Reproductive Health Issues and Depression in Wives of Labor Migrant Workers

Shreyashi Aryal,[1] Deepak Shrestha,[1] Sagun Ballav Pant[2]

[1]Department of Obstetrics and Gynaecology, Lumbini Medical College, Palpa, Nepal, [2]Department of Psychiatry, Tribhuvan University Teaching Hospital, Kathmandu, Nepal.

ABSTRACT

Background: Young Nepalese men have been forced to migrate to other countries in search of better opportunities. Wives of these migrant workers are in a vulnerable state and face various problems. The aim of this study was to assess the prevalence of reproductive health problems and depression in this sub-population and to compare it with women living together with their husbands.

Methods: This is a hospital based case control study where depression and reproductive health problems including gender based violence were compared between wives of migrant workers and women living with their husbands. Structured questionnaire was used to assess reproductive symptomatology and Becks depression Inventory-II was used to measure level of depression.

Results: During the study period, 38.65% (2193) of all women were wives of migrant workers. India was the country where most 34.6% (73) men migrated. Mean duration of migration was 51.96 months (SD= 63.27). Moderate to severe depression was present in 42.6% (90) of wives of migrant workers and 80.09% of these women experienced some form of gender based violence. Reproductive tract symptoms and gender based violence and depression were significantly more present in these women (p<0.000).

Conclusions: Depression and reproductive health problems were more prevalent in wives of labor migrant workers than in women living with their husbands. The physical and mental health needs of this sub-population warrants screening strategies and preventive measures.

Keywords: Depression; reproductive symptoms; migrant workers; wives.

INTRODUCTION

Nepal has been facing a surge of forced migration and this trend continues. Male labor migration in Nepal has increased by 137 percent in the past decade.[1] Every one out of four household have at least one member who is abroad and 80% of them are male.[1] Therefore, wives of male labor migrant workers (WoLMWs) form a significant sub population of women particularly in rural Nepal. As a consequence of loneliness, these women are exposed to the risk of violence, abuse, reproductive tract and HIV infections.[2] Addressing the health issues of WoLMWs has not been a priority in health research till date.

Depression and reproductive health problems are established correlates and both these conditions need screening and identification so that they can be treated on time. This study was done with the aim to assess reproductive health (RH) issues and the level of depression in WoLMWs seeking gynecology care.

METHODS

This was a case control study conducted at Lumbini Medical College Teaching Hospital (LMCTH), Palpa for a period of three months from September 2018. This hospital is situated in hilly Western Nepal and is a referral centre.

Women in reproductive age group (15-49 years) attending in-patient and out-patient departments of Obstetric and Gynecology were selected through purposive sampling and enrolled in the study. After history taking, for every woman whose husband was a migrant worker was taken a case and consecutive woman who was living together with her husband was chosen as control. These two

Correspondence: Dr Shreyashi Aryal, Department of Obstetrics and Gynaecology Lumbini Medical College Teaching Hospital, Pravas, Palpa. Email: shreyashiaryal@gmail.com, Phone: +9779841265694.

groups of women were matched for age (+ 5 years) and pregnancy or puerperal status.

Sample size was calculated using the formula for case control study using the software "Beta power". Minimum sample required was calculated as 115 in each group. Where effect size= 0.08 (small), Alfa error: 0.05, Power (1-alfa): 0.8, Number of predictors: 30.

All women underwent detailed history taking and examination. Each woman was then interviewed by two trained interviewers. Two semi-structured questionnaires were filled. First questionnaire was for reproductive health assessment pretested six months back in the same population of women attending gynecology department in the same institute and validated by a panel of experts. This questionnaire included issues of family planning, infertility, unintended pregnancy, safe abortion, gender based violence, reproductive tract symptoms (vaginal discharge, itching, lower abdominal pain and dyspareunia), antenatal care, postnatal care, and pregnancy/puerperal complications.Second questionnaire was the "Becks depression inventory-II" which is a reliable validated tool in Nepalese context.[3] It includes 21 questions and the sum of BDI item scores indicates severity of depression. Scores of 0-9 denote minimal depressive symptoms,10-16 as mild depression, 17-29 as moderate depression and 30-63 as severe depression.

Reproductive health assessment and depression was compared between the two groups. Gender based violence was assessed through Norvold abuse questionnaire which had been pretested, validated and used earlier in a study in the same institute.[4,5] This tool is used to assess emotional, physical and sexual violence. Confidentiality was maintained and the women were given an option to leave the interview if they wished to. Widows, divorcees, second wives and menopausal women were excluded from the study. Ethical clearance was obtained from the Institutional Review Committee prior to the commencement of the study. All data was entered in Microsoft Excel and analyzed by Statistical Package for Social Sciences (SPSS) 18.0. Continuous data were presented as mean and standard deviation; categorical data were presented as frequency and percentages. Association between categorical variables were compared with chi square test, differences in means were analyzed by independent t test and p-value <0.05 was considered significant.

RESULTS

During the study period, total admissions were 774 and total out patients in the department of Obstetrics and Gynecology were 4899. Out of the total 5673 in and out patients, WoLMWs were 2193(38.65%), amongst inpatients 279 (36.04%), and amongst outpatients 1914 (39.07%).

Total 445 women who met the inclusion criteria were interviewed out of which 422 women responded, with a response rate of 94.83%. Each case and control group consisted of 211 women.

Table 1 shows the profile of husbands who were migrant workers.India was the country where 34.6% (73) men migrated and the reason for migration was better opportunity. Mean duration of migration was 51.96 months (SD= 63.27) with a maximum migration duration of 22 years.

Table 1. Migration profile of husbands (n=211).	
Country of migration	**Frequency (%)**
India	73 (34.60)
Qatar	27 (12.80)
Kuwait	22 (10.42)
Malaysia	21 (9.96)
United Arab Emirates (UAE)	19 (9.00)
Oman	17 (8.05)
Saudi Arabia	17 (8.05)
Maldives	14 (6.64)
Congo	1 (0.48)
Reason for migration Better income	23 (10.90)
Better opportunity	184 (87.20)
Others	4 (1.90)
Duration of migration in Months (Mean$\pm$ SD)	51.96 $\pm$ 63.27
Mean duration since last visit in months (Mean$\pm$ SD)	11.5 $\pm$ 8.69

The demographic characters of the participants are shown in Table 2. Since the age group was matched for the two groups, the mean age was not significantly different in the two groups. Education status, employment status and duration of marriage was also not significantly different in the two groups. Statistically significant number of WoLMWs perceived their income status as sufficient (X^2= 19.6, n=422, df=1, p=<0.001).

Table 2. Comparison of demographic characters.

Characteristics	WoLMWs n=211	Control group n=211	Statistics
Age in years (Mean $\pm$ SD)	27.47 $\pm$ 6.941	28.03 $\pm$ 6.422	t=-0.86, df=420, p=0.39
Address			
Rural	142 (67.29%)	147 (69.67%)	X^2=0.27, df=1, p=0.6
Urban	69 (32.71%)	64 (30.33%)	
Religion			
Hindu	135 (63.98%)	101 (47.9%)	X^2=11.11, df=1, p<0.001
Others	76 (36.02%)	110 (52.1%)	
Income status			
Sufficient for living	167 (79.1%)	125 (59.2%)	X^2=19.6, df=1, p<0.001
Insufficient for living	44 (20.9%)	86 (40.8%)	
Type of marriage			
Arrange	82 (38.9%)	154 (72.98%)	X^2=48.7, df=2, p<0.001
Love	81 (38.4%)	38 (18.1%)	
Run away	46 (21.8%)	19 (9.1%)	

Table 3. Reproductive health symptoms and gender based violence.

Characteristics	WoLMWs (N=211)	Control (N=211)	Statistics
Parity			
0	78 (37%)	69 (32.7%)	X^2=39.15, df=3, p<0.001
1	46(21.8%)	102 (48.3%)	
2	51 (24.2%)	24 (11.4%)	
>3	36 (17%)	16 (7.6%)	
Difficulty in conceiving	67(31.8%)	27 (12.8%)	X^2=21.9, df=1, p<0.001
Duration trying to conceive (Mean months + SD)	7.09 + 10.256	3.55 + 1.964	t=4.93. df=420, p<0.001
Contraceptive use	72 (34.12%)	120 (56.87%)	X^2=12, df=1, p=0.001
Reproductive tract symptoms			
Present	198 (93.83%)	170 (80.56%)	X^2=16.65, df=1, p<0.001
Absent	13 (6.17%)	41 (19.44%)	
Gender Based Violence (GBV)			
Yes	169 (80.09%)	96 (45.49%)	X^2=54, df=1, p<0.001
No	42 (19.91%)	115 (54.51%)	
Type of GBV			
Emotional	113 (53.6%)	54 (25.6%)	X^2=5.4, df=2, p=0.76
Physical	31 (14.75%)	25 (11.8%)	
Sexual	25 (11.85%)	7 (3.3.%)	
Perpetrator			
Husband	0 (0.00%)	59 (61.47%)	
In laws	92 (54.43%)	13 (13.54%)	
Neighbors	71 (42.01%)	22 (22.91%)	P<0.001*
Others	6 (3.56%)	2 (2.08%)	

Fisher's Exact

Table 3 shows the assessment of reproductive health and gender based violence between the two groups. The number of unwanted pregnancies wasthe same in bothgroups but 92% of WoLMWs had abortion at unsafe sites. (X^2= 15.96, n=422 df=1 p<0.001). Since the couples did not stay together for a long time, it is seen that WoLMWs found difficulty in conceiving (X2=21.9, df=1, p<0.001)and also they did not feel the need of the use of contraception thus lowering the contraception rate significantly (X^2=12, n=422, df=1, p<0.001).   Regarding the type of contraception, more WoLMWs used emergency contraception pills when compared to the other group. (27.78% vs 5,83%)

Reproductive tract symptoms were present more in WoLMWs (X^2= 16.65, n=422, df= 1, p=0.001) amongst which pain lower abdomen, backache and vaginal discharge were were the highest presenting symptoms.

GBV was faced be 169(80.09%) WoLMWs whereas 96(45.49%) women living with their husbands faced violence. This is significantly different in the two groups. (X2=54, df=1, p<0.001)

In laws were the perpetrators of violence in 92(54.43%) women whose husbands were abroad but husbands themselves were the perpetrators of GBV in 59 (61.47%) of women living with their husbands. Emotional violence was most prevalent in both the groups.

There were 196 women amongst WoLMWs who are/ were pregnant at least once when husband were abroad and were at home infrequently. Two hundred and one women amongst control group were ever pregnant. Few components of antenatal care were compared between these two groups(Table 4).

Various pregnancy complications like PROM, preterm labor, preeclampsia, still birth were more common in WoLMWs but they were not statistically significant. WoLMWs went for fewer numbers of antenatal visits. (t=-8.87, df=395, p<0.001). Women living with their husbands felt that they had adequate diet, support and rest during pregnancy (p<0.001).

Table 4. Assessment of antenatal care.			
Characteristics	**WoLMWs** n= 196	**Control** n=201	**Statistics**
Pregnancy complications	47 (23.97%)	37 (18.40%)	X^2=1.85, df=1, p=0.17
Number of antenatal visits (Mean + SD)	2.77 + 1.547	4.00 + 1.197	t=-8.87, df=395, p<0.001

Planning of pregnancy done	134 (68.37%)	186 (92.54)	X^2=50.3, df=4, p<0.001
Planning done with			
Husbands	86 (43.88%)	129 (64.18%)	
Mothers	13 (6.63%)	35 (17.41%)	
In laws	26 (13.26%)	17 (8.46%)	
Others	9 (4.6%)	5 (2.49%)	
Accompanying person			
None	116 (59.18%)	58 (28.86%)	P<0.001*
Husband	0 (0.00%)	95 (47.26%)	
Mother	48(24.49%)	24 (11.94%)	
In laws	24 (12.25%)	20 (9.95%)	
Others	8 (4.08%)	4 (1.99%)	
Antenatal Supplements			
Folic acid/ Iron/Calcium taken	184 (93.88%)	189 (94.02%)	X^2=0.004, df=1, p=0.95
Injection **Td taken	157 (80.1)	193 (96.01%)	X^2=24.1, df=1, p<0.001
Perception of care			
Adequate Diet	107 (54.59%)	175 (87.06%)	X^2=50.8, df=1, p<0.001
Adequate Rest	56 (28.57%)	143 (71.14%)	X^2=71.9, df=1, p<0.001
Adequate Support	62 (32.12%)	148 (73.63%)	X^2=70, df=1, p<0.001

*Fisher's Exact, **Td: Tetanus Diptheria Toxoid*

Table 5 shows the difference in various components of postpartum care in between the two groups of women. There were total 126 WoLMWs and 136 women in control group who had undergone puerperal period at least once(n=262).

Post-partum complications like PPH, fever, sepsis were significantly seen more in WoLMWs. (X2=14.2, n=262, df=1, p<0.001). In absence of husbands, mothers helped most WoLMWs in breastfeeding. Women living with husbands felt they had adequate diet, rest and support compared to women whose husbands were abroad during puerperal period(p<0.001).

Table 5. Assessment of postnatal care.

	WoLMWs n= 126	Control n=136	Statistics
Postpartum complications	29 (23.01%)	9 (6.61%)	X^2=14.2, df=1, p<0.001
Breastfeeding support			
None	37 (29.37%)	42 (30.88%)	
Husband	0 (0.00%)	42 (30.88%)	p<0.001*
Mother	71 (56.34%)	30 (22.05%)	
In laws	18 (14.29%)	22 (16.1%)	
Perception of care			
Adequate Diet	32 (25.40%)	77 (56.61%)	X^2=26.2, df=1, p<0.001
Adequate Rest	31 (24.60%)	65 (47.79%)	X^2=15.2, df=1, p<0.001
Adequate Support	24 (19.04%)	63 (46.32%)	X^2=21.9, df=1, p<0.001
Neonatal complications	31 (24.60%)	23 (16.91)	X^2=2.36, df=1, p=0.12
Immunization of baby as scheduled	118 (93.65%)	130 (95.58%)	X^2=0.49, df=1, p=0.49

Fisher's Exact

Moderate to severe depression was present in 90 (42.6%) of WoLMWs. Depression was more common amongst WoLMWs shown by the statistically significant increase in mean BDI score in these women (t= 5.66 n= 420, df=420, p=<0.001). Minimum score was 0 in both the groups whereas the maximum score in WoLMWs was 43 and in control groupit was 25.

Minimal and mild depressive symptoms were present more in WoLMWs whereas prevalence of moderate to severe depression was not different in the two groups(Table 6).

Table 6. BDI score and level of depression.

	WoLMWs	Control	X^2 (P value)
Mean BDI score (Mean + SD)	13.36 + 10.428	8.73 + 5.677	t=5.66, df=420, p<0.001
Depression			
Minimal depressive symptoms	121 (57.3%)	99 (46.9%)	X2=5.31, df=1, p=0.15
Mild	57 (27%)	77 (36.5%)	
Moderate	18 (8.5%)	18 (8.5%)	
Severe	15 (7.1%)	17 (8.1%)	

DISCUSSION

Depression and reproductive health are established correlates. This study showed that reproductive health issues and depression are remarkably present in wives of migrant workers when compared to women living with their husbands.

According to the Ministry of Labor and Employment, Malaysia followed by Qatar were the countries where most permits were issued.[6] Findings of this study show that India was the country where men migrated the most followed by Kuwait and Qatar. Since Nepal and India have open borders and there is no official report of men migrating to India, we can suggest that men from this geographical region migrate more to this country.

Mean duration of migration was 51.96 months (SD= 63.27) with a maximum migration duration of 22 years and the mean duration of last visit was 11.5 (SD=8.69). These women are visited by their husbands only once a year on an average so they face additional responsibilities in absence of support and care from their husband for such a long duration. This also results in less contraceptive prevalence and difficulty to conceive. Contraceptive prevalence was found to be 34.12 % in WoLMws which was lower than women living with their husbands and also lower than the contraceptive prevalence rate of 69% in married Nepalese women aged 35-44.[7] The reason for inability to conceive should not be taken as infertility since the couple do not stay together for a long time.

More WoLMWs in this study felt they had sufficient income. This is one of the advantages of migration. According to the World Bank report, remittance accounted for 22.9% of GDP in 2009.[8] Most of this money is spent by wives on households. As shown in this study, these WoLMWs either had a run-away marriage or a love marriage which could probably be in expectation of a secure future.

WoLMWs presented with pain abdomen and backache as the most common symptoms. These symptoms are the components of chronic pelvic pain which in absence of any organic pathology is associated with depressive-anxious symptomatology and affects quality of life.[9,10]As a consequence of distance and loneliness, these women are in a vulnerable state, both mentally and physically. They are in a vulnerable position, forced to live alone, which expose them to the risk of violence and abuse. Ironically when husbands stayed home, they were perpetrators of GBV in most cases found in this study.

Because of the large catchment area of the hospital and its free delivery and abortion services, many women come

to this centre, thus this study is a true representation of this sub population of women. The findings of this study depicts that women who underwent abortion in unsafe sites were more in WoLMWs. The reason could be because of lack of knowledge of safe sites, pregnancy as a result of GBV, or hesitancy to go to a safe site in fear of social stigma.

When these women were asked about perception of antenatal care, more women in WoLMWs group said that they had inadequate care during pregnancy and puerperium. Starting with problems of difficulty in conception, these women undergo pregnancy and puerperium all by themselves. Pregnancy planning and accompanying visits to the hospital was significantly less and therefore pregnancy complications were also high in this group. Since women living alone will have to manage household work on their own and multiparas would have to look after older children even when pregnant and in immediate puerperium, it is expected for these women to get inadequate diet, rest and support in pregnancy and puerperium as suggested by our findings.

This study shows that mothers were more confided in, than in-laws when it came to pregnancy and puerperal support. Husbands are the best care providers for wives in most cases so we should concentrate in building a support system for these women either through family, friends or peer groups.

The findings of this study show that depression is more common in WoLMWs. This finding is consistent with findings from Sri Lanka and Nepal where family members of international migrant workers were found to have depression, anxiety and somatoform disorders.[11,12]Not living together with husband is a major stressor in women which cause mental illness like depression. Depression leads to decreased quality of life in these women and also poses them to a risk of violence and abuse. Depression adds to the burden of mental diseases in health care settings but women with depression are found to have low confidence in seeking health care.[13] This stresses the responsibility of healthcare providers to identify depressive symptoms in women who come with reproductive problems but otherwise avoid talking about their mental symptomatologies.

Through this research we have assessed the various dimensions of reproductive and mental issues faced by WoLMWs. There is a felt need of future health plans that are directed to this sub population. In our country, women do not always come to health centers for gynecologic problems and mental problems. Mental health problems may develop as a consequence of reproductive health problems or vice versa. Both of these conditions need screening and identification so that they can be treated on time. This study emphasizes the use of a simple tool like BDI to screen the burden of depression in a reproductive health setting.

Since this study was be done in a tertiary hospital, in a rural setting, this site could be used as a screening setting which can assist in early detection of health issues faced by these women and focus on strategies of prevention. The results of this study will also help health professionals to see beyond the presenting symptoms of women and provide complete care interweaving mental health and reproductive health.

There have been studies which debate the autonomy of women in financial, emotional and economical aspects of lives of women who are left behind by their migrating husbands,[14,15] but this study shows that loneliness does take a toll on their overall health.

We did not study the prevalence of HIV and use of condoms which are important aspects of reproductive health in this sub-population.

CONCLUSIONS

Depression and reproductive health problems werecommon in wives of labor migrant workers. As a result of loneliness, they face abuse, reproductive symptomatology and pregnancy and postpartum complications which in turn leads to depression. Physical and mental health needs of this sub-population warrants screening strategies and preventive measures and this can be achieved through the use of a simple tool like BDI.

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