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The Effect of Bereavement Counseling On Women with Psychological Problems Associated With Late Pregnancy Loss

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Abstract

Pregnancy is most often a joyful experience and a woman's plans and dreams are shattered when the death of an unborn or newborn infant occurs. Studies have reported that these women experience psychological problems such as grief, depression, and anxiety which can be minimized by counselling. Hence, this study was undertaken to assess the effect of bereavement counseling on women with psychological problems associated with pregnancy loss, focusing on Roy's adaptation theory. An experimental design, with pre-test and post-test, was used with randomly allocated experimental and control groups. Women were randomly allocated to the experimental and control groups with 45 women in each group. As pre assessment, grief, depression, and anxiety were measured using the Perinatal Bereavement Grief Scale and the Hamilton Depression and Hamilton Anxiety Scale, respectively. Women in the experimental group were given the counselling intervention and those in the control group were given the standard care, after pre-assessment. Descriptive and inferential statistics were used to analyze the data. The reduction in the level of grief, depression, and anxiety were significantly better in the experimental group as compared to the control group (all P values<0.001). Ethics approval was obtained from the Institutional Review Board of the Christian Medical College, Vellore, South India. The findings of the study revealed that women with late pregnancy loss experienced grief, depression, and anxiety and the bereavement counselling enabled them to cope more effectively.

Keywords

Grief, Anxiety, Depression, Bereavement Counselling, Pregnancy Loss.

Introduction

Pregnancy is usually a joyful experience for a woman. It is one of the milestones that, even though sometimes stressful, is rewarding for the reason that the woman takes on a new level of responsibility. Parents look forward to delivering a healthy baby and dream of a happy and contented future. Such plans and dreams are shattered when the death of an unborn or newborn infant occurs. Pregnancy loss is a painful and traumatic event that can occur at any time during the pregnancy. However, late pregnancy losses cause more psychological traumas to the parents and families and are associated with post-traumatic stress, depression, anxiety, and sleeping disorder.[1]Research has shown that women experience longer periods and higher levels of grief after perinatal loss.[2]

Women anticipate the birth of their baby; they may have begun to picture themselves holding the baby, and imagining its size, sex, colour, and features. Some parents select the name and buy things necessary for the baby. In South India, a ceremony is arranged at 28 weeks of gestation to share the joy and happiness of being promoted from just being a couple to parents**.** The unanticipated and sudden loss of a pregnancy, therefore, can be a devastating and traumatic experience and can result in high levels of psychological morbidity.[1]

Every year, there are over 6.3 million perinatal deaths in the world, of which almost all occur in the developing countries, and 27% of them occur in the least developed countries.[3]Research shows that psychiatric morbidity following perinatal death varies from 13% to 34% among mothers suffering from perinatal bereavement.[4]Twenty-five to 40% of the couples experiencing perinatal loss report anxiety or depressive symptoms soon after the loss or in the subsequent two years. [5] Women may experience psychological problems such as grief, depression, and anxiety.[6]

Some health personnel may not be aware of the extent to which these problems are manifested.[7] Identifying psychological problems and providing counselling to such women is much needed to address their fear of problems in future pregnancies and family life. An intervention cannot bring back their beloved infant, but an appropriate intervention could promote physical and emotional healing. Midwives are in a unique position to provide psychological support since they are with women, giving care to them 24 hours, and they know the importance of psychological support. They must take it as a challenge to care holistically for women who experience psychological problems, especially after pregnancy loss.

This study addressed women's experience of psychological issues related to pregnancy loss and whether bereavement counselling can help these women to overcome such psychological problems. The specific aims and objectives of the study were

1. To assess the psychological problems before and after standard care and bereavement counselling for women with pregnancy loss.
2. To validate the perinatal bereavement grief scale for the local population
3. To assess the effectiveness of bereavement counselling on women with pregnancy loss.

Methodology

Research Design

An experimental approach, with a pre-test and post-test control group design, was undertaken for studying the effect of bereavement counselling on women with psychological problems associated with late pregnancy loss.[8] A total of 90 women were selected by random allocation, and using a computer generated random list, they were randomly put into experimental and control groups by the research assistant, resulting in 45 women in each group.

Setting of the Study

The research was conducted in the Obstetrics and Gynecology (OG) Department of the Christian Medical College, Vellore, a large teaching hospital situated in the southern part of India. The hospital is a tertiary care center, with 2622 beds, of which 286 beds are allocated to maternity services.

Ethical Considerations

The Research Committee of the College of Nursing and the Institutional Review Board of Christian Medical College, Vellore, South India approved the study. After getting permission from the participants, they were asked to sign an informed consent. The records and all details obtained in this study remained strictly confidential, but they were available to the investigators who conducted the study.

Pilot Study

A pilot study was done to test the feasibility and practicability of the research.[8] this was conducted during summer 2011, on 15 women who had pregnancy loss, to check the feasibility of the study and to test reliability of the instruments. The participants were selected based on the inclusion and exclusion criteria. The research assistant allocated participants to the control or experimental groups according to the computer generated random number list. The investigator identified the participants from the birth register and visited them and voluntary obtained informed consent.

The pre-assessment data were collected using the Perinatal Bereavement Scale to assess the grief ,the Hamilton Depression Scale (HAM-D) for measuring depression, and the Hamilton Anxiety Scale (HAM-A) for assessing Anxiety, from both the groups.[9,10] Bereavement counselling was given to the experimental group and standard care, considered as normal postnatal care was given by midwives in the ward. A few changes were made to the questionnaires, based on the pilot study. One of the inclusion criteria i.e. women who live in the catchment area of 'Vellore district within the radius of eight to ten kms' was changed to 'Vellore district'. The period for post assessment was extended from four weeks to six weeks, since the women were reluctant to come at four weeks and then 6 weeks for postnatal check-up.

Sample

Postnatal women who experienced a stillbirth or early neonatal death were the group of interest. The inclusion criteria used to select the study participants were all primiparous and multiparaous women who had suffered pregnancy loss, either through stillbirth or early neonatal death, pregnancy loss after 22 weeks of gestational age is considered as late pregnancy loss; women who lived in Vellore district; and women who spoke the English or Tamil language (since the investigator was able to interview participants in these languages). The sample size was calculated based on the effect size which was 1 for anxiety, 0.62 for depression, and 0.80 for grief. Alpha error was 5%, confidence interval was 95%, and the power was 80. As per the calculation, the required sample size for eliciting the difference in the effect size due to bereavement for Anxiety was 17, for Depression 42, and for grief 24. In order to have a fairly large group, for higher representation, it was decided to have a total of 90 subjects, with 45 in the experiment group and 45 in the control group. A total of ninety subjects were selected for the study over a period of twelve months.

Recruitment of Participants

Participants were identified by the investigator and informed consent was obtained for the study. The charge nurse randomly allocated the participants who fulfilled the inclusion criteria into either control group or experimental group, using computer generated random numbers. Only two women refused to participate in the study. During the follow up period, out of 129 of the total participants, 16 from the intervention group and 23 from the control group did not participate in the post assessment. The reason for their withdrawal was that these women had gone back to their husband's place from their parent's place, which was very far from them to come for follow up.

Instruments

Data were collected using a structured questionnaire, which consisted of demographic and clinical data. None of the Standardized Perinatal Grief scales available to measure grief were found to be culturally appropriate and some of the items could not be applied to the South Indian women. The investigator reviewed the literature and developed a new instrument to measure grief. The scale first developed was tested in a pilot study in which 15 women with pregnancy loss were interviewed. They expressed some more points related to grief, which were also added. The instrument's content validity was established by giving it to five experts from the Department of Psychiatry, Community Health, and Obstetrics and Gynecology. Among the five experts two were doctors, a Psychiatrist and an Obstetrician. The other three members were professors of Nursing from the fields of Obstetrics, Psychiatry and Community Health Nursing. The scores were computed by calculating the Content Validity Index (CVI).[8]The CVI was 0.80.

The instrument was administered, over a period of three months, to 50 women who had late pregnancy loss. The internal consistency of the instrument was checked using Cronbach's Alpha, the reliability was 0.78. Test-Retest Reliability was done to check the stability of the instruments**.** Ten women were interviewed over a period of three months for Test Retest Reliability, with an interval of one week, and reliability was found to be statistically significant (p value <0.05). The instrument was refined through all the above procedures before implementation.

The Hamilton Depression Scale and the Hamilton Anxiety Scale were developed and validated in a western setting and, therefore, may have not been reliable in an Indian context,

which is one of the limitations of the study. Inter Rater Reliability was done, since post assessment was done by the research assistant. The Intra Class Correlation (ICC) value for the Perinatal Bereavement Grief Scale was 0.99 (P <0.001); for the Hamilton Anxiety Scale it was 0.97 (P <0.001), and for the Hamilton Depression Scale the ICC value was 0.99 (P <0.001).

Data Collection

The investigator took one year Post Graduate Diploma Course in Counselling through distance education before the intervention for the experimental group was started. Three sessions were planned with the help of three experts working in the psychiatry and psychology departments. The investigator visited the ward, identified the participants, and established a rapport with them. The baseline data collection and pre- intervention assessment were done for both the groups, between 12 and 24 hours post-delivery.

The investigator provided three sessions of individual bereavement counselling, of about 30 to 45 minutes per session, to the experimental group. The investigator counselled the women individually after the content validity from the experts. The session was modified by the investigator according to the needs and problems of women who had pregnancy loss. The first session of bereavement counselling was provided to the experimental group immediately after the baseline assessment, which was 12 hours after the childbirth, at the bedside. The control group had routine postnatal care by the midwives till discharge.

The second session of counselling was provided at the time of discharge from the hospital and the third session of counselling four to six weeks after discharge, during the follow up in the Obstetrics and Gynecological outpatient department. The 4-6 week post-discharge assessment was done for both groups by the second assessor, who was trained on the assessment instruments and blinded to the group allocation.

Data Analysis

Data were coded for analysis using SPSS Version 17.0. Descriptive statistics were used to describe the demographic and clinical data. Mean and standard deviation of psychological problems, such as grief, depression, and anxiety were used to compare the experimental and control groups. Two statistical tests were used to measure the psychological problems. Paired "t" test was used to compare the average improvement levels of psychological problems among the experimental and control groups. The student "t" test was used to compare the

average improvement level of psychological problems such as grief, depression, and anxiety between the experimental and control group. P Value < 0.05 was considered as statistically significant for both the tests.

Results

The demographic characteristics of the experimental and control group were found to be similar (Table1). The majorities of the women belonged to the age group of 25–30 years, and were housewives. In each group more of the women had received secondary school education than either primary or tertiary levels. The clinical characteristics of the two groups were found to be statistically significant. In the control group most (57.8%) of the pregnancy losses happened between 22-28 week gestational age, whereas there was an even spread across all gestational age ranges in the experimental group (p = 0.01). With respect to obstetrical score, a majority (66.7%) of the women in the control group were primipara but only 46.7% of the experimental group were so. This difference in the obstetrical scores was significant (p=0.05) and may be related to the gestational age at which pregnancy loss occurred in the two groups.

Table 1

Characteristics of the Respondents (N= 90)

Demographic data	Experimental group		Control group		P value
	N	%	N	%	
Age (years)					
18 – 19	0	-	1	2.2	0.3
20 -30	37	82	34	75.6	
30 -41	8	18	10	22.2	
Education					
Primary	13	28.9	9	20.0	0.6
Secondary	20	44.4	24	53.3	
Graduates	12	26.7	12	26.7	
Occupation					
House Wife	38	84.4	41	91.2	0.5
Skilled	5	11.2	2	4.4	
Unskilled	2	4.4	2	4.4	
Income(Indian Rupees)					
1001 - 3000	4	8.9	5	11.1	0.8
3001 - 5000	20	44.4	17	37.8	
>5000	21	46.7	23	51.1	
Type of Family					
Nuclear	9	20	13	28.9	0.3

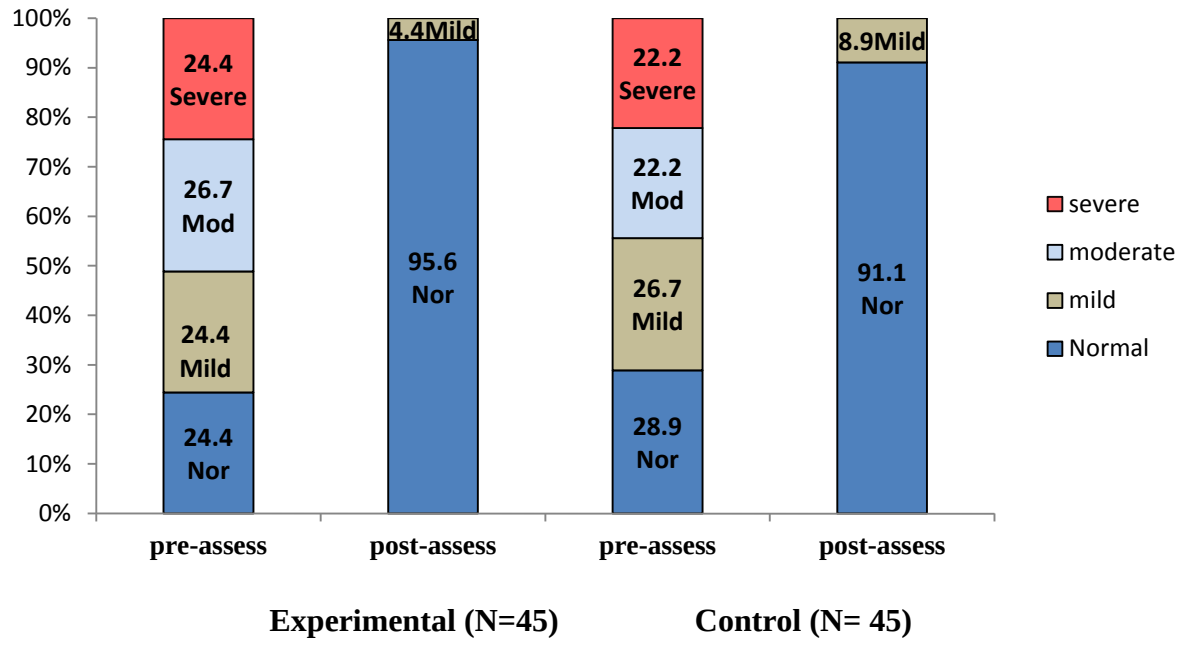
Joint	36	80	32	71.1	
Gestational Age (Weeks) 22-28 29 – 37 38 -43	 15 15 15	 33.3 33.3 33.3	 26 15 4	 57.8 33.3 8.9	0.01
Obstetrical Score Primipara Multipara	 21 24	 46.7 53.3	 30 15	 66.7 33.3	0.05

Profile of Psychological Problems

The psychological problems of women with pregnancy loss were assessed before and after the intervention. The variables studied were grief, depression, and anxiety.

Figure 1

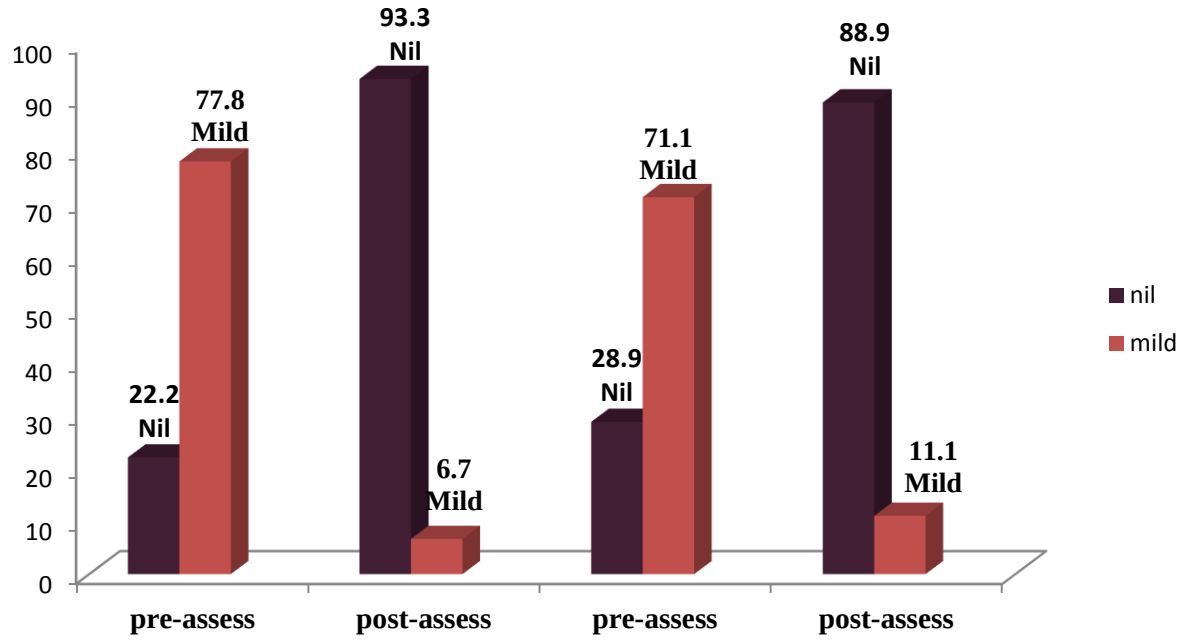
Severity of symptoms of grief amongst participants of both groups, pre/post assessment using the Perinatal Bereavement Scale



In both the groups, the severity of symptoms had drastically reduced between the pre and post assessment. Although severe or moderate grief was found at pre-assessment in 51.1% of the experimental group participants, and in 44.6% of the control group, these higher levels of grief had entirely dissipated by the post assessment. This clearly shows that symptoms of grief reduce with time, even without counselling. However the effect is more marked in the experimental group, which started with a more pronounced grief profile but ended with only 4.4% of participants reporting any symptoms of grief, compared to 8.9% in the control group.

Figure 2.

Severity of symptoms of depression in both groups pre/post assessment
Hamilton Depression Scale ("HAM-D")



Experimental (N=45) **Control (N= 45)**

Figure 2 shows that 35 (77.8 %) participants in the experimental group and 32 (71.1%) in the control groups were found to have mild depression during pre-assessment. Though the level of depression was high, it had reduced drastically by post assessment.

Figure 3

Severity of symptoms of anxiety both groups, pre/post assessment Hamilton Anxiety Scale ("HAM-A")

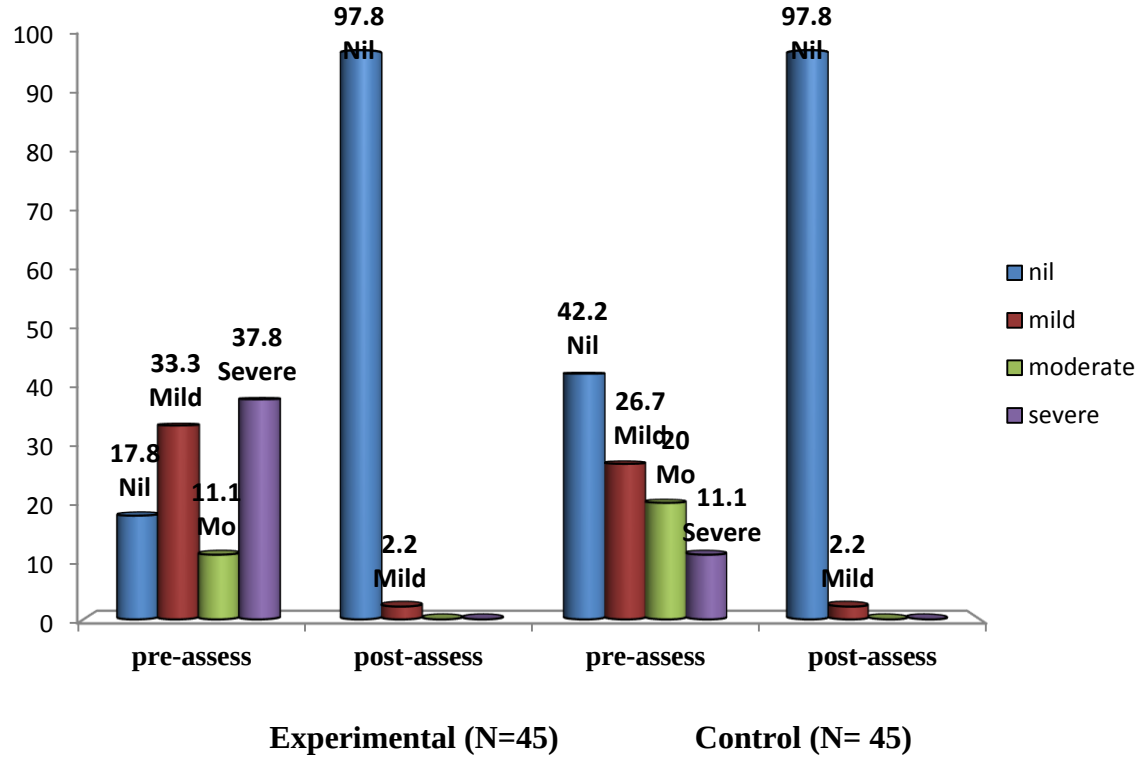


Figure 3 shows that 17 (37.8%) participants in the experimental group had severe anxiety, and 5 (11.1%) women had moderate anxiety at pre-assessment. In the control group, 5 (11.1%) participants had severe and moderate anxiety, and 9 (20%) women had mild anxiety at pre-assessment. At the time of post-assessment, 97.8% of women in both groups had no anxiety. However, the experimental group responded better than the control group when compared with the pre assessment score.

Effects of Bereavement Counseling

Table 2

Post assessment mean scores of psychological problems experimental and control groups (N=90)

Variables	Experimental group (N=45) Mean±SD	Control group (N=45) Mean±SD	Mean Diff.	95% CI	't'	df	P value
Grief	41.67 ± 6.97	46.62 ± 7.00	-4.96	-7.88 to 2.03	-3.36	88	0.001
Depression	8.53 ± 5.47	11.95 ±5.076	-3.42	-5.63 to 1.21	-3.08	88	0.03
Anxiety	5.98 ± 4.24	7.64 ± 0.06	-1.67	-3.41 to .072	-1.91	88	0.06

Table2 shows that by the time of post- assessment, the mean scores of grief, depression, and anxiety of the experimental group were lower than those of the control group. The mean score differences for grief and depression were statistically significant ($p < 0.05$) while the mean score difference for anxiety was above the threshold p value for statistical significance.

Discussion

The present study revealed that women with pregnancy loss reported psychological problems, such as grief, depression, and anxiety, at various levels, during pre and post assessment. In both control and experimental groups a similar number of women reported symptoms of grief at the pre-intervention assessment (mild – 26.7% & 24.4%, moderate – 22.2%, 26.7%, and severe – 22.2%, 24.4 (Figure 1). This finding was similar to the study done by Clauss, who reported that women experienced moderate to low level of grief following perinatal loss.[11]Keesee also stated that parents who lost their children had normative to severe grief which was related to the reasons for the death . [12]

Some of the grief symptoms experienced by these women during pre-assessment were sleeplessness (53%) at night. Even when they slept, their sleep was disturbed by dreams about the baby, or they woke up suddenly thinking of the baby. Similar findings have been

reported in the literature.[12, 13, 14] Another symptom was feeling of an empty space following the loss (experimental - 78% & control group – 71%) Women stated that when the baby was inside the womb they felt an attachment as the fetus was moving. Following the loss they had a feeling of emptiness, especially when they awoke suddenly from sleep. This finding is consistent with various other studies, which state that the majority of the women expressed that they woke up thinking that their child was alive and felt an emptiness when they remembered the real situation.[6,13,14-15]

Some women regretted not holding the baby after birth (experimental 56% & control 49%).The women who had held and seen their baby expressed that they had some satisfaction after looking at the baby and were able to remember the face of the child. This finding is supported by the study done on parents' experiences with hospital care after perinatal death, which stated that the parents of stillborn babies appreciated the time and the contact they had with their still born babies.[16]

The mean score of grief recorded in the experimental group at pre-assessment was 62.62 and 41.67 at post assessment. In the control group the mean scores were 59.56 and 46.62, respectively. The reduction in the mean scores was statistically significant ($p<0.001$) in both groups. The reduction in the experimental group was greater than in the control group and the difference was statistically highly significant with a p Value < 0.001. This finding is consistent with Swanson and colleagues, randomized trial that showed three sessions of couples' focused- nurse counselling intervention significantly hastened reduction of grief symptoms and grief distress in women.[17]

During pre-assessment, the majority of the women in both the groups had mild depression (control group 32,71.1%; experimental group 35, 77.8%). Clause has stated that women with perinatal loss had a high rate of depressive symptoms.[11]The mean score of depression in pre-assessment was 20.6, as compared to 8.53 at post assessment, in the experimental group. The difference in the mean score was highly statistically significant with a p Value < 0.001. Similarly, in the control group the mean score at pre-assessment was 20.24 and by post assessment it was 8.29. Again, the reduction in mean score was statistically highly significant, with a p Value < 0.001. A comparison of the reduction in depression scores recorded in the two groups shows a highly significant p Value < 0.001 reduction in the experimental group, as compared to the control group. This finding supports that of a randomized trial that showed women who received psychological intervention had a lower chance of being depressed.[18]

One of the major symptoms of depression was suicidal feelings, expressed as "not worth living" after the death of the baby, and were reported by several women (experimental 26.7%, control 22.2%). The Canadian Foundation for the Study of Infant Deaths found that 30% of the participants entertained suicidal thoughts after a stillbirth.[19]

In the experimental group 22 (48.9%) women experienced moderate to severe anxiety and in the control group 14 (31.1%) women had moderate to severe anxiety during pre-assessment. In the experimental group, the mean score for anxiety found at pre-assessment was 19.5. This had reduced to 5.98 by post assessment. The reduction was statistically highly significant, with a p Value < 0.001. Similarly, the mean score for anxiety in the control group reduced from 16.6 to 7.64, between pre-assessment and post assessment, and this was statistically highly significant, with a p Value < 0.001.The reduction in the mean anxiety scores was greater in the experimental group than in the control group (experimental 13.6, control 9.0) and this differential result was highly statistically significant, with a p Value < 0.001. A study done by Ierodiakonou et al., on early parental responses to sudden infant death, stillbirth, or neonatal death, reported that women experiencing a stillbirth are 3.9 times more likely to have high levels of anxiety at two months post-loss as compared to women who had babies.[20]During the interview most of the women enquired about risks and difficulties for subsequent pregnancy. A similar finding is reported by Sutan and Misham.[7]

Women with pregnancy loss experience various psychological problems immediately after delivery. They need supportive and protective care during and after hospitalization. They appreciate the concern of the staff during the time of distress. The study findings showed a reduction in psychological problems of women with bereavement counseling, after pregnancy loss.

Limitations

The experience of anxiety, depression, and grief are subjective phenomena. The Hamilton Anxiety Scale and the Hamilton Depression Scale were developed and validated in a Western setting and, therefore, may not be accurate in an Indian context. The nature of the study renders it impossible to eliminate investigator bias. The findings of this study cannot be generalized, since it was carried out in a single setting (a large teaching and referral hospital).

Conclusion and Recommendation

Pregnancy loss is a traumatic life event and one of the most painful forms of bereavements which frequently leads to psychological morbidities. The findings of the study should serve as a revelation for the midwives working in relevant hospital departments. Midwives who work with bereaved women must be helped to conceptualize the perinatal bereavement process. Awareness of such problems and the benefit of counselling can support the midwives to provide better care for such women.

Modern midwifery practice focuses more on evidenced-based care and this study provides evidence for specific improvements needed in midwifery care. In- service education for the midwives can improve their practice. Hospitals should make arrangements for the midwives in the obstetrics and gynecology department to have special training in bereavement counselling and ensure that it becomes standard policy to offer counselling to all women suffering late pregnancy loss. A bereavement cell can be established to provide a pool of trained midwives who would concentrate on supporting the bereaved women.

Midwifery educators must take it as a challenge to impart the knowledge and skills of perinatal bereavement to the students in the class room and encourage the students to practice these in the clinical setting. Being with a women following pregnancy loss and simply listening to their problems would itself make a difference in care and sensitize the students to the grieving process. Though these problems are difficult to remove completely, it is possible to minimize their effects and reduce the time taken for recovery, through appropriate counselling.

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Conflict of Interest

There is no conflict of interest

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