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Research Article

A study to assess the psychological impact of fetal loss among the postnatal mothers admitted in selected hospitals of district Faridkot, Punjab, India

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ABSTRACT

Background: Miscarriage, spontaneous abortion of a fetus and the loss of an infant through stillbirth, or neonatal death is recognized as a traumatic life event before the expected point of viability. Women's response ranges from relief to devastation. Predictors of development of complicated grief after prenatal loss include lack of social support, pre-existing relationship difficulties, or absence of surviving children, as well as ambivalent attitudes or heightened perception of the reality of the pregnancy. The study aimed to assess the psychological impact of fetal loss among the postnatal mothers.

Methods: The research design selected for the study was non-experimental descriptive design. Study was conducted from Dec 2014 to Jan 2015 in obstetrics and gynaecology unit of G.G.S medical hospital, Faridkot, Punjab, India. 60 postnatal women were selected by convenience sampling. The perinatal grief scale (standardized tool) was used to assess fetal loss.

Results: The majority of women i.e. 76.7% had more psychological impact, 23.3% women had less psychological impact of fetal loss. The range of score varies from 62-129 with mean score 102.82, SD 15.21, standard error mean 1.963, and median 103.50 and a statistically significant relation was found between psychological impact of fetal loss and gravida, Number of fetal loss, Number of live births and period of gestation at $p < 0.05$.

Conclusion: Hence it can be concluded that majority of women had more psychological impact of fetal loss and association of psychological impact of fetal loss was found between number of previous loss, number of live births, gravida and period of gestation.

Key words: Fetal loss, Psychological impact, Postnatal mothers

INTRODUCTION

Psychological impact of fetal loss is defined as the entire process precipitated by loss through perinatal death. Perinatal death is defined as death of fetus during pregnancy at gestational age of 22 weeks and more or birth weight of 500 g and more or during the neonatal period. Support is defined as function that prevent or reduce stress in a women experiencing perinatal loss the support includes steps to make her feel accepted, respected, reassured that she was cared for and able to communicate freely and shared her experience and feelings.¹

The loss of an infant through stillbirth, or neonatal death is recognized as a traumatic life event. Predictors of development of complicated grief after prenatal loss include lack of social support, pre-existing relationship difficulties, or absence of surviving children, as well as ambivalent attitudes or heightened perception of the reality of the pregnancy. Risk of complicated grief was found to be especially high after termination of a pregnancy due to fetal abnormality.²

The study was needed as childbirth has the potential of being one of the most joyous and fulfilling experience a woman goes through in her entire life, conversely the

negative experiences with childbirth are rarely discussed. There is an overlooked category: mother who conceives but loses the baby in the womb. Not only are these women overlooked, but also the hospital care they receive proves inconsistent with the latest research. Nurse and doctors should be aware of latest research showing the most effective way to treat mother who have just experienced a stillbirth.

The immense responsibility of being present for the patient physically, emotionally, and spiritually should not be lost on the nurse. A woman is bringing both death and life into the world simultaneously. Whatever the cause of premature death, the pain remains long after the tragic loss. Although the loss of neonate is undoubtedly a delicate and uncomfortable situation, it is for these reasons this topic to be addressed.³

There is greatly increased vulnerability of women with perinatal death to experience negative psychological and social consequences. Stillbirth is a significant risk factor for depression and anxiety when they are assessed during a subsequent pregnancy.

There is an urgent need to develop appropriate mental health care services for mothers with perinatal deaths to develop positive family support and to prevent the postnatal mother from establishing depression resulting from fetal loss.⁴

Main objectives of the study are: to assess the psychological impact of fetal loss among the postnatal mothers and to determine the association of psychological impact of fetal loss with selected demographic variables among postnatal mothers.

Fetal loss: is death of fetus irrespective of gestational age and weight of fetus. It includes miscarriage, intrauterine death and still birth.

Psychological impact: refers to emotional and interpersonal problems experienced by postnatal mothers after fetal loss.

Postnatal mothers: are mothers who had fetal loss i.e. miscarriage, intrauterine death and still birth.

METHODS

It was a quantitative research approach with non-experimental descriptive design. And the study was conducted in G.G.S. Medical Hospital and Civil Hospital Faridkot, Punjab, India.

Various variables used in the study were age, educational status, occupation of mother, religion, area of residence, duration of marriage, gravida, number of antenatal check-ups, number of ultrasound done, number of previous loss, number of live children, period of gestation, knowledge about fetal loss and type of family.

Assumption of study tells that mothers will experience negative psychological impact following fetal loss.

The target population of the study was postnatal women with fetal loss admitted in selected Hospitals of District Faridkot, Punjab.

Convenience sampling technique was used to select the sample. Total samples of 60 postnatal women with fetal loss admitted in selected hospitals of District Faridkot were selected for the study.

Inclusion criteria

Postnatal mothers:

- Who were admitted in selected hospitals of district Faridkot, Punjab.
- With recent fetal loss.
- Who were present at the time of data collection.
- Who were willing to participate.

Exclusion criteria

- Mothers who were not willing to participate in the study.

For the data collection an interview was schedule designed to collect patient's socio demographic profile of postnatal mothers. And PGS (PERINATAL GRIEF SCALE) are used. It was consisted of 33 items

Criterion measure

Total score: 33-165
33-90-less psychological impact
91-165- more psychological impact

RESULTS

The analysis of data revealed that the range of psychological impact of fetal loss score was 62-129 with mean score 102.82 and standard deviation of 15.21. Majority of the post natal mothers 31(51.7%) were in age group of 24-29 years. Majority of the post natal mothers were educated up to secondary 25 (41.7%).

Most of post natal mothers 39(53.3%) were housewives. Most of the post natal mothers 32(53.3%) were from rural area. Distribution of the according to religion most of the postnatal mothers, 38(63.3%) were from Sikh religion.

As per the duration of marriage, maximum postnatal mothers 36 (60.0%) were married from 1-5 years. As per distribution according to gravida, most of the postnatal mothers 38 (63.3%) were multigravida. Maximum postnatal mothers 37 (61.7%) had undergone 0-2 times antenatal check-ups. Majority of postnatal mothers 41 (68.3%) had 0-2 times ultra sound during antenatal period.

Table 1: Frequency and percentage distribution of study subjects according to selected socio demographic variables.

Content	Frequency(n)	Percentage (%)
Age (years)		
18-23	15	25.0
24-29	31	51.7
30-35	9	15.0
>35	5	8.3
Educational status		
Illiterate	0	0
Primary	14	23.3
Secondary	25	41.7
Senior secondary	16	26.7
Graduation or more	5	8.3
Occupation of the mother		
Employed	21	35.0
Housewife	39	65.0
Residence		
Rural	32	53.3
Urban	28	46.7
Religion		
Sikh	38	63.3
Muslim	4	6.7
Hindu	14	23.3
Christian	4	6.7
Any other	0	0
Duration of marriage		
1-5	36	60.0
6-10	18	30.0
11-15	6	10.0
Gravida		
Primigravida	22	36.7
Multigravida	38	63.3
Number of antenatal checkups		
0-2	37	61.7
3-4	18	30.0
>4	5	8.3
Number of ultrasound done		
0-2	41	68.3
3-4	17	28.3
5-6	2	3.3
Number of previous losses		
No	47	78.3
1	8	13.3
2	5	8.3
3	0	0
Number of live birth		
No	22	36.6
1	24	40.0
2	11	18.3
3 or more	3	5.0
Period of gestation(weeks)		
9-18	18	30.0
19-28	18	30.0
29-37	24	40.0
Knowledge of fetal loss		
Yes	43	71.7
No	17	28.3
Type of family		
Joint	35	58.3
Nuclear	25	41.7

Most of the postnatal mothers 47(78.3%) had no previous fetal loss. As per live births, maximum number of postnatal mothers 24(40.0%) had only 1 live birth. As per period of gestation, majority of postnatal mothers 24(40.0%) had period of gestation 29-37 weeks.

Table 2: Mean and Standard Deviation of psychological impact score of fetal loss among postnatal mothers, Total score 33-165.

Range	62-129
Mean	102.82
±SD	15.21
SEM	1.963
Median	103.50

Table 3: Frequency and Percentage distribution of the postnatal mothers according to the psychological impact score of fetal loss.

Categories	Number of patients	Percentage
More psychological impact	46	76.70%
Less psychological impact	14	23.30%
Total	60	100%

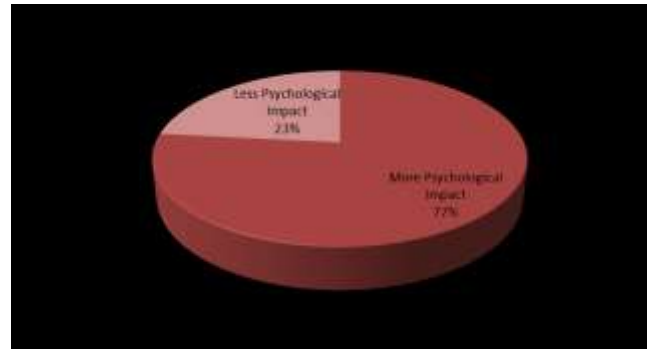


Figure 1: Frequency and percentage distribution of the postnatal women according to the psychological impact score of fetal loss.

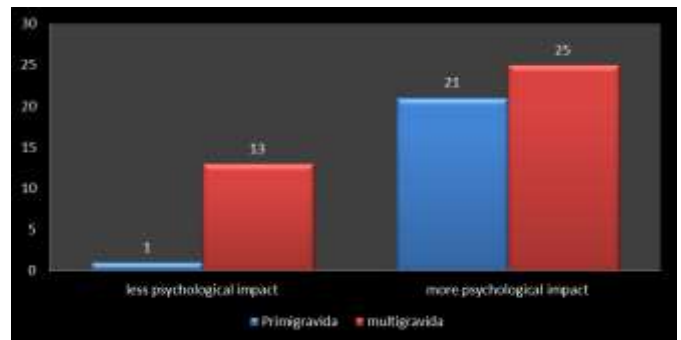


Figure 2: Association of psychological impact of fetal loss with gravida.

Table 4: Association of psychological impact of fetal loss with gravida.

Gravida	Less psychological impact n (%)	More psychological impact n (%)	Total	Chi square value	p value
Primigravida	1 (7.1%)	21(45.7%)	22	$\chi^2=6.854$ df=1	0.009 ^S
Multigravida	13 (92.9%)	25 (54.3%)	38		
Total	14 (100%)	46 (100%)	60		

**Significant at p<0.05

Table 5: Association of psychological impact of fetal loss with number of previous losses.

Number of previous loss	Less psychological impact n (%)	More psychological impact n (%)	Total	Chi square value	p value
0	6 (42.9%)	40 (87.0%)	47	$\chi^2=13.552$ df=3	0.001 ^S
1	5 (35.7%)	3 (6.5%)	8		
2	3 (21.4%)	2 (4.3%)	5		
3	0	0	0		
Total	14 (100%)	46 (100%)	60		

** Significant at 0.05 level

Maximum number of postnatal mothers, 43 (71.7%) had knowledge about the loss before delivery. Most of postnatal mothers, 35(58.3%) were from joint family.

Psychological impact of fetal loss among postnatal mothers had statistically significant association with age, educational status, occupation of the mother, residence, religion, duration of marriage, number of antenatal

check-ups, number of ultrasounds done, knowledge about fetal loss and type of family.

Psychological impact of fetal loss among postnatal mothers had statistically significant association with gravida, number of previous losses number of live births and period of gestation.

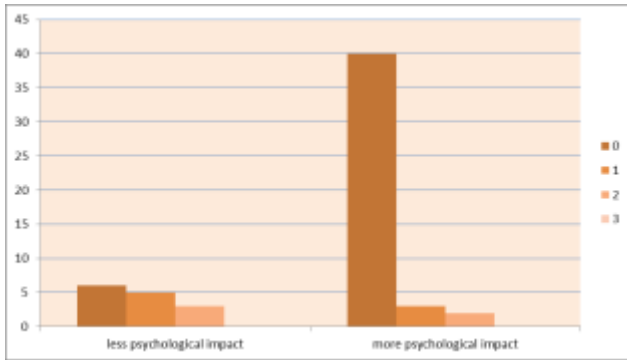


Figure 3: Association of psychological impact of fetal loss with number of previous losses.

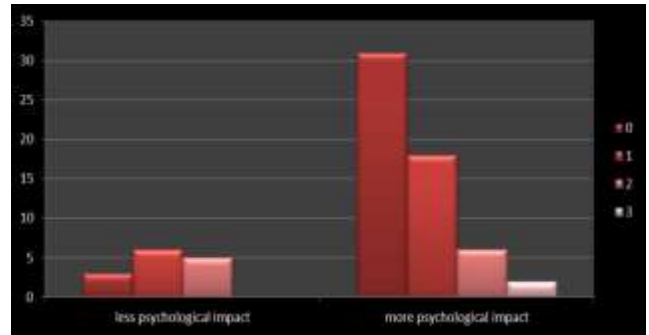


Figure 4: Association of psychological impact of fetal loss with number of live births.

Table 6: Association of psychological impact of fetal loss with number of live birth.

Number of live births	Less psychological impact n(%)	More psychological impact n(%)	Total	Chi square value	p value
0	3 (21.4%)	31 (67.4%)	34	$\chi^2=17.691$ df=3	0.001 ^S
1	6 (42.9%)	12 (26.1%)	18		
2	5 (35.7%)	1 (2.2%)	6		
3	0	2 (4.3%)	2		
Total	14 (100%)	46 (100%)	60		

**Significant at 0.05 level

Table 7: Association of psychological impact of fetal loss with period of gestation (in weeks).

Period of gestation	Less psychological impact n(%)	More psychological impact n(%)	Total	Chi square value	p value
9-18	8 (57.1%)	10 (21.7%)	18	$\chi^2= 6.506$ df=2	0.039 ^S
19-27	3 (21.4%)	15 (32.6%)	18		
29-37	3 (21.4%)	21 (45.7%)	24		
Total	14 (100%)	46 (100%)	60		

** Significant at 0.05 level

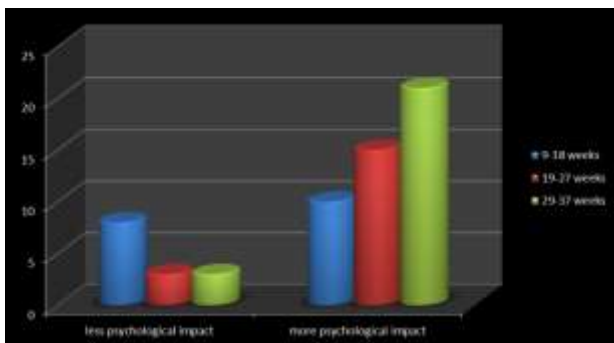


Figure 5: Association of psychological impact of fetal loss with period of gestation (in weeks).

DISCUSSION

The present study findings revealed that the highest percentage (76.6%) of the postnatal women belonged to more psychological impact category and 23.3% belonged to less psychological impact category. These findings were consistent with Lok IH suggested that miscarriage

could be associated with significant and possibly enduring psychological consequences.⁵ As many as 50% of miscarrying women suffered some form of psychological morbidity in the weeks and months after loss. About 40% of miscarrying women were found to be suffering from symptoms of grief shortly after miscarriage, and pathological grief can follow.

The present study with regards to the number of ultrasound done, the psychological impact of fetal loss among postnatal women found to be statistically non-significant (p value 0.261) which was consistent with the findings of Salvesen KA who concluded that the long term psychological stress response in women to pregnancy termination following ultrasonographic detected (fetal anomalies) of fetal loss did not differ from the stress responses seen in women experiencing a perinatal loss.⁶

The present study showed statistically significant association of psychological impact of fetal loss with number of previous loss (p value 0.01) and these findings were consistent with Carthy McF which revealed that

previous pregnancy loss had an adverse impact on distress and behavior in women.⁷ Women with one previous miscarriage had increased anxiety, perceived stress, depression, and limiting/resting behavior in pregnancy than in women with two miscarriages. This study highlighted the psychological implications of miscarriage and termination of pregnancy.

The present study psychological impact of fetal loss found to be significant with period of gestational of women (in weeks) at p value 0.039 and these findings were consistent with Davies V which reveals that second-trimester termination may be more stressful compared with first-trimester termination but these findings were inconsistent with Burgoine G A which revealed there was statistically non-significant difference in depression incidence on enrolment at 4 months, 12 months on the PGS.^{8,9} These findings were inconsistent with study conducted by Cowchock FS which concluded that the high levels of grief and PTS symptoms were significant problems for pregnant women who have suffered late loss of wanted pregnancy.¹⁰

CONCLUSION

Hence it can be concluded that majority of women had more psychological impact of fetal loss and association of psychological impact of fetal loss was found between number of previous loss, number of live births, gravida and period of gestation.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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