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A Descriptive Study to Assess the Knowledge Regarding Symptoms of Post-Traumatic Stress Disorder among Miscarriage Women at Selected Hospitals in Guntur District, Andhra Pradesh

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Abstract: ***Background: Women who experience a miscarriage and have certain risk factors are more likely to develop post-traumatic stress disorder (PTSD) symptoms. These risk factors include younger women, Lower socioeconomic status, Lack of social support, History of infertility or prior miscarriages and Loss of a planned pregnancy, multiple miscarriages, having experienced past traumatic events, and feeling a lack of social support from friends and family. Women who experience the loss of a planned pregnancy are more likely to experience psychiatric morbidity after miscarriage. Objective: To analyse the level of knowledge regarding symptoms of Post-Traumatic Stress Disorder among miscarriage women at selected hospitals in Guntur. Materials and Methods: To analyze the effect of selected interventions the investigator selected descriptive design descriptive experiments are effective because they use the "pre testing". This means that there are tests done before any data is collected to see if there is any person confounds or if any participants have certain tendencies. Then the actual result is done with pre test results recorded. Results: The study findings show that, 72% of the respondents are having Moderate adequate knowledge, 18% are having Above mild adequate knowledge whereas the remaining 10% have Above moderate adequate knowledge regarding symptoms of Post-Traumatic Stress Disorder. Conclusion: The study shows that majority of the women are having moderate knowledge regarding the symptoms of Post-Traumatic Stress Disorder while very few are having mild knowledge and above moderate knowledge. Hence, health professionals should be trained to recognise PTSD symptoms and provide psychological support. This study calls for the development of targeting interventions and resources for women dealing with miscarriage. Further research is needed to explore effective strategies for addressing Post-Traumatic Stress Disorder and its symptoms in miscarriage women.***

Keywords: pre- test group, knowledge, post- traumatic stress disorder, miscarriage womens

1. Introduction

Miscarriages is the most common failure of procreation. The World Health Organisation (WHO) defines miscarriage as a premature loss of the foetus up to the 22nd week of pregnancy, taking into account the criterion of total foetal body weight below 500 g.

The loss of pregnancy regardless of its type and duration can cause a lot of mental stress in women, as well as physical ailments and many psychological consequences.

Globally, about 12–15 percent of recognised pregnancies end in miscarriage. Studies suggest that after a miscarriage 30 – 50 percent of women experience anxiety and 10 –15 percent experience depression, typically lasting up to four months.

Research has suggested that PTSD symptoms after miscarriage can last for months or even years, particularly if the woman does not receive adequate support or care. The emotional distress triggered by these re-experiencing symptoms can often make it difficult for women to engage in daily activities or feel at ease in their environment.

Women with PTSD following miscarriage may also experience profound changes in their mood and thinking patterns. Feelings of guilt, hopelessness, or inadequacy are common, particularly if the woman blames herself for the miscarriage. The belief that they failed as a mother or were responsible for the loss can lead to intense self-criticism.

2. Need for the Study

Post-Traumatic Stress Disorder's prevalence and public health impact is essential. This has been causing severe health issues that impact not only individuals but also families and society. It can lead to chronic conditions, depression, and substance abuse, making it a significance public health concern.

Research into PTSD enhances early detection and helps develop personalized treatments. This leads to better outcomes for individuals, as clinicians can tailor interventions like Cognitive Behavior Therapy and Eye Movement Desensitization and Reprocessing (EMDR) to suit each person's trauma history. Continued research improves treatment efficacy, which is crucial as different people respond to therapies in different ways.

Post-Traumatic Stress Disorder (PTSD) is a significant psychological consequence for many women following a miscarriage. Studies over the past decade have employed various statistical analyses to understand the prevalence and impact of PTSD among miscarriage women worldwide.

Studies show that 18-38% of women experience Post-Traumatic Stress Disorder symptoms after a miscarriage, but data on how many are aware of these symptoms is limited. Awareness depends on factors like healthcare access and education.

Objectives

1) To assess the level of knowledge regarding symptoms of Post Traumatic Stress Disorder among miscarriage women at selected hospitals in Guntur.
2) To analyze the level of knowledge regarding symptoms of Post Traumatic Stress Disorder among miscarriage women at selected hospitals in Guntur.
3) To find out the association between the level of knowledge and selected demographic variables, among miscarriage women at selected hospitals in Guntur.

Hypothesis

- **H1:** There will be a significant level of knowledge regarding symptoms of Post Traumatic Stress Disorder among miscarriage women.
- **H2:** There will be a significant association between the level of knowledge and selected demographic variables among miscarriage women.

3. Conceptual Frame Work

Betty Neuman's Systems Model is a comprehensive framework used in nursing practice to understand the client as a whole system composed of various interacting components. This model focuses on how stressors impact the balance of an individual's physiological, psychological, sociocultural, developmental, and spiritual well-being.

Core Basic Structure of the Client System:
The client system refers to the woman who has experienced a miscarriage. The woman is viewed as a holistic system that is vulnerable to various stressors and requires interventions at multiple levels to regain balance.

4. Materials and Methods

Research approach: Quantitative research approach.

Research design: For the present study, a Descriptive Research Design is adopted.

Setting of the study: The present study is conducted in selected hospitals of Guntur namely, Ala Hospital, Azizia Hospital, Madhavi Maternity and Infertility Centre, Sasya Fertility Centre, Suraksha Hospital, Tulasi Multi-Speciality Hospital, Yashaswi Hospital.

Sample and sampling technique: In this study, the sampling technique used is Non-Probability Convenient Sampling Technique. It is used to collect data from the available sample falling under Inclusive Criteria.

Development of the Tool:
The development of a Modified self-constructed Post-Traumatic Stress Disorder Knowledge Scale (included with 7-point Likert Scale), involves defining the purpose of the tool, i.e., to assess the knowledge of miscarriage women regarding the symptoms of Post Traumatic Stress Disorder.

Method of data collection:

Section B:
It consists of a modified self-constructed Post Traumatic Stress Disorder Knowledge Scale, using 7-point Likert Scale. It involves a set of 22 statements, regarding symptoms of Post Traumatic Stress Disorder.

Scoring Technique:
For the scoring, a scale of 7 points is given under the labels of-

1 = Strongly Disagree
2 = Disagree
3 = Slightly Disagree
4 = Neutral
5 = Slightly Agree
6 = Agree
7 = Strongly Agree

Maximum score is 154 and the minimum score is 22 for all the 22 statements.

Score Interpretation:

Table 3.1: Score Interpretation for level of knowledge regarding the symptoms of Post-Traumatic Stress Disorder

Level of Knowledge Regarding the Symptoms of Post Traumatic Stress Disorder	Score Range	Percentage (%)
Inadequate	22	14%
Mild Adequate	23 - 48	15% - 31%
Above Mild Adequate	49 - 74	32% - 48%
Moderate Adequate	75 - 100	49% - 65%
Above Moderate Adequate	101 - 126	66% - 82%
Adequate	127 - 154	83% - 100%

Phases

Phase – I

- The miscarriage women were explained about the purpose, nature and duration of the study.
- Verbal as well as written consent was obtained prior to the conduction of study.

Phase – II

- The prepared tool i.e., Modified self-constructed Post-Traumatic Stress Disorder Knowledge Scale included with 7-point Likert Scale was administered.
- Any doubts or questions during data collection was cleared.

Phase – III

- The data obtained was analyzed and interpreted using Descriptive and Inferential Statistics.
- The results revealed that 72% of the respondents have Moderate Adequate Knowledge, 18% of the respondents have Mild Adequate Knowledge and remaining 10% have Above Moderate Knowledge.
- There is a statistically significant association of the demographic variables, Age (x^2=13.26 DF=6 p=0.0391)

and Place of living (x^2=6.68, DF=2, p=0.0354) with the level of knowledge regarding the symptoms of Post-Traumatic Stress Disorder.

Data Collection Procedure:

- The study was conducted from 01.02.2025 till 06.02.2025 in all the above listed hospitals.
- Permission was taken from the concerned department for data collection.
- The research material was shown to the administration of the hospital/clinic in order to address any concern if there.
- The nature and purpose of the study was explained to the respondents and their approval for participation was obtained by written consents.
- The prepared research tool, i.e., Modified self-constructed Post Traumatic Stress Disorder Knowledge Scale included with 7-point Likert Scale was administered for data collection.

5. Results

- **Figure 4.4. (d)** shows that, with regard to Occupation, 76% of the respondents are Unemployed and remaining 24% of the respondents are Employed.
- **Figure 4.5. (e)** shows that, with regard to Socio-economic status, 20% of the respondents earn 10,000 per month, 62% of the respondents earn between 10,001 – 20,000 per month and remaining 18% of the respondents earn between 20,001 – 30,000 per month.
- **Figure 4.6. (f)** shows that, with regard to Place of living, 82% of the respondents are from Rural Area and remaining 18% of the respondents are from Urban Area.
- **Figure 4.7. (g)** shows that, with regard to Gravidity, 16% of the respondents are Gravida 1, 42% of the respondents are Gravida 2 and remaining 42% of the respondents are Gravida 3 or more.
- **Figure 4.8. (h)** shows that, with regard to Parity, 42% of the respondents are Primipara, 20% of the respondents are Multipara and remaining 38% of the respondents are Nullipara.

Validity:

The content was validated by experts in the field of Nursing, Gynecology and Obstetrics, and Reproductive Medicine. All necessary correction and orders made by the experts was done and the tool was modified and prepared for data collection.

Reliability:

To estimate the reliability of the tool, 6 miscarriage women were administered the tool. The reliability of the tool was estimated by using Split-Half Method. Cronbach's alpha or coefficient alpha formula was used to obtain the reliability quotient and the quotient obtained was, "r" = 1.17. Hence the tool was found to be highly reliable.

Pilot study:

A Pilot study was conducted to check the practicability and feasibility of the study and to plan for the data analysis and interpretation. The pilot study was conducted on 26.01.25 at Aster Ramesh Hospitals in Guntur.

Results

Frequency and percentage distribution of level of knowledge regarding symptoms of Post-Traumatic Stress Disorder among miscarriage women at selected hospitals in Guntur.

S. No	Level of Knowledge Regarding Symptoms of Post-Traumatic Stress Disorder	Frequency	Percentage
1	Inadequate	0	0%
2	Mild Adequate	0	0%
3	Above Mild Adequate	9	18%
4	Moderate Adequate	36	72%
5	Above Moderate Adequate	5	10%
6	Adequate	0	0%

Mean, medium, mode, standard deviation and range of the levels of depression and pranayama on depression scores among geriatric people in pre- test and post- test.

Mean and standard deviation for level of knowledge regarding symptoms of Post-Traumatic Stress Disorder among miscarriage women at selected hospitals in Guntur.

N = 50

Mean	Standard Deviation
86.26	±1.58

6. Discussion

- Regarding Age, 32% of the respondents are in between the age group of 18 years – 22 years, 32% of the respondents are in between the age group of 23 years – 27 years, 24% of the respondents are in between the age group of 28 years – 32 years and 12% of the respondents are above 32 years of age.
- Regarding Religion, 56% of the respondents are Hindus, 18% of the respondents are Christians, and remaining 26% of the respondents are Muslims.
- Regarding Educational Status, 28% of the respondents are Illiterate, 24% of the respondents have received Primary Education, 24% of the respondents have received Secondary Education, 20% of the respondents have completed their Graduation and remaining 4% have completed their post-graduation.
- Regarding Occupation, 76% of the respondents are Unemployed and remaining 24% of the respondents are Employed.

7. Recommendations

- Similar study can be conducted for a larger sample.
- Similar study can be conducted at various other hospitals.
- Experimental studies can also be conducted to evaluate the effectiveness of structured educational intervention on improving knowledge regarding Post-Traumatic Stress Disorder symptoms.
- Comparative studies can be conducted to compare the knowledge of Post-Traumatic Stress Disorder symptoms in women who have experienced a miscarriage and women who have not.

8. Limitations

The present study is limited to –

- 50 miscarriage women
- Selected hospitals of Guntur, Andhra Pradesh
- 1 week of data collection
- Difficulty in getting permission from the concerned authorities,
- Findings of the study cannot be generalized in entire Guntur.

9. Conclusion

The study concluded that, 72% of the respondents are having Moderate adequate knowledge, 18% are having Above mild adequate knowledge whereas the remaining 10% have Above moderate adequate knowledge regarding symptoms of Post-Traumatic Stress Disorder.

It was also concluded that among the selected demographic variables, Age in years (x^2=13.26,DF=6, p=0.0391) and Place of living (x^2=6.68, DF=2, p=0.0354) were found to be in association with the level of knowledge regarding symptoms of Post-Traumatic Stress Disorder and were statistically significant at p= <0.05 significance value, whereas the rest of the demographic variables were not in association with the level of knowledge regarding symptoms of Post-Traumatic Stress Disorder and were non-significant at p = <0.05 significance value.

Ethical clearance: Ethical clearance was obtained from the concerned authorities of the selected hospitals of Guntur, Andhra Pradesh. The privacy and confidentiality of the data is strictly maintained under all circumstances.

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Conflict of interest: Nil

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