social Scence& Medicine 2012; 74(2):135-42
5. Kindler KS, Karkowski LM, Prescott CA. Causal relationship between stressful life events and onset of major depression. Am J Psychiatry 1999; 156:837-41
6. Adhikari R, Jampaklay A, Chanrutrithirons A, Impact of children's migration on health and health care seeking behavior of elderly left behind. BMC public health 2011;11(1):143

7.   Antman FM. The impact of migration on family left behind, discussion paper series, ForschungsinstitutZurZukunfit der Arbeit 2012. No 6374
8.   Jetley S. impact of male migration on rural females. Economic and political weekly 1987;22,ws -47-ws-53
9.   Kistitwaria J. Migration in mountains: problem of women. College of home Science, himachal Pradesh agricultural University 2011 India
10. Go SP, Postado LT, Jimener PR. The effect of international contract labour (Phillipines), Manila: Integrated research Centre, De La Salle University 1983;1:1-22
11. Gulati L. In absence of their men: the impact of male migration on women. New Delhi, India, Sage publication 1993
12. Farooq M, Javed HZ. The impact of international migration on migrants' families left behind in rural areas of Pakistan. Pak J AgriSci 2009;46(4):424-28
13. BMET database, Overseas employment of Bangladesh Workers from 1976 to 2015 (up to July)
14. ADB Briefs No 63, August 2016
15. Zigmond AS, Snaith RP. The Hospitl anxiety and depression scale. ActaPsychiatScandinavica 1983;67(6):361-370
16. Mushtaq R, Khalily MT, Gul S. Determinants of depression, anxiety stress among left behind families in Azad Jammu and Kashmir. Pak Armed Forces Med J 2017;67(3): 472-77
17. Khan IA, Mahmood S, Yasin G, ShahbazB. Impact of international migratoion on social protection of migrants families. Pak J AgriSci 2010; 47(4): 425-28
18. Whooley MA, Kiefe CI, Chesney MA, Mackovitz JH, Matthews K, Hulley SB. Depressive symptoms, unemployment, and loss of income: The CARDIA study. Arch Intern Med 2002; 162:2614-20
19. Paris T, Singh A, Luis J, Hossain M. Labour outmigration, livelihood of rice farming households and women left behind: a case stdu in eastern uttar Pradesh, Economic and political Weekly 2005; 2522-29
20. Akran B, Khuwaja F. A study on depression among working and nonworking womwn of Gujrat, Pakistan. European Academic Research 2014; 1(10):2948-62