

Depression Among Pregnant Women with Husbands Abroad: Case Control Study in Hostile Region of Azad Jammu and Kashmir

Depression
Among Pregnant
Women with
Husbands
Abroad

Syed Azhar Ali¹, Ayesha shafqat³, Misbah Batool² and Roomisa Anis⁴

ABSTRACT

Objective: To determine the difference in the presence of depressive symptoms among pregnant women with husbands living abroad and those with husbands living with them in Azad Jammu and Kashmir

Design: Case control study

Place and Duration of Study: This study was conducted at the Amna Hospital Rawalakot for a period of three months from October 2018 to December 2018.

Materials and Methods: The sample population comprised of pregnant women reporting for ante natal checkup at Amna hospital Rawalakot. Cases constituted the pregnant women with husbands living abroad while controls were the pregnant women with husbands living with them. Patient health questionnaire-9 (PHQ-9) was used to record the presence and severity of depressive symptoms. Age, gestation, parity, rural or urban origin, education, level of family income, daily contact hours on telephone or what's app, previous pregnancy loss or complications, number of years abroad and visits to home per year were associated with depressive symptoms.

Results: Mean age of the study participants was 29.73 (± 5.395). 66 had significant depression in the case group while 14 had in the control group (p -value <0.001). Education and rural background had significant difference among the case and control group. Less number of visits per year of husband was strongly linked with presence of depressive symptoms among the cases.

Conclusion: This study showed a high frequency of depressive symptoms among pregnant women with husbands abroad as compared to those with husbands living with them. Special attention should be paid to the women whose husband had lesser number of visits to the country.

Key Words: Depressive Symptoms, Pregnancy, Husband Abroad

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INTRODUCTION

Depression, a state of low mood and aversion to activity affect a person's thoughts, behavior, feelings, and sense of well-being.¹ It is emerging as a major public health problem among the population of both the developed as well developing countries.^{2,3} young woman is one of the huge groups of population with increased vulnerability towards depressive illness.⁴ Typically, women suffer from depression twice as often as men.⁵ Criteria for the diagnosis of depression are the same regardless of pregnancy status; however, depression is often overlooked in pregnancy.⁶

¹. Department of Psychiatry / Physiology², Poonch medical college Rawalakot AJ&K.

³. Department of Physiology / Biochemistry⁴, Alnafees Medical College Islamabad.

Correspondence: Syed Azhar Ali, Assistant Professor Psychiatry, Poonch medical college Rawalakot, AJ&K.

Contact No: 0333-58299766

Email: dr.azhar81@gmail.com

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Recent data strongly suggest that depression during pregnancy is common with estimates between 7% and 13%⁷

Developing countries have a unique socioeconomic structure which affects the lives of its inhabitants in number of ways.⁸ Going abroad for employment is one of the common social problems which have been faced by the young males of developing countries.⁹ This included both highly qualified individuals as well as the labor class. A study done in AJK in recent past has revealed that this trend is very high in this part of the world raising many problems for the individuals as well as the families.¹⁰

Women usually feel accomplished and complete when undergoing the process of child birth, but certain biological, psychological and social factors prone them towards different kinds of mental health issues during this period of life.¹¹Stressful life events are during pregnancy are associated with increased depression during pregnancy which has been associated with poor birth outcomes and postpartum depression¹². Social support lessen the impact of life stressors on family well-being through offsetting the erosive impact or strain felt by the spouse¹³Lack of support from the

husband whether living with them or not may be one of these factors. A study done in our neighboring country revealed that husband's employment and type of employment had a significant link with the presence of stress during the ante natal period.¹⁴ Military studies reveal that multiple and prolonged deployments are associated with increased anxiety and depression in the spouses of the service members.¹⁵ A large systematic review analyzing the factors linked to depression and anxiety during pregnancy concluded that lack of support from husband has a direct link with the presence of these psychiatric illnesses among the females during pregnancy.¹⁶ Findings of a recent study done in turkey also supported this association and support from the partner emerged as protective factor against psychological stress among the pregnant women.¹⁷ Depression if remains undetected and untreated in pregnancy may lead to negative maternal and fetal outcome.¹⁸

Local studies have been available regarding the mental health problems during the pregnancy. A recent study demonstrated high prevalence of depression in pregnant military wives whose husbands were deployed on the border areas and were not available to them during this time¹⁹ Pregnant women with a military-deployed spouse have increased risk of depression and self reported stress.²⁰ Women who have a spouse deployed during their pregnancy are at increased risk for preterm birth and postpartum depression^{21,32}but no study has been done regarding this phenomenon in women with husbands abroad. Therefore, this case control study was planned with the rationale to see the difference of presence of depressive symptoms between women with husbands abroad and women with husbands living with them during pregnancy in the hostile region of AJK.

MATERIALS AND METHODS

This case control study was conducted for duration of three month from 1st October 2018 to 31st December 2018. Pregnant ladies of age between 20 and 45 and from any socio economic backgrounds, who came for antenatal checkup and gave written consent were included the study. Non consenting ladies or ladies with past or current history of any psychiatric or medical illness, current psychoactive substance use and those who were unable to understand/ complete the required questionnaires were excluded from the study. Cases included the pregnant ladies with husbands abroad for more than one year and also at the time of pregnancy. Controls were the pregnant women with husbands living with them at the time. Those women with husbands abroad for less than one year were also not included in the analysis.

Instrument: Various psychometric tools have been used and locally adapted in context of our sociocultural settings.

Patient Health Questionnaire-9 (PHQ-9) was used to assess the presence of depressive symptoms among the subjects. It is a 9 item screening tool which is simple to administer and is self-rated. Validated Urdu version was used in our study in order to reduce the bias of excluding non-English understanding women.²² Cut of score of 10 was used to screen the population and subjects with the score of 10 or above were classed as positive for the presence of depressive symptoms.²³

The sample was drawn from pregnant ladies who reported for ante natal checkup at Amna Hospital Rawalakot. Permission and ethical approval was taken from the ethical committee of Poonch medical college Rawalakot. Patients were divided into categories of cases and controls on the basis of stay of their husband with them or broad. Those ladies with husbands abroad were classed as cases. All others were classed as controls. Subjects were interviewed before the antenatal check up in a separate room with complete reassurance of confidentiality. The subjects were provided with a detailed description of the study and were inducted into the study after written informed consent. The socio demographic data of the full sample of subjects participating in the research was entered in a structured Performa; keeping in mind the wish of some subjects for anonymity only initials of their names were kept as record. The confounding variables were taken care of by detailed history taking about any current or previous medical or psychiatric illness and any current or previous evidence of illicit substance/drug use. Those subjects with confounding variables were excluded from the study. Patient Health questionnaire was applied to all subjects to assess the presence of depressive symptoms among them.

Descriptive statistics were used to describe the characteristics of participants and the distribution of cases and controls. Samples were identified under the categories of cases and controls on the basis of husbands abroad or living with them. Variables in this study included Age, gestation, parity, rural or urban origin, education, level of family income, daily contact hours on telephone or what's app, previous pregnancy loss or complications, number of years abroad and visits to home per year. Between-group variances in categorical correlates were determined using the chi-square. All statistical analysis was performed using Statistics Package for Social Sciences version 24.0. Chisquare test was used and differences between groups were considered significant if p-values were less than or equal to 0.05. Binary logistic regression was done to evaluate the relationship of factors including the presence of depressive symptoms among the cases and controls. Same test was applied in the cases also to

relate the socio demographic factors with the presence of depression.

RESULTS

Table No. I: Characteristics of the study groups: Chi-square test application on cases and controls

| Socio demographic factors Total | Cases (husbands abroad) 100 | | Controls (Husbands living with them) 100 | | p-value |
|--|--------------------------------|-----|---|-----|---------|
| Age : 20-30 | 55 | 55% | 38 | 38% | 0.016 |
| >30 | 45 | 45% | 62 | 62% | |
| Education | | | | | <0.001 |
| <Matriculate | 24 | 24% | 58 | 58% | |
| Matriculate or more | 76 | 76% | 42 | 42% | |
| Gestation | | | | | 0.884 |
| 1 st trimester | 38 | 38% | 37 | 37% | |
| 2 nd or 3 rd trimester | 62 | 62% | 63 | 63% | |
| Parity: 1 | 44 | 44% | 32 | 32% | 0.080 |
| >1 | 56 | 56% | 68 | 68% | |
| Family income | | | | | 0.471 |
| <Outgoings | 62 | 62% | 57 | 57% | |
| >Outgoings | 38 | 38% | 43 | 43% | |
| Presence of depressive symptoms | | | | | |
| No | 34 | 34% | 86 | 86% | <0.001 |
| Yes | 66 | 66% | 14 | 14% | |
| Origin: Rural | 88 | 88% | 71 | 71% | 0.003 |
| Urban | 12 | 12% | 29 | 29% | |
| Previous loss or complication | | | | | |
| No | 70 | 70% | 74 | 74% | 0.529 |
| Yes | 30 | 30% | 26 | 26% | |

Table No.2: The correlated factors relating to the presence or absence of husband in the country: the binary logistic regression

| | B | p-value | OR (95% CI) |
|--|--------|---------|-------------------------|
| Age(ref. is >30 years) | 0.730 | 0.061 | 2.075 (0.968 – 4.449) |
| Gestation(ref. is early pregnancy) | -0.086 | 0.836 | 0.917 (0.404 – 2.080) |
| Parity(ref. is Multiparous) | 0.731 | 0.089 | 2.076 (0.895 – 4.818) |
| Depressive symptoms(ref. is no depressive symptoms) | 2.591 | 0.000 | 13.338 (6.052 – 29.398) |
| Origin (ref. is urban origin) | 0.997 | 0.053 | 2.709 (0.988 – 7.427) |
| Family income(ref. is more than outgoings) | 0.411 | 0.275 | 1.508 (0.721 – 3.153) |
| Previous loss or complication (reference is no complication) | 0.092 | 0.834 | 1.096 (0.465 - 2.585) |
| Education (ref. is above matriculation) | 1.370 | 0.000 | 3.935 (1.858 – 8.333) |

After the application of inclusion and exclusion criteria 100 cases and controls were included in the study. Mean age of the study participants was 29.73 (±5.395). Table I shows that 66 women had depression in the case group while 14 had in the control group (p-value <0.001). Education and rural origin were also significantly different among both the groups (Table 1 & 2). Lesser number of visits per year to the country was strongly related to the presence of depressive symptoms among the case group when binary logistic regression was done (Table 3).

Table No.3: The correlated factors relating to the presence of depression in the case group:the binary logistic regression

| | B | P-value | OR (95% CI) |
|--|--------|---------|------------------------|
| Age(ref. is >30 years) | 0.656 | 0.249 | 1.927 (0.632 – 5.869) |
| Gestation(ref. is early pregnancy) | 0.185 | 0.791 | 1.204 (0.304 – 4.761) |
| Parity(ref. is Multiparous) | -1.059 | 0.118 | 0.347 (0.092 – 1.307) |
| Origin (ref. is urban origin) | -0.456 | 0.538 | 0.634 (0.148 – 2.711) |
| Family income(ref. is more than outgoings) | 0.594 | 0.305 | 1.812 (0.582 – 5.641) |
| Previous loss or complication (reference is no complication) | 1.006 | 0.144 | 2.736 (0.709 – 10.553) |
| Education (ref. is above matriculation) | -0.533 | 0.375 | 0.587 (0.181 – 1.905) |
| Visits per year (ref. is 1 or more per year) | 1.606 | 0.002 | 4.985 (1.782-13.942) |
| Contac on phone or what's app (ref. is less than 1 hour per day) | -0.630 | 0.219 | 0.533 (0.195-1.455) |
| No of years abroad (ref. is less than 3 years) | -0.242 | 0.641 | 0.785 (0.284 – 2.171) |

DISCUSSION

Marriage is usually a contract between two people involving emotional component in addition to the legal binding therefore two persons who sign this contract are believed to stay with each other during all the phases of their lives. It holds especially true for the couples of eastern origin.²⁴ For the past several decades, empirical studies have concluded that the married report better mental health than the unmarried.²⁵ Supportive behaviors of one spouse may lessen symptoms of illness in their partner.²⁶ Socioeconomic strain may affect this source of support and compel the husband to go abroad to earn the

livelihood. Managing economic changes, filling the role of both mother and father, isolation, and fears of abandonment result in mental stress and profound sadness among the women.²⁰ This trend is quite common in the developing countries including the hostile area of AJK.¹⁰ AJK is a disputed territory for more than seventy years now with constant stress of hostile political environment and limited employment opportunities. Women may adjust to this living away from husband and cope with the routine stressors but may face psychiatric morbidity during the special phases of life. Pregnancy has always been considered a unique phase in the life of a women. Few perceive it as a happy and satisfying time of life; others may feel fearful, stressed or even depressed.¹⁷⁻¹⁹ Both the cases and controls in our study showed the presence of depressive symptoms but the number was far high in the case group i-e among those with husbands abroad for the sake of employment. Similar results have been reported in the past as well in the studies done on this phenomenon.^{27, 28}

Regression analysis revealed that week of pregnancy, site of recruitment, years of education, income, marital status, employment, and number of miscarriages and stillbirths were significant predictors of total BDI score.²¹ An interesting finding was the significant difference in education status of the cases and control. Pregnant women with husband abroad had significantly lower education status as compared to the women with husbands living with them. Previously women disadvantaged by poverty and lower education has been a consistent correlate with depressive symptoms in pregnant sample.^{29,31} Reason of this finding in our study may be overall low education status in the social framework of the population from which sample has been drawn. This low education might also have compelled husbands to go abroad for employment due to fewer opportunities for people with less education in our part of the world. Qualitative studies involving the partners may clear this association in future studies.

Most of the cases were from rural background while most of the controls were from the urban background. This was an incidental finding as this parameter was not matched deliberately in the study design. Difference was statistically significant and has also been reported in the previous studies.^{19,30} Rawalakot is a small city with number of villages in the surroundings. City provides certain job opportunities to the people but in villages these are rare. Usually they can grow crops and that too can't be done in winters. Hostile environment with constrained relationship with India add to the uncertainty and compel the inhabitants especially those with less education to seek employment abroad.

Among the cases when binary logistic regression analysis was applied the only factor which had a significant relationship with presence of depressive

symptoms among pregnant ladies with husbands abroad was the number of visits per year. Though with advancement in technology the social media and other ways of communication has made this world a global village and one can remain in touch with his family and loved ones all the time despite being abroad but still physical presence has its own importance. These finding correlate with the findings done in past that physical presence of husband with the spouse has a link with better mental health.^{27,28} Therefore if this parameter has some association in other studies as well, this can be advised in the antenatal visits that partner should increase the frequency of visits to the home if possible in order to protect the wife from psychological issues during this vulnerable time.

To the best of our knowledge, this is the first study in AJK to examine the difference in prevalence of depressive symptoms among pregnant women with husbands abroad and living with them. However, several important limitations should be noted. This study lacked clinical validation of the PHQ, and is therefore subject to error that arises from false positives and negatives inherent when using screening tools. Another interesting factor which was not scope of this study that women with husbands living with them but physically abusing them may show greater rate of depression as compared to those with husbands abroad. This comparison might change the results of our study. Therefore, results of our analysis could not be generalized. Sample was from a private hospital. Inclusion of sample from government hospitals of AJK may also alter the results.

Given the high prevalence of antenatal depressive symptoms among the women with husbands abroad, early intervention may have important child health implications. Therefore, routine screening of psychological problems among the pregnant women with husbands abroad may affect the maternal and child outcome positively.

CONCLUSION

A large number of young males have been working abroad from the area of AJK and this study showed a high frequency of depressive symptoms among pregnant women with husbands abroad as compared to those with husbands living with them. Special attention should be paid to the women whose husband had lesser number of visits to the country.

Author's Contribution:

| | |
|----------------------------|-----------------------------------|
| Concept & Design of Study: | Syed Azhar Ali |
| Drafting: | Ayesha Shafqat |
| Data Analysis: | Misbah Batool, Roomisa Anis |
| Revisiting Critically: | Syed Azhar Ali, Ayesha Shafqat |
| Final Approval of version: | Syed Azhar Ali |

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