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The Correlation between Post-Abortion Grief and Quality of Life in Females With a History of Abortion Visiting Health Centers and Hospitals of Shahid Beheshti University of Medical Sciences, Iran During Year 2016

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Abstract

Introduction: Grief is a common reaction of parents to abortion. It may be followed by various psychological complications that affect female's individual/social quality of life. This study aimed at determining the correlation between post-abortion grief and quality of life of females with a history of abortion.

Methods: This descriptive-correlational study was conducted during year 2016. Convenience sampling was applied to select 165 females with a history of abortion from health centers and hospitals affiliated to Shahid Beheshti University of Medical Sciences (Tehran, Iran). A demographic and fertility questionnaire, the Perinatal Bereavement Grief Scale, and the World Health Organization Quality of Life Questionnaire were used to collect data. Descriptive statistics and Pearson's and Spearman's correlation tests were administered to analyze the data. All analyses were performed using the SPSS 20 software.

Results: There was a significant relationship between quality of life and post-abortion grief ($r = -0.387$; $P < 0.001$), and the mean score of quality of life decreased with an increase in the intensity of post-abortion grief. Females with a history of abortion had a moderate level of post-abortion grief (mean score out of 100: 47.52 ± 9.01) and intensity of post-abortion grief in less than 3 months from abortion occurrence until completion of the questionnaire was at its highest level (with a mean and standard deviation of 421.3 ± 99.3) and declined over this perioed. However, there was no significant relationship between the intensity of the grief and the time of abortion, and desirable quality of life (mean score: 91.90 ± 14.43).

Conclusions: The findings of this study suggested an association between greater severe post-abortion grief and decreased quality of life, i.e. post-abortion grief had adverse effects on female's quality of life. Therefore, fertility health policy makers are recommended to develop appropriate measures to reduce grief and improve the quality of life of females after abortion.

INTRODUCTION

Abortion is one of the most common incidents, which leads to pregnancy loss. Annually, about 42 million abortions occur around the world [1]. Abortion means spontaneous or induced termination of pregnancy before the embryo reaches the capacity to live. Spontaneous abortion is one of the most common complications of pregnancy that occurs in 14% to 20% of pregnancies [2]. The exact number of abortions in

Iran is not known and it is estimated between 70.54 and 116.9 cases per 1000 live births [3]. Abortion is considered a stressful and threatening event in the life of a woman [4, 5]. Mothers are able to imagine their child at different times throughout the 3 months of pregnancy, and this feeling increases over time, and the relationship between the mother and the fetus is such that mothers consider their babies a real person [6]. In contrary to the general impression that the mother forgets the grief of losing the fetus immediately after its death, researchers believe that severe mental symptoms in mothers could last up to 12 months after perinatal death. Accordingly, doctors recommend that these people should not become pregnant from 6 to 12 months after the abortion [7, 8]. The results of Broen's (2005) study showed that 10% of females experience psychological distress 6 months after abortion, which is probably due to the attachment between the mother and the fetus during pregnancy [9]. Grief is a common experience for all humans, who are missing something or someone [10]. Grief can be affected by different variables including: the reason for loss of pregnancy, the amount of attachment to the missing child, the family and surrounding environment, the personality of the person and her ability to cope with progressive conditions, and social variables, such as cultural expectations and personal variables [11]. Post-abortion grief is a complex and multifaceted phenomenon that occurs following perinatal loss. Post-abortion grief is often mixed with mourning concepts [12]. For a mother, losing the fetus is the same as losing the baby; as the loss of the child could be the hardest experiences that may happen to the person and affects their mental and physical health in the short and long term [13]. Post-abortion grief can cause different kinds of mourning in parents [14], which may have many side effects in the lives of individuals. With increase in severity of the grief, these complications may become more complicated and severe [15]. There are controversial studies about the impacts of grief on mental illnesses. In some studies, grief is reported as one of the major risk factors for mental illness, so that more than 30% of females, who have experienced abortion also experience sorrow, depression, and anxiety; in 5% to 10% of cases this is due to the severity and continuity of depression symptoms [16], in 20% to 55% of the cases as a result of short-term depression [17], and in 10% to 15% of cases due to major depression, especially in voluntary pregnancies [16, 18]. However, Steinberg (2016) and Biggs (2013) believed that abortion per se does not lead to psychological complications [19, 20], rather factors, such as pre-abortion mental health, domestic violence, desire for pregnancy, and economic status affect the incidence of depression, anxiety, and anxiety symptoms [21, 22]. Short-term anxiety is found in 20% to 40% of women [23] after abortion, yet others believe that abortion as a traumatic and stressful factor causes psychological complications [24].

However, psychological complications of abortion may occur due to different reasons. The mental and physical problems of abortion could reduce the quality of life of the individual by affecting various aspects of life and by creating sexual and marital problems [25]. The definition of life quality presented by World Health Organization (WHO) contains 6 general dimensions, including physical health, psychological state, level of independence, social relationships, environmental situation, and spiritual dimensions [26]. Quality of life is a multifaceted and relative concept, affected by time and personal and social values [27]. The lives of married people and families are affected by quality of life, which includes the people's perception of their status in the life in terms of culture and the value system in which they live, as well as their goals, expectations, standards, and priorities [28]. Different methods of mourning in males and females and in particular in parents cause different manifestations of grief in couples, which can raise conflicts between them [29]. At the same time, various tensions as a result of grief could lead to different forms of parental conflicts, which mean these couples will face other problems when dealing with this crisis [30], and this can affect the quality of their life. The quality of life in people with an illness is focused on reflecting the individual's condition and on the meaning of his or her life from psychological, physical, and social dimensions [31]. Quality of life in medical examinations is a sign of health care quality and is considered as part of disease control programs [32]. Studies have shown that quality of life and physical-emotional and social performance in females, who have experienced abortion are lower than those without this experience [33]. It seems that fetal loss grief causes physical and psychological disorders, such as anxiety, sleep disorders, and depression in females, which could affect the quality of their life. Given the different value of fertility in different cultures and adverse impact of abortion on the quality of life, and emphasizing the importance of women's role in the family and society and the impact of their health on the coherence and promotion of quality of lives and given the lack of studies and contradictory results in this field, the present study was conducted to determine the correlation between post-abortion grief and quality of life in females with abortion experience, referring to Shahid Beheshti University of Medical Sciences during year 2016.

METHODS

The present study was a descriptive-correlational study, which was conducted from March 2015 to March of 2016 with the aim of determining the correlation between post-abortion grief and quality of life in 165 females with abortion experience. Taking advantage of similar studies and sample size formula for descriptive studies and considering $\alpha = 0.05$, $\beta = 0.20$, minimum

expected correlation coefficient of 0.3 and attrition rate of 20%, the sample size was estimated as 165 individuals. After obtaining the required licenses from the Ethics Committee for Medical Research with code 40, IR.SBMU.RAM.REC, 2016, from the International Branch of Shahid Beheshti University of Medical Sciences and obtaining a referral from the Department of Health and the head of the University Health Center, the researcher was provided a list of health centers (Shemiranat, North, East, Pardis) and hospitals supported by Shahid Beheshti University of Medical Sciences. After presenting the referral to the selected centers, which were selected by the cluster sampling method, and introducing himself and expressing the goals and subjects of the research, the sampling was conducted. Given the extent of the population and women's referrals to these centers, the convenience sampling method was used. The participants were ensured about confidentiality of the information and the right to withdraw at any stage of the research. Inclusion criteria were being an Iranian woman with abortion experience, residence in Tehran, age of 15 to 59, no history of known psychological illness (admitted to a hospital, under the supervision of a psychiatrist, and using drugs), abortion at a gestational age of 22 weeks or less, lapse of at least two weeks and a maximum of 3 years from the time of the abortion, no re-occurrence of pregnancy after the abortion, lack of known psychological and physical refractory disease, including disabilities, in spouses of the surveyed women, lack of a mishap in life over the past 6 months, and lack of referral to a counselor or trial centers before the abortion due to dispute with the spouse. Exclusion criteria included three indicators, inability to complete the questionnaires due to psychological pains, incomplete questionnaires or withdrawal from the study.

Data collection tools were personal and fertility data, Fetal-Perinatal grief Scale, and the Quality of Life Questionnaire. Fetal-Perinatal grief Scale, developed by Sereshti et al. (2015), has 75 questions. This scale has eight dimensions, including primary reactions, feelings of guilt, psychosomatic reactions, anger, insecurity, opposition, reduction in self-confidence, and acceptance of loss. Scoring was done according to a 6-point Likert scale, from completely disagree to completely agree. Completely agree and completely disagree items received scores of 6 and 1, respectively. The questions on acceptance of the loss were reverse scored, which was considered in the statistical analysis. The internal consistency of the tool was investigated with Cronbach's alpha, which was between 0.70 and 0.91 in all areas, and the total alpha coefficient of the scale was 0.89 [3]. Cronbach's alpha for Fetal-Perinatal Grief Scale was 0.97 in this study. In the present study, perinatal grief scores were calculated based on a 0 to 100 range, so that mild, medium, and severe areas were less than 33, between 33 and 66, and more than 66, respectively. The following formula was used to convert the scores to a 100 scale:

Score (100) = (Score– min)*100 / (max - min)

In this study, a short form of the Quality of Life Questionnaire (WHO, 2004) was used. This questionnaire includes 26 items; the first items evaluate quality of life in general and the second items evaluate health condition in general. Scoring of the quality of life questionnaire is based on a 5-score Likert Scale and the scores range from 0 to 100. A higher rating reflects a better quality of life. According to the obtained score, individuals' quality of life will be categorized in one of the 3 groups, undesirable (0 to 3.33), moderate (33.46 to 66.3), and desirable (66.4 to 100). In the present study, the Cronbach's alpha of WHO 26-item quality of life questionnaire was equal to 0.90. The researcher handed out demographic, socioeconomic status, quality of life questionnaires, and Fetal-Perinatal grief Scale to the clients with a history of abortion. Collected data was analyzed by the SPSS software version 20. For the purposes of the study, descriptive statistics, including frequency, frequency percentage, mean, standard deviation and Pearson and Spearman correlation tests were used.

RESULTS

The results showed that 1.8% of the abortions had occurred in less than 4 weeks of pregnancy, 32.1% between 4 and 6 weeks, 38.8% between 7 and 12 weeks, and 27.3% of the abortions had occurred between 13 and 22 weeks of pregnancy. The mean value of the interval between the incidence of abortion and the completion of the questionnaire was 10.5 months. In this study, 28 participants (17%) had systemic diseases, of which 29.24% individuals had skeletal disorders, 50% had endocrine diseases, 25% had blood disorders, 57.3% had respiratory diseases, and 14.7% had nervous system diseases. Also, from spouses of the participants, 13 individuals (7.9%) had a disease, of which 13 individuals (69.7%) had skeletal disorders, 15.46% had blood diseases, 15.38% had heart disease, and 30.77% had neurological diseases. Overall, 65.5% of the participants did not know the cause of abortion, and of the remaining 34.5%, who knew the cause of abortion, 26.31% had no fetal growth, 24.56% had intentional abortion, 1.76% had uterine myoma, placenta and cervical failure, 10.53% had trauma or accidents, 26.25% chromosomal abnormalities, and 28.77% reported other causes of abortion. Furthermore, 71.5% of the participants had not heard the sound of the fetal heartbeat and 61.2% had not seen their fetus images through sonography. Pregnancy termination was conducted in 63.6% of the participants with curettage and in other participants through medical treatment. Overall, 94.5% of the participants were Muslim and Shi'a, and the level of their religiosity was reported as moderate.

Table 1: Mean and Standard Deviation of the Demographic Characteristics of the Participants

Characteristics	Average	Standard deviation	Min	Max
Age of research units	31	6.61	18	48
Number of pregnancies	2.31	1.42	1	8
Gestational age	9.71	5.06	2weeks	22weeks
Abortion rate	1.53	1.05	1	8

Table 2: Number and Percentage of the Highest Frequency of Demographic Variables in the Research Units

	The most frequent	Number	Percentage
Women's Education	university education	67	40.6
Women's career	housewives	119	71.2
Nationality	Fars	84	50.9
Number of children	No child	76	46.1
History of previous marriage	Does not Have	148	89.7
family relationship with spouses	Does not Have	126	76.4
history of infertility	Does not Have	151	91.5
Wanted or Unwanted pregnancy	wanted of both parents	97	58.8
existence of abnormality in fetuse	were not aware	97	59.4
sex of aborted fetuses	Unknown	135	81.8

Table 3: Distribution of Post-Abortion Grief in Women with Abortion Experience

Grief	Number	Percentage	Total Mean	SD	Minimum	Maximum
Mild	71	43.0	18.78	10.14	2.13	32.27
Moderate	78	47.3	47.52	9.01	33.07	65.33
Severe	16	9.7	75.32	5.83	66.4	84.27
Total	165	100	37.85	20.59	2.13	84.27

Table 4: Mean and Standard Deviation of the Post-Abortion Grief during the Interval between Abortion Occurrence and Completion of the Questionnaire

Post-abortion grief during the interval between abortion occurrence and completion of the questionnaire	Mean	SD
An interval of less than 3 months from abortion occurrence	3.99	0.421
An interval of between 3 months and one day till 6 full months after abortion occurrence	3.81	0.072
An interval of between 6 months and one day till 12 full months after abortion occurrence	3.01	0.622
An interval of between 12 months and one day till 36 full months after abortion occurrence	2.76	0.259

Table 5: The Quality of Life Score in Females with Abortion Experience

Quality of life	Number	Percentage	Mean	SD	Minimum	Maximum
Undesirable	0	0	0	0	0	0
Average	49	29.69	66.61	8.03	51	88
Desirable	116	70.31	90.23	10.11	101	182
Total	165	100	91.90	14.43	51	182

As can be seen from Table 4, the severity of post-abortion grief had been in its peak during 3 months after abortion occurrence until the completion of the questionnaire and declined over time. The results showed that there was no significant relationship between severity of the post-abortion grief and abortion occurrence ($r = -0.28$) ($P < 0.871$).

DISCUSSION

The results showed that there was a negative and significant relationship between post-abortion grief and quality of life in women with abortion experience ($r = -0.387$) ($P < 0.001$). This means that with increase in post-abortion grief, quality of life decreases. Although so far no study has been conducted on the correlation between fetal-perinatal grief and quality of life, yet the results of Silverman et al. (2000), who examined the long grief after the death of the spouse, showed that long grief disrupts quality of life and leads to a reduction in social performance scores, mental health scores, and energy [34]. Rahbar et al. (2009) in a Cohort study examined the general health of people after abortion. The findings of their study suggested that abortion impacts incidence of physical disorders, anxiety and sleep disorders, depression and general health, so that psychological support will be essential for improving quality of life [35]. A descriptive cross-sectional study by Prommanert et al. (2004) in Thailand also showed the experience of grief in recently aborted females [36]. Yusufpour, Ahi, and Nasri (2015) indicated that grief

affects quality of life and psychotherapy based on improving the quality of life in patients with complicated grief reduced the anxiety of these individuals [37]. Nansel et al. (2005) also suggested that the women, who lose their pregnancy at an early stage have lower quality of life and higher depression and stress in comparison with woman at the same age group in the general population [33].

The results of the present study showed that post-abortion grief in the majority of participants was 66 to 33. Therefore, the severity of post-abortion grief in females with abortion experience was moderate. However, the results of Prommanert et al. (2004), contrary to the present study, showed that the majority of participants in the study experienced mild grief [36]. The reason for this possible contradiction could be attributed to the number of samples and the interval between abortion occurrence and completion of the questionnaire in the two studies, different tools used to evaluate grief and different values of childbearing in different cultures. In other words, Prommanert et al. investigated the severity of grief two weeks after abortion occurrence and applied a shortened scale of fetal-perinatal grief developed by Putwain et al., while in the present study, grief was investigated through fetal-perinatal grief scale developed in Iran and during 2 to 3 weeks after abortion occurrence. The results of the study showed that the quality of life of women with abortion experience with an average of 91.90 was at a desirable level. the results of the present study are inconsistent with the results of Zamani et al. (2013), who compared depression and quality of life in infertile, fertilized, and aborted females, and concluded that females with recurrent abortion and infertility have higher scores of depression and lower quality of life than fertile women [36], and the results of Rahbar et al., who indicated that the quality of life declines in women after abortion [38]. Concerning the probable causes of the contradiction, differences in sample size and the different tools used in these studies could be suggested.

CONCLUSIONS

The present study showed a negative and significant relationship between post-abortion grief and quality of life in females with abortion experience. Post-abortion grief occurs at different levels after abortion. Regardless of the time of its occurrence, being voluntary or involuntary or even the cause, abortion negatively affects different aspects of life quality, including mental, physical, and social health. To identify the factors decreasing women's quality of life could be the major goal of social, cultural, and familial support institutions. Therefore, it is recommended that screening in terms of grief severity should be done for all women experiencing abortion in order to detect vulnerable women and to achieve a heathy society through appropriate counseling and treatment. In addition, it is recommended for policy makers in the field of reproductive health and midwifery, by setting up appropriate programs and taking advantage of modern psychological and medical approaches, to try and improve quality of life and decline grief in this group of women. It is also suggested that in future studies, quality of life in women with abortion experience should be compared with women without this experience. The results showed that intensity of post-abortion grief was at its peak during 3 months after abortion occurrence and the interval of three months, and one day after abortion till 6 full months after abortion occurrence was in the next place and reduced over time. However, the results showed no significant relationship between severity of the post-abortion grief and the time of abortion occurrence. Therefore, psychological counseling at health centers is recommended for women experiencing abortion to reduce severity of post-abortion grief. Further studies with a greater sample size are also suggested.

Research Limitation

The lack of routine referral of aborted women to health centers was one of the limitations of the study, although the researcher tried to overcome this limitation by increasing the sampling time.

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