

Original Article

Association Between Levels of Alexithymia and Ways of Coping in Women Experiencing a Perinatal Loss

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Correspondence: Hulya Ozberk, PhD Associate Professor, Dokuz Eylul University Faculty of Nursing, Department of Obstetrics and Gynecology Nursing, Izmir, Turkey E-mail: hulya.ozberk@deu.edu.tr**Abstract****Background:** Perinatal loss is a traumatic experience, and alexithymia may complicate emotional responses such as grief and depression.**Aim:** This study aimed to examine the relationship between alexithymia levels and coping strategies in women who experienced perinatal loss.**Material and Methods:** This cross-sectional study included 110 women who experienced perinatal loss at a university hospital's obstetrics clinic between June 2019 and January 2022. Data were collected using a Sociodemographic Questionnaire, the Toronto Alexithymia Scale, and the Ways of Coping Questionnaire.**Results:** Perinatal losses occurred mostly in the first trimester (56.4%) and were primarily due to embryo/fetus-related factors (59.1%). Based on Toronto Alexithymia Scale, 47.3% were alexithymic (64.32 ± 4.10) and 28.2% non-alexithymic (45.83 ± 5.56). Non-alexithymic women used problem-focused coping (self-confident approach, seeking social support), while alexithymic women used emotion-focused coping (resigned and helplessness approaches). A moderate positive correlation was found between non-alexithymia and the optimistic approach ($r = 0.408$, $p = 0.023$), and a weak correlation between alexithymia and the resigned approach ($r = 0.246$, $p = 0.039$).**Conclusion:** Half of the women with perinatal loss had alexithymia and mainly used resigned and helpless coping strategies. As alexithymia increased, so did the use of resigned coping. Healthcare professionals should screen these women and support effective coping.**Keywords:** Alexithymia, coping skills, grief, perinatal loss.

Introduction

Perinatal loss can occur at any time from the implantation of the fetus up until one month postpartum (DeBackere et al. 2008). An estimated 23 million miscarriages occur every year worldwide. Nearly 1.9 million stillbirths occurred at 28 weeks of pregnancy or later worldwide in 2021. The latest data show that the global stillbirth rate was 13.9 stillbirths per 1,000 total births in 2022. This equates to 1 in 72 total births resulting in a stillborn baby, or one every 17 seconds. This number may have been underestimated, as stillbirths are often underreported. (UNICEF 2023). Worldwide, 20-25% of all pregnancies are lost due to miscarriage, ectopic pregnancy, stillbirth and neonatal death (Robinson 2014; Hutti et al. 2017). The Turkey Demographic and Health Survey (TDHS) reported that, in Turkey, the rate of miscarriage was 13.0%, stillbirth rate was 1.0 and perinatal mortality rate was 9.3 per thousand (TDHS 2018).

Loss of pregnancy is a life crisis with a bio-psycho-social and spiritual dimension that affects the mother and other family members. Perinatal loss is a challenging and traumatizing event for both women and men (Karaca and Oskay 2017). Women can experience severe shock, grief, loss, despair and disappointment before and after a perinatal loss (Steinberg et al. 2016) and liken the process to "staying afloat in the storm" (Fernández-Basanta et al. 2020). Thus, experience of a perinatal loss can lead to adverse emotions and pathologies in the long term if women cannot describe their feelings appropriately (Wright 2020). After the loss, women may develop symptoms of severe anxiety and depression as well as post-traumatic stress disorder (PTSD) (Bhat and Byatt 2016; Keten et al. 2015). Horesh et al. (2018) reported that after a perinatal loss, 33.3% of women develop PTSD. The same study also reported that the experience of perinatal loss, regardless of gestational age, causes depression in women, puts them at risk for PTSD, with 25% of women developing symptoms of PTSD one month after the loss. In most cases, these women and their families do not receive any special care after perinatal loss. Nurses who provide care for families during the perinatal and postnatal

period should assess families' reactions to the loss, support them in describing their feelings, and provide them with counseling to help them make important decisions.

The term 'alexithymia' was coined by Sifneos (1973) to describe a situation in which individuals are unable to identify or understand their feelings. This concept includes three personality traits. These are: (i) difficulty identifying and describing feelings, (ii) constricted imaginal processes, and (iii) externally oriented thinking style. Difficulty describing feelings is one of the most prominent traits of individuals with alexithymia. When alexithymics were told to describe their feelings, they ended up describing physical symptoms or did not understand the question at all. Constricted imaginal processes mean that alexithymics have a weak imagination and even when they occasionally dream, their dreams are realistic or logical. Externally-oriented thinking refer to alexithymics' tendency to place the emphasis on external reactions and allowing external factors to dominate their thoughts (Sifneos 1991).

Currently, alexithymia is not considered a personality disorder or a psychiatric condition. Gilanifar and Delavar (2017) examined the association between general symptoms of pregnancy and alexithymia and found high levels of alexithymia to be associated with existing psychopathology. Since alexithymia is known to co-occur with many psychiatric disorders, it is considered to be a permanent personality trait rather than a condition that develops after a clinical disorder (Bratis et al. 2009; de Timary et al. 2008; Reker et al. 2010). Alexithymia has also been associated with interpersonal problems, social isolation, insecure attachment, and maladaptive mechanisms for coping with stress (Besharat 2010). Identifying and understanding own emotions is an important part of stress management. Studies have found that alexithymic traits compound perceived stress (Kerr et al. 2004; Terock et al. 2019).

Previous studies have found that individual alexithymic traits lead to different health outcomes (Kajanoja et al. 2017; Kajanoja et al.

2019). In a study with pregnant women, Kajanoja et al. (2019) found that the externally oriented thinking dimension of alexithymia was associated with overweight and gestational diabetes in pregnant women. The same study suggested that future studies should clarify causality and examine potential mechanisms and associations with pregnancy outcomes and fetal health. To the best of our knowledge based on a review of national and international literature, no study has yet examined alexithymic traits among women experiencing a perinatal loss. In this study, we aimed to examine the association between levels of alexithymia and alexithymic traits and ways of coping among women experiencing a perinatal loss.

Materials and Methods

Type of study: This is a descriptive cross-sectional study.

Setting and participants: Study was conducted in the obstetric clinic of a university hospital between June 2019 and January 2022. Calculations using an effect size of 0.50, 80% power and 0.05 significance level, based on the stress scores reported by Lynn et al. (2011) using G*Power statistical software yielded a minimum sample size of 102. During the data collection process, the researcher reached 150 women who met the inclusion criteria, of whom 40 refused to participate in the study. The study was thus completed with 110 women. Women were included if they were over 18 years of age, experienced a perinatal loss for the first time and volunteered to participate in the study. Women who had a history of psychiatric illness and used any psychiatric medication were excluded from the study.

Data Collection Instruments: The data were collected using a "Sociodemographic form", the "Toronto Alexithymia Scale (TAS-20)" and the "Ways of Coping Questionnaire (WCQ)".

Sociodemographic form: It was consisted of 15 questions inquiring women's sociodemographic (age, education, working, etc.) and pregnancy characteristics (mode of conception, gestational week of the lost baby, etc.).

Toronto Alexithymia Scale (TAS-20): The scale was developed by Bagby et al. (1994) to

measure alexithymic traits in individuals and consists of 20 items scored on a 5-point Likert-type scale. It has three subscales: difficulty identifying feelings, difficulty describing feelings, and externally-oriented thinking. Higher scores on the scale indicate higher levels of alexithymia. The scale was adapted to the Turkish language by Gulec et al. (2009). A score of 51 and below is interpreted as absence of alexithymia, a score of 52-58 as borderline alexithymia, and a score of 59 and above as presence of alexithymia (Gulec et al. 2009; Gulec & Yenel 2010). The scale has a total Cronbach's alpha value of 0.78. This study found it to be 0.77.

Ways of Coping Questionnaire (WCQ): The questionnaire was developed by Folkman and Lazarus (1985) to examine cognitive and behavioral ways of coping used in stressful situations. It is a 4-point Likert-type scale and was adapted into Turkish by Sahin and Durak (1995). The Turkish version of the questionnaire contains 30 items. It is divided into subscales for problem-focused/active coping (self-confident approach, optimistic approach, seeking social support) and emotion-focused/passive coping (helplessness approach, resigned approach). Higher scores on a subscale indicate a more frequent use of the approaches elicited in that subscale to cope with stress. The sum of scores from the subscales of self-confident approach (scoring range: 7-28), optimistic approach (scoring range: 5-20) and seeking social support (scoring range: 4-16) represent the "problem-focused/active coping" skill (scoring range: 16-64 points), while the sum of scores from the subscales of helplessness approach (scoring range: 8-32) and resigned approach (scoring range: 6-24) represent the "emotion-focused/passive coping" skill (scoring range: 14-56 points). Cronbach's alpha values for the subscales vary, with a value of 0.62-0.80 for the self-confident approach, 0.64-0.73 for the helplessness approach, 0.49-0.68 for the optimistic approach, 0.47-0.72 for the resigned approach and 0.45-0.47 for seeking social support. The present study found a Cronbach's alpha value of 0.74 for the self-confident approach, 0.70 for the helplessness approach, 0.66 for the optimistic approach, 0.68

for the resigned approach, and 0.42 for seeking social support.

Statistical analysis: The study data were evaluated using SPSS for Windows version 22 software. Sociodemographic characteristics, and levels of alexithymia were presented in numbers and percentages. The data were found to be non-normally distributed. Ways of coping in relation to levels of alexithymia were assessed using the Kruskal-Wallis test, and correlation between mean scores was examined using the Spearman's correlation test. Statistical significance was set at $p < 0.05$.

Ethical approval: The study was approved by the Non-Interventional Ethics Committee of Dokuz Eylul University (Date: 03.04.2019, Decision No: 2019/08-28). Participants provided written and verbal informed consent. The study was conducted in accordance with the Declaration of Helsinki.

Results

The sociodemographic characteristics of the women are presented in Table 1. The participants had a mean age of 30.72 ± 6.63 years, 39.1% of them were primary school graduates, 79.1% were not working, 55.5% had an income equivalent to expenses and 88.2% lived in nuclear families. 82.8% of the women had no history of genetic diseases, 90% were not on any regular medication and 56.4% had a regular diet. The mean number of pregnancies was 2.78 ± 1.48 , the mean number of living children was 1.86 ± 0.81 and 24.5% of the women were smokers.

Table 2 shows the characteristics of the pregnancies that ended in perinatal loss. Of these pregnancies, 60.9% were planned and 89.1% were the result of natural conception. 82.7% of the women attended regular pregnancy check-up, 36.4% attended pregnancy check-up once a month and 95.5% were not exposed to any teratogen. Of the perinatal losses, 56.4% occurred at 12 weeks and before. Perinatal loss was caused by embryo/fetus-related factors in 59.1% of the cases. 47.3% of the women saw the dead embryo/fetus (Table 2). Table 3 provides a comparison of the participants in terms of ways of coping in relation to alexithymia levels. Of the women

47.3% had alexithymia, 24.5% had borderline alexithymia and 28.2% did not have alexithymia. The women with alexithymia had higher mean scores for difficulty identifying feelings, difficulty describing feelings, externally-oriented thinking and higher total scores for alexithymia compared to those without alexithymia and those with borderline alexithymia. Women without alexithymia had higher mean scores for problem-focused coping strategies including the self-confident approach ($KW = 8.128$, $p = 0.017$) and seeking social support ($KW = 8.614$, $p = 0.013$) subscales compared to women with borderline alexithymia and women with alexithymia. Women with alexithymia had higher mean scores for emotion-focused coping strategies including the helplessness approach ($KW = 15.436$, $p = 0.000$) and resigned approach ($KW = 12.142$, $p = 0.002$) subscales compared to women with borderline alexithymia and women without alexithymia. Women without alexithymia were found to use problem-focused coping strategies, while women with alexithymia used emotion-focused coping strategies.

Table 4, which shows the association of mean scores from the TAS and the WCQ shows a moderate positive correlation between the absence of alexithymia based on the TAS and the optimistic approach subscale of the WCQ ($r = 0.408$, $p = 0.023$). Women without alexithymia were found to be more likely to use the optimistic approach as a coping strategy. Presence of borderline alexithymia based on the TAS had a moderate positive correlation with the resigned approach subscale of the WCQ ($r = 0.440$, $p = 0.022$). Women with borderline alexithymia were found to make a greater use of the resigned approach in coping. Presence of alexithymia based on the TAS had a weak positive correlation with the resigned approach subscale of the WCQ ($r = 0.246$, $p = 0.039$). Alexithymic women were found to make a greater use of the resigned approach as a coping strategy (Table 4).

Discussion

To the best of our knowledge, the present study is the first to investigate the association between

levels of alexithymia and ways of coping among women experiencing a perinatal loss. The study found that approximately half of the women who experienced a perinatal loss had alexithymia. The participants' mean total score from the TAS-20 was similar to the mean alexithymia scores reported by Le et al. (2007) for women during the antepartum and postpartum period and to those reported by Glanifar et al. (2017) for pregnant women. In

the limited number of studies found in the literature, the sample group consisted of women with low educational and socioeconomic levels. Presence of alexithymia can be said to be affected by social, economic and cultural factors. Indeed, from a cultural perspective, the common tendency to hide and suppress emotions among women in Turkey may have led to the high rates of alexithymia found in the present study.

Table 1. Sociodemographic characteristics of the women who have experienced a perinatal loss (n: 110)

	n	%
Age		
19-25	30	27.3
26-35	52	47.2
36-45	28	25.5
Educational status		
Primary	43	39.1
Junior high	25	22.7
Senior high	24	21.8
Undergraduate	18	16.4
Working status		
Working	23	20.9
Not working	87	79.1
Income status		
Income less than expenses	49	44.5
Income equivalent to expenses	61	55.5
Type of family		
Nuclear family	97	88.2
Extended family	13	11.8
History of genetic disease		
Yes ^a	19	17.2
No	91	82.8
Regular medication		
Yes ^b	11	10.0

No	99	90.0
Smoking status		
Smoker	27	24.5
Non-smoker	83	75.5
Nutritional status		
Regular	62	56.4
Irregular	48	43.6
	$\bar{x} \pm SD$	Min-Max
Number of pregnancies	2.78 ± 1.48	1-6
Number of living children	1.86 ± 0.81	1-4
Number of cigarettes smoked per day (n: 27)^c	12.22 ± 6.19	3-20

^aType II Diabetes: 6, Hypertension: 5, Cancer: 3, Hypothyroidism: 3and Hepatitis B: 2,

^bAntihypertensives: 2, Thyroid hormone:3, Anticoagulants: 2, Insulin:1, ^cNumber of Cigarettes.

Table 2. Characteristics of lost pregnancies (n: 110)

	n	%
Planned conception		
Yes	67	60.9
No	43	39.1
Type of conception		
Natural	98	89.1
Via Fertility Treatment	12	10.9
Pregnancy check-up		
Regular	91	82.7
Irregular	19	17.3
Frequency of pregnancy check-up attended		
Once a week	13	11.8
Once every two weeks	29	26.3
Once a month	40	36.4
Not attended pregnancy check-ups	28	25.5
Exposure to teratogen during pregnancy		
Yes	5	4.5
No	105	95.5
Gestational week when perinatal loss occurred		

Week 12 and before	62	56.4
Weeks 13-20	33	30.0
Weeks 21-27	10	9.1
Week 28 and after	5	4.5
Cause of perinatal loss		
Embryo/Fetus-related factors	65	59.1
Maternal factors	19	17.3
Unknown	26	23.6
Did the mother see the lost embryo/fetus		
Yes (late gestational week, embryo/fetus with physical integrity preserved)	52	47.3
No (early gestational week, embryo/fetus with physical integrity not preserved)	36	32.7
Not wanted to see the embryo/fetus	22	20.0

Table 3. Comparison of participants' coping strategies by level of alexithymia (n: 110)

	Alexithymia absent (Score: 51 and lower) n:31		Borderline alexithymia (Score: 52-58) n:27		Alexithymia present (Score: 59 and higher) n:52		Test and p value
	$\bar{x} \pm SD$	Min- Max	$\bar{x} \pm SD$	Min- Max	$\bar{x} \pm SD$	Min- Max	KW; P
Toronto Alexithymia Scale							
Difficulty Identifying Feelings	13.83±3.42	7-22	17.77±3.81	10-26	23.92±2.82*	18-29	73.048; 0.001
Difficulty Describing Feelings	10.38±2.99	5-15	14.07±2.25	9-19	16.34±2.58*	11-22	54.895; 0.001
Externally-Oriented Thinking	21.61±3.13	14-27	23.03±3.33	18-32	24.05±2.54*	17-29	12.550; 0.002
Total Score	45.83±5.56	30-51	54.88±2.22	52-58	64.32±4.10*	59-75	93.605; 0.001
Ways of Coping Questionnaire							
Problem-Focused/Active Coping							
Self-confident approach	22.29±2.84*	17-28	21.59±3.12	14-28	20.28±2.92	14-28	8.128; 0.017

Optimistic approach	14.67±2.30	10-19	14.22±2.02	10-19	14.03±2.77	5-19	0.805; 0.669
Seeking social support	11.35±1.92*	8-15	10.77±1.90	6-16	10.17±1.82	6-16	8.614; 0.013
<i>Emotion-Focused/Passive Coping</i>							
Helplessness approach	19.64±3.77	12-28	20.29±4.33	12-29	22.73±3.09*	15-28	15.436; 0.000
Resigned approach	14.32±3.43	6-21	15.18±3.45	7-23	16.71±2.63*	9-22	12.142; 0.002

*Groups causing the difference.

Table 4. Association of participants' mean scores on the toronto alexithymia scale and the ways of coping questionnaire (n: 110)

	Toronto Alexithymia Scale					
	Alexithymia absent (Score: 51 and lower)		Borderline alexithymia (Score: 52-58)		Alexithymia present (Score: 59 and higher)	
	r*	p	r*	p	r*	p
Ways of Coping Questionnaire						
Self-confident approach	-0.206	0.267	0.153	0.445	-0.088	0.267
Optimistic approach	0.408	0.023	-0.172	0.390	-0.049	0.366
Helplessness approach	0.259	0.159	0.360	0.065	0.121	0.197
Resigned approach	-0.152	0.413	0.440	0.022	0.246	0.039
Seeking social support	-0.216	0.244	0.006	0.977	-0.060	0.336

* Spearman's Correlation Test.

People with high levels of alexithymia have been reported to be more adversely affected by common stressors compared to those with low or no alexithymia (Lyvers et al. 2020). Le et al. (2007) found that women with high levels of alexithymia were at a high risk for depression during pregnancy. A systematic review found that alexithymia was associated with negative thoughts and emotions during the grieving process (Lobb et al. 2010). When alexithymic people who have difficulty describing their feelings are diagnosed with complicated grief, they may experience symptoms of a more

severe depression and grief compared to non-alexithymic people (Kaya & Aydemir 2021). The prevalence of alexithymia found among the women examined in the present study leads us to hypothesize that these women are more likely to experience depression during the postpartum period. This hypothesis is supported by the results showing that as the level of alexithymia increased, the mean scores from the TAS-20 subscales for difficulty identifying feelings, difficulty describing feelings and externally-oriented thinking increased in parallel. Nurses, midwives and other health professionals should

screen women experiencing a pregnancy loss for alexithymia and depression and help them describe their feelings.

Although there are many ways to cope with stressful or challenging events, Lazarus and Folkman (1984) stated that they can be categorized into two main types. These categories are also considered as two commonly known basic functions of coping. These are regulating stressful emotions (emotion-focused coping) and changing the problematic relationship between the individual and the environment that causes stress (problem-focused coping). The present study found that women who experienced a perinatal loss and who had alexithymia used emotion-focused coping strategies (resigned and helplessness approach). This result is similar to the reports of Yilmaz and Beji (2010) who found that women considering termination of pregnancy exhibited more symptoms of depression and used a resigned and helplessness approach as coping strategies. Another study conducted with women with and without a history of pregnancy loss found that as the number of losses increased, the likelihood of seeking social support decreased and adopting a resigned behavior increased (Yilmaz & Beji 2013). It has been reported that women who have high levels of alexithymia and who adopt a resigned attitude in response to stressful situations may have a higher tendency to wait, give up and attribute the events to fate instead of fighting against the underlying causes of stress (Kahramanol 2016). In Muslim countries, death is believed to be under the control of God's will. In Islamic literature, Muslim women experiencing a loss are encouraged to endure loss with fortitude, as patience is promoted as a great virtue in Islam for the consolation of the bereaved upon the death of a fetus, infant or child (Hedayat 2006). The resigned and helplessness approach observed among women in the present study is likely to have been influenced by their beliefs and alexithymic traits.

Ability to recover from challenging situations, to adapt to new situations and to prevent taxing situations from turning into a mental illness plays an important role in coping with post-

traumatic stress and adapting to life (Zara 2011). Considering that the ability to identify feelings and describing them enables individuals to better cope with stress and emotional experiences, alexithymics may be said to be at greater risk for having difficulty coping with stress (Besharat 2010). A study with adult women concluded that alexithymia was positively correlated with emotion-focused coping strategies and negatively correlated with seeking social support and optimistic coping strategies. These findings indicate that alexithymia and problem-focused/active coping rarely coexist (Vingerhoets et al. 1995). Likewise, some other studies associated alexithymia with maladaptive coping (Besharat 2010; Wood & Doughty 2013). Correlation analyses in some studies suggested that emotion-focused coping, compared to other coping styles, was more strongly associated with alexithymia and put individuals at greater risk for post-traumatic stress disorder (Hassija et al. 2012; Madan et al. 2015; Pineles et al. 2011). Indeed, the present study found a significant and positive correlation between the presence of alexithymia and the resigned approach, one of the dimensions of emotion-focused/passive coping, which overlaps with difficulty identifying and describing feelings, the basic component of the concept of alexithymia. Alexithymia causes difficulties in both internal experiences and in relationships with others. A possible interpretation of this association is that when problem-focused coping approaches fail to help identify own feelings, passive coping strategies emerge as a more accessible option.

Limitations: Firstly, the use of self-report scales cannot objectively reveal the reality in full. Moreover, the sample consisted of a small group of women who experienced a perinatal loss and who presented to a single-center healthcare institution, which means that the results cannot be generalized to all women experiencing a perinatal loss.

Conclusion: One of the salient results of the study is that approximately half of the women who experienced a perinatal loss had alexithymia. In case of perinatal loss, women with alexithymic traits adopt a resigned and

helplessness approach to cope with stress. As the levels of alexithymia increase, women become more likely to use passive coping approaches (resigned and helplessness approach).

In trying to provide a holistic care, nurses and other health professionals, who remain in close proximity to patients in all circumstances, should assess how women experiencing a perinatal loss react to this event and help these women describe their feelings. Given that alexithymic traits compound perceived stress, women experiencing a pregnancy loss should be checked for alexithymic traits and receive early interventions if needed as part of secondary care. Health professionals working in the field of women's health should use appropriate ways of communication to approach women experiencing a perinatal loss, support and inform them in a manner tailored to alexithymic traits.

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