Impact of Cognitive Behavioral-Based Counseling on Grief Symptoms Severity in Mothers After Stillbirth
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Abstract

Background: An active intervention is necessary for the care and support of women who have experienced stillbirth.

Objectives: The aim of the present study was to determine the impact of psychological counseling on the severity of grief symptoms in mothers after stillbirth.

Methods: We conducted a semi-experimental study on 100 women who had experienced stillbirth in their most recent delivery in a Central Maternity Hospital affiliated to the University of Medical Sciences, Zahedan, Iran. Participants were randomly assigned to two groups: intervention (n = 50) and control (n = 50). The intervention group received four sessions of small-group psychological counseling over 2 weeks and the control group received the routine postnatal care. We evaluated the severity of grief symptoms in both the groups before the first counseling session as well as at the end of the fourth week following the final session (and at equivalent times in the control group) using the Perinatal Grief Scale. Data were analyzed using independent and paired t-tests, chi-square test, and analysis of covariance.

Results: The mean total grief symptom score and three subscale scores (active grief, difficulty coping, and despair) were significantly lower in the participants who received psychological counseling than in those who received the routine care (P < 0.05).

Conclusions: Counseling significantly reduces grief symptoms, allowing for faster transition from grieving and preventing complicated grief. It is, therefore, necessary to integrate psychological interventions into the care system for mothers.

Keywords: Counseling, Grief, Stillbirth

1. Background

Despite improvements in maternal care quality and worldwide expansion of facilities in the past few decades, there are still a large number of stillbirths every year. In 2015, 2.7 million babies worldwide were born dead (1). The incidence of stillbirth in developed countries is 10 per 1000, and in less developed countries it is more than 60 per 1000 (2). Pregnancy and childbirth are important and often joyful experiences in a woman’s life (3). In contrast, a stillbirth is a devastating event that causes long-term grief, comparable in intensity to the death of a child. In the community and even in some hospitals, there remains a stigma of non-acceptance and illegitimacy surrounding grief after stillbirth, resulting in this type of mourning being unique and particularly complex (1). Some hospitals are reluctant to show the stillborn baby to the mother or other family members; some others allow them to hold it; fathers often try to quickly forget the birth. Mothers have reported that support in hospitals after infant death does not meet their emotional needs, which further increases their and their family’s distress (4). These women endure difficult labor and are ready for breastfeeding, while they return home empty-handed. Other family members and friends avoid talking about the subject, resulting in the mother being unable to express her emotions. Thus, the mental health of the mother and her family can be severely affected (5).

Women who have experienced stillbirth are a medically high-risk group (6). After any delivery, the mother may suffer from complications such as changes in sleep and appetite, and feelings of guilt, stress, shame, and depression, and this is more likely in cases of stillbirth (7). Mental illness can occur after inadequate perinatal care and it is often related to feelings of guilt and self-blame (8). If there is doubt or ambivalence about the pregnancy, or the woman feels she has done something wrong during pregnancy that may have caused the stillbirth (such as exercise, poor diet or smoking), this may prolong the grief process. Difficulty in coping with negative emotions and
ongoing avoidance leads to social isolation (9). Stillbirth is associated with a more than threefold greater risk of depression than healthy live birth, and 44% of mothers suffer from signs and symptoms of posttraumatic stress disorder after stillbirth (10). Because 50% - 8% of women who have experienced stillbirth decide to become pregnant again (11), the negative psychological effects of the stillbirth may be carried through to the next pregnancy (1).

It is well documented that stillbirth is a risk factor for long-term psychological problems, but few studies have examined patient satisfaction with post-stillbirth care (4). A study by Geller et al. (2010) found that routine treatment and care for mothers who experienced stillbirth does not take into account the psychological problems and emotional reactions associated with the loss. Preparing the mother for emotions she is likely to experience, providing the information she requests, and allowing her to participate in decision-making are measures of satisfaction with care after stillbirth, and are often lacking (12).

Despite the known psychological vulnerability of women after a stillbirth, and the evidence that perinatal loss causes mental illness, few of these mothers receive adequate psychological support (9). In some institutions, educational pamphlets and care guides are given to grieving mothers, but their efficacy is rarely evaluated (13). A few clinical trials have addressed depression in women after perinatal loss, but studies of grief and its severity in such cases are lacking (9). Regarding intervention, some studies have investigated the impact of physical activity (14), online short-term intervention (4), individual counseling by telephone (6), and couple-based intervention (14) on the symptoms of depression, anxiety, and grief in a largely unfocused manner. The emphasis is mostly on mothers with live births and on physical health, less so on the psychological health of mothers after stillbirth. These mothers are often ignored in the medical health system, especially in hospitals, and in some cases, they may even face neglect and a lack of support. Considering the psychological vulnerability of mothers after stillbirth, there is an urgent need to provide psychological health services in these cases, including short-term and brief psychological interventions conducted face-to-face by a therapist. The aim of the present study was to determine the impact of psychological counseling on the severity of grief symptoms in mothers after stillbirth.

2. Objectives

The researchers conducted this study to determine the effect of cognitive behavioral-based counseling on grief symptom severity in mothers after stillbirth.

3. Materials and Methods

This study was a semi-experimental investigation in two groups. The study population comprised all women who had experienced a stillbirth and referred to the central maternity hospital affiliated to the University of Medical Sciences, Zahedan, Iran, between May and September 2016. Participants were recruited by continuous convenience sampling. Based on the inclusion criteria, patients over 18 years old, being literate, with no history of stillbirth or miscarriage in previous pregnancies, no history of mental disorders, and no other stressful events during the past year were included. The perinatal loss in the selected women also occurred at more than 22 weeks gestational age. Exclusion criteria were lack of participation in more than one grief and crisis counseling session or possible loss during the study. A sample size of 50 per group (100 in total) was determined from the mean and standard deviation of grief scale scores in a study by Kersting et al. (2013) (9). The confidence level was set at 95% and statistical power at 80%.

The data collection tool was a two-part questionnaire designed by Potvin et al. (1989). The first part includes demographic variables and information related to birth and stillbirth, and the second part is the perinatal grief scale (PGS). The questionnaire contains 33 items comprising three subscales (active grief, difficulty coping, and despair), each with 11 items. The scale is commonly used to assess grief in a perinatal loss such as through abortion, ectopic pregnancy, fetal death, and infant mortality (15). Scoring is on a 5-point Likert scale (where 1 represents “strongly disagree”; 2, “disagree”; 3, “neither agree nor disagree”; 4, “agree”; 5, “strongly agree”) except for items 11 and 32, which are reverse-scored. Scores are summed for each subscale, and the three subscale scores are summed to obtain the total score for the questionnaire. Thus, each subscale score ranges from a minimum of 11 to a maximum of 55, and the total score for the questionnaire is between 33 and 165. The questionnaire has been validated and used in the Iranian population. Reliability was evaluated by a test-retest coefficient (r = 0.8) and internal consistency using Cronbach’s Alpha was 0.96. Validity was assessed using different methods such as factor analysis, items correlation with the total score, and correlation with stress, anxiety, and depression (DASS-21 questionnaire). Validity and reliability of PGS were assessed upon 112 women with stillbirth experience as a part of this thesis.

Eligible women with prenatal loss were identified through the office for registration of births in the maternity hospital. Women who entered the study and intervention group had passed 7 - 10 days from their stillbirth. For randomization, first, cards containing the name
of the group (A: Control and B: Intervention) were prepared for all participants. These cards were arranged randomly. Then, a card was assigned to each of the eligible women elected. This was done until all the prepared cards finished. According to the address on file, they were invited to their local participating health center. After the study was explained to each participant and written consent was obtained, the women completed the questionnaire for the first time (pre-test). The women in the control group received no subsequent intervention. They were simply informed when they would be required to complete the questionnaire again (post-test). The intervention group received four sessions of psychological grief counseling at their local health center, in small groups, over 2 weeks.

The content and session numbers were determined based on other similar Psychoeducational interventions in other studies and using some principles and fundamentals of cognitive-behavioral therapy. The therapist was an MSc in counseling in midwifery that conducted the intervention under the supervision of a Ph.D. in Counseling. Given the number of eligible women elected within each health center, the number of each group varied between 4 and 9 participants. The structure and content of the counseling sessions were predetermined (Table 1). Four weeks after the last session, the post-test questionnaire was provided to all the participants at their homes.

3.1. Statistical Analysis

Data were analyzed using SPSS 20 (IBM Corp, Armonk, NY, USA). Central tendency and dispersion indices were determined using descriptive statistics. To evaluate the efficacy of grief counseling, within-group means were compared at the start and at the end of the study using paired t-test; the two groups were compared using independent t-test; qualitative variables were compared using the chi-square test and for determining the effect of the intervention, analysis of covariance was used. The level of significance was set at 0.05.

4. Results

The mean age of the intervention and control groups was 29.16 ± 6.88 and 29.90 ± 6.82, respectively. Independent t-test showed no significant difference in age between the two groups (P = 0.5). There were no significant differences in demographic characteristics between the two groups (P > 0.05). Support received from the husband did not differ significantly between the two groups (Table 2). 34% of the women in the intervention group and 31% in the control group had no children and the rest of the groups had at least one child at home. There was no significant difference between the two groups in terms of having children at home (P = 0.3).

Reduction in grief severity score in the three subscales (active grief, coping difficulty, and despair) was significantly greater in the group receiving psychological grief counseling than in the control group (Table 3). The mean decrease in overall grief severity was significantly greater in the group receiving grief counseling (-17.92 ± 17.11) than in the control group (-9.28 ± 11.48). By controlling for the confounding effect of pre-test scores, Analysis of Covariance Test showed that in the post-test, the mean grief severity score in the intervention group was lower than that in the control group (P = 0.0001), indicating that grief counseling effectively reduced grief symptoms in our participants.

5. Discussion

The aim of the present study was to determine the impact of psychological counseling on the severity of grief symptoms in mothers after stillbirth. At the end of the study, the overall severity of perinatal grief symptoms and the severity of grief symptoms in three subscales (active grief, coping difficulty, and despair) were significantly lower in the intervention group, who had received psychological counseling, than in the control group, who had received the routine postnatal care. It is well known that psychological interventions improve symptoms of grief not only in mothers who have experienced stillbirth but also in the general population (16, 17). In the present study, grief symptoms severity also reduced from the pretest to the posttest evaluation in the control group although participants in this group received no intervention. Considering that we conducted the study in the early weeks after stillbirth, and symptoms were severe, it seems that grief symptoms severity decreased over time even without intervention, but the reduction in severity was greater or faster because of receiving psychological counseling. This finding is consistent with those of previous studies (4, 18-20) that concluded symptoms of depression, grief, and stress in mothers may reduce over time, but will not disappear entirely without intervention.

Few studies have used psychological support and face-to-face counseling for reducing grief symptoms in mothers after stillbirth. Nikcevic and colleagues (2007) studied the effect of medical and psychological interventions on distress in women after abortion and found that psychological support decreases stress and grief (21). However, most interventional studies to date have been conducted with the aim of improving mental health and the psychological condition of mothers after stillbirth in the form of
non-face-to-face interventions. For example, Neugebauer and colleagues (2007) studied the impact of interpersonal consulting by phone after medical abortion and showed that the intervention can reduce symptoms of depression in these mothers (22). In addition, in a preliminary study, Kersting and colleagues (2011) used Internet-based cognitive behavioral therapy for 5 weeks to evaluate its effects in helping parents after pregnancy loss and indicated that this form of therapy has medium-to-large, relatively long-term effects (up to 4 months’ follow-up) on posttraumatic stress, grief, depression, and mental health (4). To our knowledge, the Kersting study is closest in methods to the present study; with the main differences, including that we provided patient-therapist interaction and our study had a shorter intervention period. Psychological interventions with the patient-therapist relationships show greater effectiveness than those without. For example, van der Houwen and colleagues (2010) showed that brief, internet-based, written, self-help intervention in grieving women, without therapist response, could reduce feelings of loneliness, but was not effective in reducing grief and depression (23). Another study by Kersting and colleagues (2013), subsequent to their preliminary study, showed that brief Internet-based intervention reduced posttraumatic stress, complicated grief, depression, and anxiety compared to the control group (13). Similar to our study, in two studies by Kersting, principles of cognitive and behavioral therapy were used, such as social sharing, cognitive restructuring, and self-confrontation, which may have increased the effectiveness of the intervention.

Some studies have assessed the role of the spouse in psychological interventions. Swanson and colleagues (2009) compared the effects of couple-based interventions over three sessions in four groups: in presence of a nurse, couples using a self-care method, couples using a combination of self-care and nurse presence, and a control group without any intervention (14). The results showed that couple-based intervention in presence of a nurse was the most effective method for eliminating grief symptoms. Unlike our study, the Swanson study involved the mother and the spouse, and our study showed that face-to-face interventions are more effective than non-face-to-face interventions in improving the psychological condition of mothers after stillbirth.

Other single-intervention, non-psychological approaches for relieving grief after a perinatal loss have also been evaluated. For example, mothers who took part in a physical activity such as yoga, jogging or walking had fewer symptoms of depression than those who did not engage in any physical activity (6), suggesting that physical interventions can also be effective in improving depression in grieving mothers. We, therefore, encouraged the participants in our intervention group to undertake physical activity.

The religious dimension in our intervention may also have contributed to its effectiveness. Kersting (2007) showed that the strength of attachment to religion and social support predicts a low grief score in the PGS in mothers with perinatal grief (24). Religion has an important role in adaptation to perinatal loss and reducing grief severity and psychological distress (25).

To our knowledge, the present study is the first to focus on psychological dimensions in the care and support of mothers with stillbirth, and it was conducted in a compact way. We employed the medical elements of emotional discharge, thought-emotion-behavior cycle, challenging negative thoughts, and finding meaning in loss, which are known effective factors in psychological intervention. A meta-analysis by Wittouck et al. (2011) found that cognitive behavioral interventions significantly reduced grief symptoms in controlled clinical trials (26). Other studies have used only pharmacological treatment methods, pharmacological and psychological methods, psycho-educational methods, or non-face-to-face psychological interventions such as the Internet- or telephone-based cognitive behavioral therapy. While, in the present study, we used a small group, face-to-face, cognitive behavioral counseling approach, which we believe is one of the strengths of the
Table 2. Demographic Characteristics of Intervention and Control Groups

| Variable          | Intervention | Control | Test Results |
|-------------------|--------------|---------|--------------|
| Sex of infant     |              |         | P = 0.6      |
| Male              | 25 (50)      | 28 (56) |              |
| Female            | 25 (50)      | 22 (44) |              |
| Total             | 50 (100)     | 50 (100)|              |
| Education         |              |         | P = 0.5      |
| Primary           | 13 (26)      | 13 (26) |              |
| Primary High-school| 9 (18)      | 4 (8)   |              |
| Secondary         | 11 (22)      | 13 (26) |              |
| High-school       | 17 (34)      | 20 (40) |              |
| Diploma           |              |         |              |
| Total             | 50 (100)     | 50 (100)|              |
| Abnormality       |              |         | P = 0.5      |
| Positive          | 8 (16)       | 6 (12)  |              |
| Negative          | 42 (84)      | 44 (88) |              |
| Total             | 50 (100)     | 50 (100)|              |
| Occupation        |              |         | P = 0.6      |
| Employed          | 35 (70)      | 37 (74) |              |
| Unemployed        | 15 (30)      | 13 (26) |              |
| Total             | 50 (100)     | 50 (100)|              |
| Delivery          |              |         | P = 0.3      |
| Normal Vaginal    | 34 (68)      | 38 (76) |              |
| Delivery          | 16 (42)      | 12 (24) |              |
| Total             | 50 (100)     | 50 (100)|              |
| Seeing the baby   |              |         | P = 0.1      |
| Seen              | 26 (52)      | 19 (38) |              |
| Not seen          | 24 (48)      | 31 (62) |              |
| Total             | 50 (100)     | 50 (100)|              |
| Cause of death    |              |         | P = 0.2      |
| Clear             | 27 (54)      | 33 (66) |              |
| Not clear         | 23 (46)      | 17 (34) |              |
| Total             | 50 (100)     | 50 (100)|              |
| Age of mothers    |              |         | 29.16 ± 6.88 | 29.90 ± 6.12 |
| Husband’s Support | 6.50 ± 1.59  | 6.84 ± 1.62 |            |
| Pregnancy duration, mo | 6.46 ± 1.50  | 6.64 ± 1.41 |            |

5.1. Limitations

The main limitations of the present study were the short period of counseling (four sessions over 2 weeks), lack of long-term follow-up, and the impossibility of blindness in the researcher and subjects, as well as conducting the intervention in the early weeks of grief when grief symptoms were relatively severe.

5.2. Conclusion

Negligence in hospitals and the lack of support from peers increase a mother’s vulnerability to mental illness after stillbirth, and there is an urgent need for the provision of mental health services in hospitals and medical centers for mothers who have experienced perinatal loss. The present interventional study showed that psychological counseling has a significant positive impact on reducing the severity of grief symptoms in the early weeks after delivery. While we acknowledge that combining cognitive behavioral approaches with specialized grief counseling may be difficult for some hospitals and service providers, we recommend that psychological interventions and physical exercise be integrated into care programs for mothers who have experienced perinatal loss, to help prevent complicated grief and prepare the mother for subsequent pregnancy.

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Footnotes

Authors’ Contribution: Both authors conceived the study. Ali Navidian contributed to the conceptualization of the study and study design, interpreted the data, and supervised the study. Zahra Saravani gathered the data, performed statistical analysis, and helped in drafting the manuscript. Both authors reviewed and edited the manuscript and have seen and approved the final draft.

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### Table 3: Grief Symptom Severity in the Intervention and Control Groups Before and After Psychological Grief Counseling

| Variable                        | Before          | After           | Changes         | Paired t test(Before-After) |
|---------------------------------|-----------------|-----------------|-----------------|----------------------------|
| Active grief                    |                 |                 |                 |                            |
| Intervention                    | 36.98 ± 8.68    | 30.60 ± 5.73    | -6.38 ± 6.30    | 0.0001                     |
| Control                         | 38.32 ± 6.84    | 34.88 ± 5.66    | -3.44 ± 3.75    | 0.0001                     |
| Independent t test              | 0.3             | 0.0001          | 0.006           |                            |
| Difficulty coping               |                 |                 |                 |                            |
| Intervention                    | 32.50 ± 7.61    | 26.84 ± 4.33    | -5.66 ± 5.73    | 0.0001                     |
| Control                         | 34.12 ± 6.64    | 32.10 ± 5.45    | -2.92 ± 4.17    | 0.0001                     |
| Independent t test              | 0.2             | 0.0001          | 0.008           |                            |
| Dispair                         |                 |                 |                 |                            |
| Intervention                    | 34.58 ± 8.31    | 28.70 ± 5.53    | -5.88 ± 6.11    | 0.0001                     |
| Control                         | 35.34 ± 6.97    | 32.42 ± 6.09    | -2.96 ± 5.02    | 0.0001                     |
| Independent t test              | 0.6             | 0.002           | 0.01            |                            |
| Total prenatal grief            |                 |                 |                 |                            |
| Intervention                    | 104.06 ± 24.00  | 86.14 ± 15.00   | -17.92 ± 17.11  | 0.0001                     |
| Control                         | 107.78 ± 19.60  | 98.50 ± 16.01   | -9.28 ± 11.48   | 0.0001                     |
| Independent t test              | 0.3             | 0.0001          | 0.004           |                            |

*Values are expressed as mean ± SD.*

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