Original Article
DOI: https://doi.org/10.70749/ijbr.v3i1.522

INDUS JOURNAL OF BIOSCIENCE RESEARCH
https://induspublishers.com/IJBR
ISSN: 2960-2793/ 2960-2807

Miscarriage Induced Mental Health Issues and Coping Strategies among Primigravida Women

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ARTICLE INFO

Keywords

Coping Strategies, Miscarriage, Mental Health Issues, Primigravida.

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Declaration

Author's Contributions: All authors equally contributed to the study and approved the final manuscript.
Conflict of Interest: No conflict of interest.
Funding: No funding received by the authors.

Article History

Received: 02-12-2024
Revised: 05-01-2025
Accepted: 17-01-2025

ABSTRACT

Background: Miscarriage is most common with approximately 23 million miscarriages occurring worldwide annually. It induces mental health issues among primigravida women, which affects the overall well-being of a woman. Women experiencing miscarriage have higher levels of depression and general anxiety symptoms. Healthcare providers need to give proper information, and emotional and psychological support during the period of miscarriage. **Aim of Study:** To determine the mental health issues and identify the coping strategies used by primigravida women after miscarriage. **Material and Methods:** A quantitative descriptive cross-sectional study was conducted on 317 primigravida women at the Gynecological Ward and OPD of Liaquat University Hospital, Jamshoro. A non-probability purposive sampling method was utilized for data collection. Data was analyzed by using SPSS version 27. Frequency and percentages were computed for categorical variables. Numerical variables were summarized as mean ± standard deviation. The chi-square test was applied to assess the association of categorical variables with PTSD and coping strategies. **Results:** A total of 317 females were enrolled in the study. The mean age of study subjects was 28.1 ± 5.3 years. The average PCL-C score was 33.8 ± 8.6 with a score range of 17-60. Using a threshold of 38 and above, PTSD was seen in 38.8% of females. Out of 14 coping strategies, the highest mean score was seen for the strategy of acceptance and instrumental support followed by self-distraction, active coping, planning, denial, emotional support, religion, venting, positive reframing, behavioral disengagement, self-blame, humor and substance use. The highest PTSD frequency was seen in females of age group 20-29 years (40.8%). **Conclusion:** Miscarriage is a deeply emotional and psychologically challenging experience for women, especially primigravida women. The mental health of primigravida women after miscarriage is significant, influences women's decisions to delay future pregnancy attempts, and underscores the need for significant emotional and social support.

INTRODUCTION

Miscarriage e is most common with approximately 23 million miscarriages occurring worldwide annually (1). Miscarriage is a spontaneous loss of a pregnancy before24 weeks of gestation (fetal weight less than 500g). Miscarriage affects 15 to 20% of all clinically confirmed pregnancies and occurs in about one-third of all women, which affects the mental health of women experiencing miscarriage(2, 3). Miscarriage induces mental health issues among primigravida women, which affects the overall well-being of a woman. Studies have reported that women who have recurrent miscarriages face severe anxiety which may be the main factor that influences recurrent abortion(4, 5). Previous studies also suggested that anxiety has a detrimental effect on work productivity among women(6). The psychological effect of pregnancy loss not only affects the woman but also has a significant effect on her relationship with her spouse and family. Miscarriage can distress intimate partner relationships, as both partners may experience emotional distress in different ways(7). Primigravida women experiencing miscarriage may feel unsupported or misunderstood by intimate partners and family members, especially if the family is unable to recognize the psychological depth of the loss(8, 9).

Coping strategies play an important role in managing post-miscarriage stress and anxiety among women. Positive motivational coping strategies help to cope and provide psychological support to a woman with

recurrent loss of pregnancy. Moreover, coping strategies promote positive feelings besides negative emotions at the early stage of pregnancy(10). Women after miscarriage have a perception of a higher quality of life than health, strong intimate support, and self-efficacy, which significantly impact their coping mechanisms and mental health(11) The positive coping intervention endures coping by promoting positive thinking stimulation of positive feelings and providing psychological relief for women with miscarriages(10).

During the miscarriage, different coping strategies can be used such as self-care practices which refer to intentional action taken to improve physical, mental, and emotional well-being, and intimate partner and family support which encourage coping with emotional distress (12)

Research shows that social norms influence different aspects of affection in the experience of pregnancy loss. However, such features are rarely considered while understanding different situations and perceptions of negative outcomes of pregnancy in primigravida women(13). These strategies include searching for information, positively reassessing the situation, and seeking social support(13). Research shows that social norms influence different aspects of affection in the experience of pregnancy loss. However, such features are rarely considered while understanding different situations and perceptions of negative outcomes of pregnancy in primigravida women(14). In the context of Pakistan, where cultural, religious, and societal factors significantly influence women's experiences of pregnancy and motherhood, the impact of pregnancy loss takes on a unique dimension. This study examined the mental health issues, women's coping strategies when dealing with pregnancy loss and the pregnancy loss impact on family relationships. This research also evaluate the specific challenges faced by women and contribute to the development of comprehensive support mechanisms.

Research Questions

1. What are the mental issues experienced by primigravida women after a miscarriage?
2. What are the emotional responses of primigravida women followed by a miscarriage?
3. What coping strategies do primigravida women employ to manage mental health issues after a miscarriage?

Hypothesis

H_O: There is no association between miscarriage and mental health issues among primigravida women

H_A: There is a significant association between miscarriage and mental health issues among primigravida women.

MATERIAL AND METHODS

A quantitative descriptive cross-sectional study was conducted at Gynecological Ward and Out Patient Department (OPD) of Liaquat University Hospital, Jamshoro from May 2024 to October 2024, 317 primigravida women were enrolled in this study by using non-probability purposive sampling technique. The sample size was determined from previous study prevalence rate of 29%, it was calculated through the software of World Health Organization (WHO) Open Epi sample size calculator (15). Primigravida women of any age with miscarriage and agreed to sign written informed consent were included in this study. Primigravida or multigravida who refused to participate, unmarried and null para women were excluded from the study population. Additionally, women with pre-existing mental health issues and serious medical complications that could confound the study result were also excluded from the study population. Data was collected through a questionnaire which consists sociodemographic information, Post-Traumatic Stress Scale (PCL-C) to evaluate Post-Traumatic Stress symptoms and the Brief-Coping Orientation to Problems Experienced Inventory (COPE) inventory, consists of 28-point to measure the person's coping styles by measuring scores on 3 subscales, (1) problem-focused coping style, (2) avoidant coping style, and (3) emotion-focused coping style. Data was analyzed using Statistical Package for Social Sciences (SPSS) version 27. Frequency and percentages were computed for categorical variables. Numerical variables were summarized as mean ± standard deviation. A P-value less than or equal to 0.05 was taken as statistically significant.

Ethical approval was taken from the Research Ethics Committee (REC) Liaquat University of Medical & Health Sciences Jamshoro (LUMHS). Informed written consent was taken in local language from patients after explaining the study. Surety guidance was provided and assured that record use only for research purposes and confidentiality of all information will be maintained.

RESULTS

Distribution of socio-demographic characteristics

A total of 317 females were enrolled in the study. The mean age of study subjects was 28.1 ± 5.3 years. The age ranges from 18-49 years. More than half of them were in the age range of 20-29 years (54.9%), Muslims (89.6%), belonging to rural areas (61.8%) and 90.5% were housewives. The majority had a monthly income of 21,000-30,000 PKR (38.5%), 42% were illiterate, and 53.6% were Sindhi community (Table 1).

Table 1

Displays Of Participants' Sociodemographic Characteristics

Variables	Groups	Frequency	Percentage
Age groups	<20 years	11	3.5
	20-29 years	174	54.9
	30-39 years	122	38.5
	40-49 years	10	3.2
Religion	Islam	284	89.6
	Hindu	23	7.3

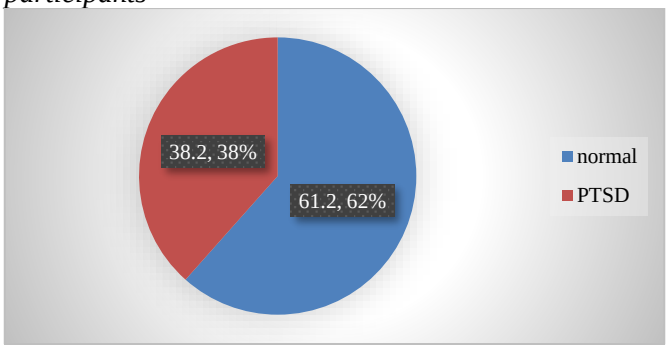
	Christian	10	3.2
Monthly income	≤20,000PKR	19	6
	21,000-30,000 PKR	122	38.5
	31,000-40,000 PKR	89	28.1
	41,000-50,000 PKR	67	21.1
	More than 50,000 PKR	20	6.3
Residence	Urban	121	38.2
	Rural	196	61.8
Occupation	Full time Employed	16	5
	Housewife	287	90.5
	Part-timer	14	4.4
Level of education	Illiterate	133	42
	Primary	70	22.1
	Secondary	60	18.9
	Matriculation	26	8.2
	Intermediate	20	6.3
	Graduation	8	2.5
Ethnicity	Sindhi	170	53.6
	Punjabi	119	37.5
	Balochi	20	6.3
	Siraiki	7	2.2
	Pakhtoon	1	0.3

Description PCL-C score

The average PCL-C score was 33.8 ± 8.6 with a score range of 17-60. Using a threshold of 38 and above, PTSD was seen in 38.8% of females, shown in figure 1.

Figure 1

Depicts the Frequency of PTSD among study participants



Description of Brief-coping Strategies

Out of 14 coping strategies, the highest mean score was seen for the strategy of acceptance and instrumental support followed by self-distraction, active coping, planning, denial, emotional support, religion, venting, positive reframing, behavioral disengagement, self-blame, humor and substance use as demonstrated in Table 1.

Table 2

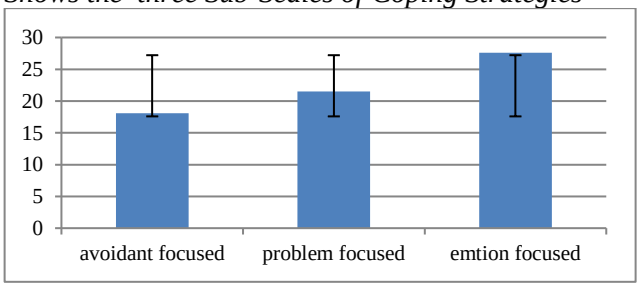
Descriptive statistics of Brief-coping Strategies

Coping strategies	Minimum	Maximum	Mean	Standard deviation	95% Confidence interval (upper limit – lower limit)
Self-distraction	2.00	8.00	5.53	1.39	5.38-5.68
Active coping	2.00	8.00	5.46	1.41	5.30-5.61
Denial	2.00	8.00	5.18	1.49	5.02-5.35
Substance use	2.00	7.00	2.38	0.87	2.29-2.48
Emotional support	2.00	8.00	5.24	1.46	5.08-5.40
Instrumental support	2.00	8.00	5.58	1.54	5.41-5.75
Behavioral disengagement	2.00	8.00	4.95	1.59	4.77-5.12
Venting	2.00	8.00	5.08	1.41	4.93-5.24
Positive reframing	2.00	14.00	5.14	1.41	4.99-5.30
Planning	2.00	8.00	5.38	1.35	5.23-5.53
Humor	2.00	8.00	2.97	1.34	2.82-3.12
Acceptance	2.00	8.00	5.61	1.45	5.45-5.77
Religion	2.00	8.00	5.18	1.37	5.03-5.33
Self-blame	2.00	7.00	3.55	1.29	3.41-3.69

The average score for three sub-scales including avoidant, problem-focused, and emotion-focused was 18.1 ± 3.5, 21.6 ± 4.5, and 28.0 ± 4.8 respectively. The score range for the avoidant scale was 8-26, for the problem-focused scale was 8-31 and for emotion-focused was 12-41(Figure 2).

Figure 2

Shows the three Sub-Scales of Coping Strategies



DISCUSSION

The result of the current study revealed the importance of providing emotional and social support for primigravida women experiencing miscarriage, as many coping strategies can be effective in decreasing the negative impact on women's emotional health. It is highlighted by previous studies that having social support during and post miscarriage decreases the mental health problems, such as stress, anxiety, and depression experienced by women after miscarriage(16). It was also highlighted that primigravida women experiencing pregnancy loss have two types of social and emotional support, firstly health care providers including doctors, nurses, and psychologists, secondly family members including intimate partners, work colleagues, and friends. The most trusted form of support is provided by

formal support including nurses and doctors whereas family and friends support is also important(17). In this study the average PCL-C score was 33.8 ± 8.6 with a score range of 17-60. Using a threshold of 38 and above, PTSD was seen in 38.8% of females which is higher than a study conducted in America which examined the PTSD and estimated to range from 3.5% to 6.8 %(17).

The study found that patients with the higher monthly income showed the higher frequency of PTSD which is similar to a study in Netherlands reported that lower family come was significantly associated with higher prevalence of miscarriage which suggests that financial challenges affect the pregnancy outcome(18)Whereas, study from Pakistan shows that poverty leads to anemia and malnutrition, which is a major risk factor for pregnancy loss(19). The examination of coping strategies has become a crucial aspect of understanding how individuals navigate academic and personal stressors. In a recent study, researchers explored the prevalence of various coping strategies among a sample population. However, occurrence can be reduced by using Adaptive strategies such as time management, seeking social support, and practicing mindfulness(20) Out of the 14 coping strategies investigated, the highest mean score was observed for the strategies of acceptance and instrumental support, followed by self-distraction, active coping, planning, denial, emotional support, religion, venting, positive reframing, behavioral disengagement, self-blame, humor, and substance use (20). The findings of this study provide valuable insights into the patterns of coping mechanisms employed by individuals in response to challenging situations.(21).

CONCLUSION

Miscarriage is a deeply emotional and psychologically challenging experience for women, especially primigravida women. The mental health of primigravida women after miscarriage is significant, influences women's decisions to delay future pregnancy attempts, and underscores the need for significant emotional and social support.

Strength

This study is the first of its kind in Pakistan that might be helpful in addressing the mental health issues and coping strategies among primigravida women.

Limitations

The study was observational and multiple-choice questions were included, which may cause potential biases and limitations in the understanding of questions. Limitations on the addition of any other detail or personal opinion and lack of any other type in the questionnaire were also limitations in the study. Furthermore, the sample size was small and the study was conducted in one city.

Recommendations

Psychological support should be provided during routine care during the miscarriage management period, including regular screening of stress, anxiety, depression, and PTSD. There should be facilities for regular follow-up sessions for women after miscarriage, especially in the first few months after the miscarriage, to assess and manage mental health issues.

It is important to provide counseling services that include both emotional and psychological support for women after miscarriage.

Promoting effective coping strategies such as mindfulness, positive thinking, intimate partner and family support, and self-care.

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