Fall 12-15-2021

Recognizing the Unique Needs of Women with Varied Pregnancy Loss Histories

Shalini Venkat
svenkat@mail.stmarytx.edu

Recognizing the Unique Needs of Women with Varied Pregnancy Loss Histories

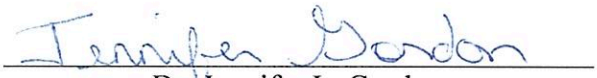
by

Shalini Venkat

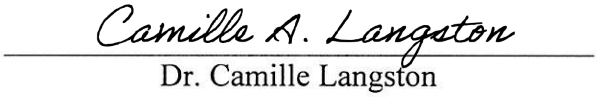
HONORS THESIS

Presented in Partial Fulfillment of the Requirements for
Graduation from the Honors Program of
St. Mary's University
San Antonio, Texas

Approved by:



Dr. Jennifer L. Gordon
Associate Professor of Psychology, University of Regina



Dr. Camille Langston
Director, Honors Program

Abstract

Infertility is associated with psychological distress; women who experience miscarriage and recurrent miscarriage experience additional grief and trauma. Unfortunately, available psychological interventions for infertility are of limited efficacy; a new intervention is therefore needed. However, little is known about the psychotherapy preferences of women with infertility, and particularly whether miscarriage history is associated with treatment preferences. Thus, the current study evaluated the psychotherapy preferences of women with infertility as a function of miscarriage history. 410 North American women were recruited to complete an online survey assessing their quality of life, depressive symptoms, anxiety, and preferences of 14 psychotherapy techniques endorsed by the American Psychological Association. An age adjusted ANCOVA revealed no significant differences in anxiety, depression, and emotional, relational, and social quality of life between women with varied pregnancy loss histories (i.e., no losses, 1 loss, 2+ losses), though significant differences in mind-body quality of life were detected (p = .044). Furthermore, binary logistic regression analyses of ranked psychotherapy techniques illustrated a preference for 'challenging core beliefs' and 'de-escalation and restructuring for couples.' Results were partly consistent with previous work that speaks to the efficacy of specific therapy approaches, though further investigation is needed to fully understand variance in participant preferences. Ultimately, the results of the current study will be wielded to create an infertility-specific psychological intervention tailored to the needs of those with pregnancy loss histories.

Keywords: pregnancy loss, infertility, psychotherapy preferences, interventions

Recognizing the Unique Needs of Women with Varied Pregnancy Loss Histories

Approximately 12% of women of reproductive age within the United States have difficulty getting pregnant or carrying a pregnancy to term (Chandra & Stephen, 2013). Furthermore, among those who are able to achieve pregnancy, an estimated 10% may experience miscarriage, or the loss of a fetus within the first trimester (American College of Obstetricians and Gynecologists [ACOG], 2018). About 1% of women may experience recurrent pregnancy loss, defined as two or more consecutive losses (ACOG, 2019).

Several causes have been ascribed to infertility and pregnancy loss, including genetics, reproductive systems disorders, disease, anatomical anomalies, hormonal issues, and lifestyle factors (e.g., nutrition, stress) (Anwar & Anwar, 2016; Direkvand-Moghadam et al., 2013; Ford & Schust, 2009). Despite this, up to 30% of individuals experience unexplained infertility, and no cause can be ascribed to 50-75% of cases of recurrent pregnancy loss (ACOG, 2019; Gelbaya et al., 2014), indicating that certain causal factors remain unknown.

Psychological Outcomes Related to Infertility and Miscarriage

Both infertility and pregnancy loss have been associated with a number of psychiatric outcomes. Infertility has been associated with psychological distress (Downey & Mckinney, 1992; Morrow et al., 1995) anxiety, and depression (Domar et al., 1992; Kee et al., 2000; Klemetti et al., 2010; Lakatos et al., 2017). Pregnancy loss, also linked to negative psychiatric outcomes (Farren et al., 2018; Haghparast et al., 2016), has been associated with additional grief, stress, and trauma (Farren et al., 2016; Krosch & Shakespeare-Finch, 2017) which may persist over time (Kersting et al., 2009; Volgsten et al., 2018). Women with recurrent pregnancy loss have exhibited similar psychological outcomes and worse quality of life as women experiencing infertility without recurrent loss (Adib-Rad et la., 2019; Kolte et al., 2015; Tavoli et al., 2018).

Although similarities exist across conditions, reactions to miscarriage may vary, and tailored psychosocial interventions are needed to address these individual differences (Murphy et al., 2012).

Need for New Psychosocial Interventions

In light of the high levels of distress seen among women experiencing infertility or pregnancy loss, effective interventions for improving distress in these populations are needed. However, interventions targeting infertility have yielded mixed outcomes. While several studies have indicated that psychological interventions may modestly improve pregnancy outcomes, evidence supporting their effects on psychological symptoms is poor, with randomized controlled trials showing no benefit of interventions on psychological outcomes (Frederickson et al., 2015; Zhou et al., 2021). Though a small number of studies have tested the impact of psychological interventions for distress related to pregnancy loss, these have been associated with only small effects on depression and anxiety (Huberty et al., 2017; Shaohua & Shorey, 2020). Thus, there is a need for a new psychosocial intervention for individuals suffering from infertility or miscarriage.

Patient-Centered Interventions

Integrating multiple psychotherapy approaches may be key to supporting individuals experiencing infertility or loss, as it allows for therapy tailored to the needs of individual patients (Castonguay et al., 2015; Zarbo et al., 2016). As aforementioned, individuals who experience infertility or loss may struggle with a variety of psychiatric symptoms, and tailored therapies may be key to addressing comorbidities. Individually tailored interventions have enhanced the effectiveness of self-guided internet-based therapy for anxiety and depression, further suggesting

that tailored interventions would be well-suited to those suffering from infertility or loss (Carlbring et al., 2011; Johansson et al., 2012).

Another consideration that is important to developing patient-centered care is personal preference. Few studies have explored the preferences of individuals who have experienced infertility or loss previously (Koert et al., 2015; Latifnejad Roudsari & Allan, 2011; Musters et al., 2011, 2013), though these variables may be important for treatment utilization and retention (Farmer et al., 2020). No previous study has examined preferences in the context of psychotherapy approaches, the foci of the current study.

Purpose of Study

The purpose of the current study was to compare the psychological profiles of infertile women with versus without a history of pregnancy loss as well as to evaluate potential differences in preferred content for an infertility-specific psychological intervention. It was predicted that those with a history of pregnancy loss or multiple pregnancy losses would exhibit higher rates of anxiety and depression than those with no history of loss(es). However, given that this is the first study of its kind to examine psychotherapy content preferences in women with infertility, no hypotheses were made regarding preferred content.

Method

Participants

Women who were currently struggling to conceive or had a history of infertility were recruited from online support groups. Those who were eligible for the study lived in either the United States or Canada and did not identify as cisgender men. Eligible participants were also either currently struggling to conceive without any medical intervention, currently undergoing

fertility treatments, or had previously experienced infertility. 410 women between the ages of 18 and 45 (M = 33.62) completed the survey, of which 195 participants reported having a history of infertility.

Measures

Demographics and Reproductive History

Participants were asked to self-report their age, race, ethnicity, marital status, sexual orientation, education level, employment status, individual, family income, and reproductive health history. Regarding their reproductive health, participants were prompted to specify any known sources of infertility, miscarriage/abortion history, how long they had been trying to conceive, why they stopped trying to conceive (if applicable), infertility treatment history, and which health care professionals they had sought help from.

Quality of Life

Participants' quality of life was measured through the Fertility Quality of Life (FertiQoL) tool (Boivin et al., 2011). The 24-item Core FertiQoL assesses the impact of fertility problems across mind-body, emotional, relational, and social domains. The tool assesses negative physical symptoms, cognitive/behavioral disruptions, and emotions; marital relationships or partnerships; and social interactions experienced by those struggling to conceive. Scores, when reversed, summed, and scaled, range from 0 to 100. Higher scores are indicative of a higher quality of life. As the FertiQoL is designed for those with fertility problems, participants who reported experiencing infertility in the past were not instructed to complete the measure.

Psychopathology

Symptoms of anxiety and depression were also assessed among all participants. Anxiety was assessed through the 7-item Generalized Anxiety Disorder questionnaire (GAD-7) (Spitzer et al., 2006). Possible scores ranged from 0 to 21 with higher scores being indicative of more severe anxiety. Depressive symptoms were assessed through the 9-item Patient Health Questionnaire (PHQ-9) (Kroenke et al., 2001). Possible scores ranged from 0 to 27 with higher scores indicating more severe depressive symptoms.

Psychological Technique Preference

Five evidenced-based psychotherapy approaches endorsed by the American Psychological Association for the treatment of anxiety, depression, chronic illness, and relationship problems were identified (American Psychological Association, Presidential Task Force on Evidence-Based Practice, 2006). These approaches comprised of Cognitive Behavioral Therapy (CBT), Interpersonal Psychotherapy (IPT), Acceptance and Commitment Therapy (ACT), Mindfulness-Based Cognitive Therapy (MBCT), and Emotionally Focused Therapy (EFT). These techniques were then broken down into 14 psychotherapy techniques (see Appendix A) and defined for a lay audience in collaboration in collaboration with patient advisors. To assess preference, participants were given technique summaries and asked to report how helpful they thought the technique would be. They then had to rank their top five most liked and disliked techniques.

Procedure

This project received ethical approval through the University of Regina's Institutional Review Board. After being recruited and providing informed consent, participants were invited to complete an online survey. The survey confirmed their eligibility to participate in the study

and featured questions regarding participants' demographics, fertility history, quality of life, anxiety, depressive symptoms, and relationship satisfaction. Participants were then provided with summaries for 14 psychotherapy techniques and asked to rate how useful they thought the technique would be to themselves and others. Afterwards, they ranked their 5 most liked and disliked techniques. Data were analyzed with version 27 of IBM's SPSS.

Results

Participant Characteristics

As seen in Table 1, the majority of participants were cisgender women who lived in the United States. Most were Caucasian, heterosexual, married, highly educated, and worked full time. Average annual earnings ranged from $70,000-89,999 (*SD* = 2.0), and average family incomes were $113,000 or greater (*SD* = 1.3). For the most part, number of pregnancy losses was unrelated to demographic characteristics, with the exception of age. Specifically, participants with 2+ losses were found to be older relative to the two other groups.

Table 1

Demographic Data by Loss History

Variable	Overall (*N* = 352)		No Losses (*N* = 182)		1 Loss (*N* = 87)		2+ Loss (*N* = 83)		Group difference
	n	%	*n*	%	*n*	%	*n*	%	*p* value
Gender									.628
Woman	351	99.7	181	99.5	87	100	83	100	
Genderqueer/Gender Non-Conforming	1	0.3	1	0.5	0	0	0	0	
Sexual Orientation									.168
Heterosexual	304	86.4	153	84.1	75	86.2	76	91.6	
Homosexual	5	1.4	2	1.1	2	2.3	1	1.2	
Bisexual	39	11.1	23	12.6	10	11.5	6	7.2	
Other	4	1.1	4	2.2	0	0	0	0	
Race									.557

White	308	87.5	161	88.5	73	83.9	74	89.2	
Black	3	0.9	1	0.5	0	0	2	2.4	
Hispanic/Latino	4	1.1	2	1.1	0	0	2	2.4	
Asian	13	3.7	7	3.8	4	4.6	2	2.4	
Indigenous	1	0.3	1	0.5	0	0	0	0	
Other	6	1.7	2	1.1	3	3.4	2	1.2	
Marital Status									.158
Single	4	1.1	3	1.6	0	0	1	1.2	
Cohabitating	23	6.5	15	8.2	7	8.0	1	1.2	
Married	324	92.0	163	89.6	80	92.0	81	97.6	
Divorced/Separated	1	0.3	1	0.5	0	0	0	0	
Education Level									.941
High School	5	1.4	1	0.5	3	3.4	1	1.2	
Some University	12	3.4	8	4.4	1	1.1	3	3.6	
Bachelor's Degree	149	42.3	78	42.9	34	39.1	37	44.6	
Master's Degree	101	28.7	53	29.1	26	29.9	22	26.5	
Doctorate	51	14.5	24	13.2	15	17.2	12	14.5	
Some Trade School	11	3.1	4	2.2	3	3.4	4	4.8	
Trade School	23	6.5	14	7.7	5	5.7	4	4.8	
Employment Status									.584
Full-time	268	76.1	142	78.0	64	73.6	62	74.7	
Part-time	21	6.0	9	4.9	7	8.0	5	6.0	
Student	13	3.7	8	4.4	3	3.4	2	2.4	
Sick, Parental, or Other Leave	24	6.8	15	8.2	5	5.7	4	4.8	
Unemployed by Choice	15	4.3	4	2.2	4	4.6	7	8.4	
Unemployed or Laid Off	11	3.1	4	2.2	4	4.6	3	3.6	
Annual Income									.923
< $19,999	29	8.2	13	7.1	8	9.2	8	9.6	
$20,000-34,999	30	8.5	19	10.4	7	8.0	4	4.8	
$35,000-49,999	34	9.7	16	8.8	9	10.3	9	10.8	
$50,000-69,999	81	23.0	43	23.6	21	24.1	17	20.5	
$70,000-89,999	62	17.6	29	15.9	13	14.9	20	24.1	
$90,000-112,999	41	11.6	21	11.5	12	13.8	8	9.6	
$113,000 and <	58	16.5	33	18.1	12	13.8	13	15.7	
No Response	13	3.7	4	2.2	5	5.7	4	4.8	
Family Income									.399
$20,000-34,999	5	1.4	1	0.5	3	3.4	1	1.2	
$35,000-49,999	10	2.8	5	2.7	4	4.6	1	1.2	
$50,000-69,999	28	8.0	12	6.6	8	9.2	8	9.6	
$70,000-89,999	27	7.7	16	8.8	5	5.7	6	7.2	
$90,000-112,999	61	17.3	32	17.6	14	16.1	15	18.1	
$113,000 and <	210	59.7	111	61.0	51	58.6	48	57.8	
No Response	9	2.6	3	1.6	2	2.3	4	4.8	

Country									.377
Canada	89	25.3	50	27.5	23	26.4	16	19.3	
United States	262	74.4	132	72.5	64	73.6	66	79.5	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	
Age (in years)	33.6	3.9	33.0	3.6	33.8	4.0	34.7	4.1	.023*

*****$p < .05$

Psychological State

Given the observed group differences in age, it was decided that age would be included as a covariate in all analyses examining the effect of pregnancy loss on psychological outcomes (i.e., quality of life, anxiety, and depression). Thus, a one-way ANCOVA was conducted for each outcome. The results, including the adjusted means and standard errors, are presented in Table 2. As can be seen, a group difference in age was found such that participants with 2+ losses had significantly worse mind-body quality of life relative to women with no losses. Participants with only one loss were no different than the other two groups, however. There were no group effects on any of the other psychological outcomes.

Table 2

Age Adjusted Means and Standard Errors for Psychological Outcomes by Loss History

Variable	No Losses (N = 113)		1 Loss (N = 62)		2+ Losses (N = 56)		Group difference p value
	M_{adj}	*SE*	M_{adj}	*SE*	M_{adj}	*SE*	
Total FertiQoL	63.6	1.7	63.3	2.3	60.1	2.4	.461
Emotional FertiQol	12.7	0.4	13.2	0.6	11.1	0.7	.051
Mind-Body FertiQoL	16.8	0.4	15.6	0.6	14.9	0.7	.044*
Relational FertiQoL	17.2	0.4	17.4	0.6	17.3	0.6	.965

Social FertiQoL	17.6	0.5	17.3	0.6	16.0	0.7	.154
Anxiety Scores (GAD-7)	8.0	0.5	8.7	0.7	6.7	0.7	.123
Depression Scores (PHQ-9)	14.5	0.5	15.0	0.6	14.0	0.7	.546

*$p < .05$

Psychotherapy Technique Helpfulness

Among all participants, the 'addressing complicated grief' technique was perceived to be most helpful (*M(SD)* = 6.3(2.7)), and the 'exposure' technique was perceived to be the least helpful (*M(SD)* = 3.1(2.7)). Since age was not found to be correlated with perceived helpfulness of any of the psychological techniques (ps > .05), it was decided that a simple ANOVA would be conducted to determine the relationship between pregnancy losses and perceived helpfulness of each of the techniques. These analyses revealed that one's pregnancy loss history had a significant effect on how helpful the 'addressing complicated grief' technique was perceived to be, $F(2, 272) = 5.83$, $p < .01$. Post hoc comparisons using the Tukey HSD test demonstrated that the average perceived helpfulness of therapy utilizing this technique was significantly higher for participants who had experienced two or more pregnancy losses ($n = 64$, *M(SE)* = 7.1(0.3)) than the participants who had experienced no losses ($n = 132$, *M(SE)* = 5.8(0.2)). No significant differences in perceived helpfulness were found for other psychotherapy techniques (*ps* > .05)

Most Liked Psychotherapy Techniques

Binary logistic regression analyses were conducted to investigate the relationship between pregnancy loss(es) experienced (categorized as 0, 1 or 2+ losses) and whether or not a particular psychotherapy technique appeared in that participant's top five most liked techniques. These models were statistically significant for the following techniques: 'challenging core

beliefs' [$\chi^2(2, n = 352) = 10.25, p = .006$], 'de-escalation and restructuring for couples' [$\chi^2(2, n = 352) = 10.25, p = .006$], and 'addressing complicated grief' [$\chi^2(2, n = 352) = 10.25, p = .006$].

As shown in Table 3, pregnancy loss history (i.e., experiencing a single loss or two or more losses versus no losses) contributed significantly to these models. Participants with no history of loss were less likely to rank 'challenging core beliefs' as one of their most liked techniques in comparison to those who had experienced a single loss (*OR* = 2.55) or two or more losses (*OR* = 2.73). Participants who experienced two or more losses were also more likely to rank 'de-escalation and restructuring for couples' as a most liked technique (*OR* = 2.39) in comparison to those with no loss history. Participants who experienced a single loss were less likely to rank 'addressing complicated grief' as a most liked technique (*OR* = 0.35) than those with no loss history.

Table 3

Logistic Regression Predicting Likelihood Psychotherapy Technique is Ranked One of Top Five Most Liked

		B	*SE*	Wald	*df*	*p*	*OR*	95 CI *OR*	
								LL	UL
Challenging Core Beliefs	No Losses			9.02	2	.011			
	1 Loss	0.94	.33	7.92	1	.005**	2.55	1.33	4.88
	2+ Losses	1.00	.37	7.41	1	.007**	2.73	1.32	5.62
De-escalation and Restructuring for Couples	No Losses			10.39	2	.006			
	1 Loss	-0.03	.35	0.01	1	.923	0.97	0.49	1.90
	2+ Losses	0.87	.36	5.72	1	.017*	2.39	1.17	4.87
	No Losses			13.66	2	.001			

Addressing Complicated Grief	1 Loss	-1.05	.28	13.62	1	.000***	0.35	0.20	0.61
	2+ Losses	-0.58	.32	3.29	1	.070	0.56	0.30	1.05

*$p < .05$. **$p < .01$. ***$p < .001$.

Most Disliked Psychotherapy Techniques

Additional binary logistic regression analyses were conducted to investigate the relationship between pregnancy loss(es) experienced and participants' top five most disliked psychotherapy techniques. The 'interpersonal inventory & communication analysis ' model was statistically significant, $\chi^2(2, n = 352) = 8.16$, $p = .017$. Participants who experienced two or more losses were significantly more likely to rank 'interpersonal inventory & communication analysis' as one of their top five most disliked techniques ($B = 1.15$, $SE = .45$, Wald = 6.69, $p = .010$) than those with no loss history. More specifically, those who experienced two or more losses were 3.17 times more likely to rank 'interpersonal inventory & communication analysis' as a disliked technique.

Discussion

The current study aimed to assess differences in psychological state and psychotherapy technique preferences between infertile women with versus without a history of pregnancy loss. As the first to examine psychotherapy preferences among women with infertility, the results of this study will be used to build an infertility-specific psychological intervention tailored to patient needs.

Our results were somewhat supportive of our hypothesis. When adjusted for age, mind-body quality of life was significantly worse for participants who experienced two or more losses than those who experienced no losses. In other words, those who experienced two or more losses

reported significantly more negative physical symptoms and cognitive behavioral disruptions related to fertility issues. These findings are consistent with extant literature, which has generally found multiple losses to be predictive of poor fertility quality of life outcomes (Li et al., 2020). However, loss history had no bearing on group differences in anxiety levels, depressive symptoms, and the other domains of quality of life (i.e., emotional, relational, social) despite the additional grief and trauma these groups experience (Farren et al., 2016; Krosch & Shakespeare-Finch, 2017). Previous research partly aligns with these findings. That is, studies have found anxiety and depressive symptoms to be heightened in the presence of post-traumatic stress disorder (Barbano et al., 2019; Spinhoven et al., 2014). Conflictingly, research has also found grief to be distinct from anxiety and depression and predictive of poor quality of life (Boelen & Prigerson, 2007; Boelen & van de Bout, 2005). Nonetheless, these findings are novel, as previous research has failed to distinguish how quality of life and psychiatric symptoms vary by the number of losses experienced within an infertile sample.

Regarding psychotherapy preference, participants who experienced two or more losses preferred the ‘challenging core beliefs’ and ‘de-escalation and restructuring for couples’ techniques and those who experienced a single loss preferred the ‘challenging core beliefs’ technique in comparison to those with no loss history. Of relevance, previous research suggests that pregnancy loss may result in core belief disruptions (Krosch & Shakespeare-Finch, 2017). For women who had experienced pregnancy loss, core belief challenge was linked to posttraumatic growth (Freedle & Kashubeck-West, 2021). Thus, the ‘challenge core beliefs’ technique may have seemed well-suited to the needs of individuals with pregnancy loss histories. Furthermore, participants may have preferred the ‘de-escalation and restructuring for couples’ technique if they experienced relationship difficulties in response to their loss. Previous literature

indicates pregnancy loss may contribute towards relationship strain due to incongruencies in grieving, discordant coping, and additional misunderstandings (Wing et al., 2001). These techniques were derived from the cognitive behavioral and emotionally focused therapy approaches, respectively. Both approaches have proven successful among populations with histories of infertility and loss (CBT, Domar et al., 2000; Faramarzi et al., 2008; Kersting et al., 2011; Nakano et al., 2013; EFT, Soltani et al., 2014).

The 'addressing complicated grief' technique was perceived to be the most helpful by those with a history of two or more losses, though it was significantly less likely to be ranked in participants' top five liked techniques. This discrepancy may indicate participants' recognition that the technique would be helpful but a reluctance to engage in the therapy themselves—perhaps due to sociocultural factors such as the stigma surrounding perinatal grief and seeking therapy (Breen et al., 2018; Greil et al., 2010; Markin & Zilcha-Mano, 2018).

Among all psychotherapy techniques, 'interpersonal inventory & communication analyses' was significantly more disliked by participants who experienced two or more losses versus those with no loss history. This technique derives from interpersonal therapy (IPT), which has previously proven helpful for those with infertility or loss history (Koszycki et al., 2012; Johnson et al., 2016). However, some women have described negative social support experiences after a loss (Bellhouse et al., 2018). These poor experiences may have led participants to be reluctant to partake in therapy focused on mending past relationships. The 'exposure' technique was considered the least helpful, as is consistent with previous work which suggests those dealing with infertility or loss cope through avoidance (Jordan & Revenson, 1999).

A few limitations have affected the results of this study. First, the study's participants were primarily white and cisgender, thereby limiting the generalizability of the study.

Furthermore, as the current study assessed archival data, several key variables were unable to be investigated fully. Measurement of relationship satisfaction, grief, trauma, and other sociocultural variables may have provided context to participants' psychotherapy preferences.

Future Work & Clinical Implications

Future studies should continue to gauge the psychotherapy preferences of individuals with histories of loss and recurrent loss, particularly with a more diverse sample. Future work should also distinguish how psychotherapy preferences relate to additional variables, such as relationship satisfaction, grief, trauma, stress, culture, and coping styles—all of which have been associated with pregnancy loss and infertility experiences previously.

The current study lays the foundation for the development of a patient-centered psychosocial intervention for individuals with infertility and pregnancy loss histories. Results suggest that a tailored intervention should include the following techniques into its curriculum: 'challenging core beliefs' and 'de-escalation and restructuring for couples'. 'Exposure' and 'interpersonal inventory and communication analyses' should be avoided, and 'addressing complicated grief' should be incorporated in with caution.

Ultimately, a new psychosocial approach is needed to support the diverse needs of individuals with infertility, as previous interventions have proven ineffective. The preliminary findings offered by the current study should be built upon to ensure such an intervention can be designed and implemented with infertility and loss patients' best interests in mind.

Appendix A

Techniques Derived from Evidence-Based Psychotherapy Approaches

Technique (therapeutic approach)	**What this would look like**	**Purpose/Rationale**
Cognitive restructuring (CBT)	The therapist teaches the client to identify the kinds of thoughts that contribute to their depressive or anxious feelings and, together, they look at how realistic those thoughts are. For example, the therapist and client might look at evidence for and against the thought "IVF will never work" given the client's age, diagnosis, history, medical advice received, etc. Over time, the client learns to question their thoughts on their own, without the therapist's help.	Sometimes individuals going through infertility have extreme negative thoughts such as "I'll never have a child" or "My partner would be better off with someone else", which are not always entirely based on reality but that contribute to negative mood. The goal of this technique is to help the client challenge inaccurate thoughts and replace them with more balanced thoughts, leaving clients feeling less hopeless and distressed.
Challenging core beliefs (CBT)	This approach is similar to the one just described but the focus is more on the deep-seated beliefs that people hold about themselves, other people, and their world. For example, a person might have a core belief that "nothing ever works out for me" or "I am unlovable" that have only been strengthened through the experience of infertility. The therapist and client work to identify the core beliefs that the client holds, what might have contributed to the development of those beliefs, and how they might have been influenced through the experience of infertility. They then work towards challenging those core beliefs and replacing them with more positive ones.	Major life events, such as infertility, can have a powerful influence on core beliefs, for better or worse. Negative core beliefs, whether they developed because of infertility or were previously held but strengthened through the process of infertility (e.g., nothing ever works out for me), can deeply influence a person's day-to-day interpretations of events, making them more prone to extreme negative thoughts and mood.

Behavioural activation (CBT)	The therapist and client examine the client's schedule and discuss what activities have been dropped or engaged in less because of an increased focus on infertility. They then work to reintegrate these previously enjoyed activities into the client's life, addressing any worries the client might have about doing that. They then discuss what impact engaging in these activities then has on the client's mood.	Infertility can be so all-consuming that individuals experiencing it often spend less time on activities they used to enjoy. At the same time, the process of trying to conceive can impose restrictions on certain enjoyable activities (e.g., travel, vigorous exercise). This restriction of activities then has a negative effect on their mood. Re-engaging in those activities where possible or exploring new activities can introduce a much-needed break from thoughts of infertility and can provide a boost in mood.
Exposure (CBT)	Women struggling with infertility often report that it can be upsetting to be in a situation where they're exposed to babies, pregnant women, or young children. This can create problems because a woman might either avoid these situations and becomes socially isolated or endure these situations but with a lot of distress. To help women tolerate these situations with less distress, the therapist and client work together to create a hierarchy of upsetting triggers or situations that contribute to increasing amounts of discomfort. For example, low on the hierarchy might be watching a diaper commercial and high on the hierarchy might be attending a baby shower. The therapist and client then work on having the client "expose" herself to the items on the hierarchy, one at a time and starting at the bottom. The client might watch the diaper commercial every day until it has no effect on her mood anymore, at which point she moves up to the next item on the hierarchy.	Research suggests that avoidance of babies, pregnant women, and children in the context of infertility predicts worse mood. We believe that in avoiding these things, women may be isolating themselves from their loved ones or missing out on activities they could otherwise be enjoying. It may also be that in avoiding these triggers, the triggers become more distressing. In research on phobias and other anxiety disorders, for example, avoiding feared objects or situations has been found to increase fear of these objects and/or situations. In contrast, exposing oneself to feared triggers over and over again reduces their psychological impact over time.
Problem Solving (CBT)	This technique focuses on the client's approach to solving the many	The stress of a major life event such as infertility can be

	problems that arise in the context with infertility (e.g., deciding on a treatment approach, potential financial strain with fertility treatments, managing doctor's appointments). The therapist teaches the practical aspects of good problem solving, such as focusing on one problem at a time and not making decisions when under stress. At the same time, the therapist works with the client to manage their negative emotional reactions throughout the problem solving process, such as pessimism and anxiety.	exacerbated when an individual uses maladaptive coping strategies to cope with the day-to-day stressors that result from that major life event. For example, rather than focusing on one step or problem at a time, an individual might get ahead of themselves and think "and if this treatment cycle doesn't work, then we'll do this, and if that one doesn't work, then we'll do that, and if that one doesn't work…", becoming overwhelmed and hopeless. Others might take the opposite approach and try not to think about problem solving at all – instead, they feel depressed and hopeless but don't take constructive actions to solve the issue.
Diaphragmatic breathing (CBT)	This type of breathing involves contracting of the diaphragm, expanding the belly, and deepening of inhalation and exhalation, which results in slower breathing while maximizing the amount of oxygen in the blood. The therapist teaches the client to engage in diaphragmatic breathing as a way of relaxing when they're feeling very tense. Often, it's done while the client is sitting comfortably in a chair with their eyes closed. Outside of session, the client would be instructed to use this technique when they're feeling overwhelmed with emotion.	Diaphragmatic breathing has been shown to reduce anxiety and lower stress hormone levels. It could therefore be used to reduce stress in the context of infertility
Scheduling worry time (CBT)	The therapist instructs the client to set aside a certain amount of time daily (e.g., 30 minutes once or twice daily) to devote to their ongoing worries about infertility. For example, this time could be devoted to researching potential treatments, budgeting for fertility treatments, or simply contemplating what life might be like without children. Throughout the day, whenever an infertility-related worry	Often women with infertility are consumed with infertility-related worries throughout the day and this interferes with their ability to engage in and enjoy their daily lives. In problems like generalised anxiety, scheduling 'worry time' has been shown to reduce the amount of time spent worrying overall. It may therefore have the same benefit for infertility.

	pops up outside of 'worry time', the client is encouraged to keep track of it on a 'worry list', to be saved for the next designated 'worry time'.	
Mindfulness meditation (MBCT/ACT)	In session, the therapist instructs the client to sit quietly and practice paying attention in the moment to their breathing, body sensations or thoughts without judgment. Outside of session, the client practices this using pre-recorded guided meditation sessions. Over time, as the client develops this skill, the therapist instructs them to use the same approach to unpleasant and sometimes painful thoughts and emotions. For example, a client might be instructed to purposefully think about their fears surrounding never being able to carry a child and to use the apply the same non-judgmental approach to observe the thoughts without becoming overwhelmed by them.	Mindfulness meditation help people create distance between themselves and their thoughts so that they're able to observe them without having a knee-jerk reaction to them. Over time, mindfulness helps people to cope better with stress on a day to basis.
Cognitive defusion (ACT)	The therapist has the client complete several exercises aimed at demonstrating the idea that thoughts are not reality - simply having a thought does not make it true. The client practices recording and examining their thoughts on a day to day basis, reminding themselves that these thoughts are simply the products of their mind and are not to be taken literally. Not cognitive restructuring.	Distress is often due, in part, to a tendency to take all thoughts at face value. For example, the passing thought "I will never be a mother" is experienced as reality and therefore has a powerful negative effect on one's emotions. The purpose of this approach is to help the person consider their passing thoughts (which can often be overly pessimistic and negative) with a grain of salt.
Values clarification and committed action (ACT)	The therapist explores with the client what aspects of life they value the most (e.g., career, family, health) and whether their current day-to-day life is consistent with what the client values. The therapist and client would also examine whether any values had been undermined by their infertility (e.g., avoidance of social settings undermining valued relationships with	In other chronic conditions, identifying one's values and taking steps to live in line with those values despite the limitations that their illness presents has been shown to have positive psychological effects. Individuals with infertility have been shown to spend less time engaged in activities that they previously found

	friends and colleagues). The therapist then uses this information to help the client set goals and take actions that enrich the person's life.	meaningful because dealing with infertility is so all-consuming.
De-escalation and restructuring for couples (EFT)	This approach is intended for couples whose intimate relationship has been negatively impacted by infertility. The therapist would meet with the couple, observe their pattern of communication, and help them identify the communication patterns that are not working well. The therapist also helps each partner become more aware of the feelings that are contributing to their ways of interacting with their partner so that they can communicate those feelings in a more honest way. Ultimately, the therapist helps the couple communicate their feelings in a way that improves the relationship.	Infertility can often create distance between partners for a number of reasons, including differences in ways of coping with stress. An increase in arguments and decrease in closeness with one's partner can exacerbate the stress related to infertility.
Interpersonal inventory & communication analysis (IPT)	The therapist carefully reviews the important people in the client's life, the quality of those relationships, and how these relationships might have been impacted by the diagnosis or treatment of infertility. Communication analysis is then used to overcome difficulties in the relationships that the client wishes to improve. The therapist asks the client to recount a difficult social encounter related to infertility, such as an upsetting conversation with a family member who has made an insensitive remark about the client's infertility. The therapist and client dissect the interaction to understand the related thoughts and feelings and the client's interpretation of the others' thoughts and feelings. They then discuss how a future interaction could be improved. If the client wishes, role play can be used to allow the client to practice being	Often, women with infertility find that their relationships with their loved ones are negatively impacted by infertility. For example, there might be an increase in arguments with one's husband, distancing from a friend who is pregnant, or bitterness towards a family member who gives unsolicited advice. This loss of social support may worsen the stress of infertility. The goal of communication analysis is to repair damaged relationships and increase closeness with loved ones. Research shows that good social support is very important in helping individuals cope with stress, including the stress of infertility.

	assertive in a way that helps to repair the damaged relationship. Role playing could also be used when a client wishes to share her diagnosis with a friend or family member but is apprehensive about it.	
Establishing social supports (IPT)	In a case where the client has few people in her life that she feels comfortable sharing her diagnosis with, the focus in therapy would be on creating new opportunities. This could mean reaching out to someone who's already in the client's social circle but with whom the client hasn't shared her diagnosis. Alternatively, this could mean developing new relationships with people who have similar experiences (e.g., through infertility support groups).	The goal is to increase the number of people that a woman can turn to for emotional support as she struggles with the stress of infertility.
Addressing complicated grief (IPT)	This approach would apply to a situation where a woman has a difficult time coping with the loss of a pregnancy or failed cycle. The therapist and client would explore the client's feelings and interpretations surrounding the loss. The therapist would also meet with the couple to talk about how the partner has been coping with the loss and how the client and her partner can best support each other going forward. If the client is single, the partner can be replaced with another close loved one, such as a parent, sibling, or close friend.	Often, grief is worse when there are unresolved issues that need to be talked about and processed. For example, sometimes grief is more severe when an individual has beliefs about who is at fault for a loss, such as when she blames herself or a medical professional. Or issues arise when two members of a couple have different ways of coping with a loss and that leads to misunderstanding and distancing. Becoming aware of these issues and addressing them doesn't eliminate the pain associated with a pregnancy loss or failed cycle but can make the situation easier to accept and recover from. Improving the couple's communication about the loss means that they will have each other to turn to for emotional support as they continue to grieve.

References

American College of Obstetricians and Gynecologists. (2018). ACOG Practice Bulletin No. 200: Early Pregnancy Loss. *Obstetrics & Gynecology*, *132*(5), e197–e207. https://doi.org/10.1097/AOG.0000000000002899

Adib-Rad, H., Basirat, Z., Faramarzi, M., Mostafazadeh, A., & Bijani, A. (2019). Psychological distress in women with recurrent spontaneous abortion: A case-control study. *Turkish Journal of Obstetrics and Gynecology*, *16*(3), 151–157. https://doi.org/10.4274/tjod.galenos.2019.88899

Anwar, S., & Anwar, A. (2016). Infertility: A review on causes, treatment and management. *Infertility*, *2*(6), 5.

Barbano, A. C., van der Mei, W. F., deRoon-Cassini, T. A., Grauer, E., Lowe, S. R., Matsuoka, Y. J., O'Donnell, M., Olff, M., Qi, W., Ratanatharathorn, A., Schnyder, U., Seedat, S., Kessler, R. C., Koenen, K. C., & Shalev, A. Y. (2019). Differentiating PTSD from anxiety and depression: Lessons from the ICD-11 PTSD diagnostic criteria. *Depression and Anxiety*, *36*(6), 490–498. https://doi.org/10.1002/da.22881

Bellhouse, C., Temple-Smith, M. J., & Bilardi, J. E. (2018). "It's just one of those things people don't seem to talk about..." women's experiences of social support following miscarriage: A qualitative study. *BMC Women's Health*, *18*(1), 176. https://doi.org/10.1186/s12905-018-0672-3

Boelen, P. A., & Prigerson, H. G. (2007). The influence of symptoms of prolonged grief disorder, depression, and anxiety on quality of life among bereaved adults. *European Archives of Psychiatry and Clinical Neuroscience*, *257*(8), 444–452. https://doi.org/10.1007/s00406-007-0744-0

Boelen, P. A., & van den Bout, J. (2005). Complicated grief, depression, and anxiety as distinct postloss syndromes: A confirmatory factor analysis study. *The American Journal of Psychiatry*, *162*(11), 2175–2177. https://doi.org/10.1176/appi.ajp.162.11.2175

Boivin, J., Takefman, J., & Braverman, A. (2011). The fertility quality of life (FertiQoL) tool: Development and general psychometric properties. *Human Reproduction (Oxford, England)*, *26*(8), 2084–2091. https://doi.org/10.1093/humrep/der171

Breen, L. J., Croucamp, C. J., & Rees, C. S. (2019). What do people really think about grief counseling? Examining community attitudes. *Death Studies*, *43*(10), 611–618. https://doi.org/10.1080/07481187.2018.1506527

Carlbring, P., Maurin, L., Törngren, C., Linna, E., Eriksson, T., Sparthan, E., Strååt, M., Marquez von Hage, C., Bergman-Nordgren, L., & Andersson, G. (2011). Individually-tailored, Internet-based treatment for anxiety disorders: A randomized controlled trial. *Behaviour Research and Therapy*, *49*(1), 18–24. https://doi.org/10.1016/j.brat.2010.10.002

Castonguay, L. G., Eubanks, C. F., Goldfried, M. R., Muran, J. C., & Lutz, W. (2015). Research on psychotherapy integration: Building on the past, looking to the future. *Psychotherapy Research*, *25*(3), 365–382. https://doi.org/10.1080/10503307.2015.1014010

Chandra, A., & Stephen, E. H. (2013). *Infertility and impaired fecundity in the United States, 1982–2010: Data From the National Survey of Family Growth*. *67*, 19.

Direkvand-Moghadam, A., Delpisheh, A., & Khosravi, A. (2013). Epidemiology of female infertility; A review of literature. *Biosciences Biotechnology Research Asia*, *10*(2), 559–567. https://doi.org/10.13005/bbra/1165

Domar, A. D., Broome, A., Zuttermeister, P. C., Seibel, M., & Friedman, R. (1992). The prevalence and predictability of depression in infertile women. *Fertility and Sterility*, *58*(6), 1158–1163. https://doi.org/10.1016/S0015-0282(16)55562-9

Domar, A. D., Clapp, D., Slawsby, E., Kessel, B., Orav, J., & Freizinger, M. (2000). The impact of group psychological interventions on distress in infertile women. *Health Psychology*, *19*(6), 568–575. https://doi.org/10.1037/0278-6133.19.6.568

Downey, J., & McKinney, M. (1992). The psychiatric status of women presenting for infertility evaluation. *American Journal of Orthopsychiatry*, *62*(2), 196–205. https://doi.org/10.1037/h0079335

American Psychological Association, Presidential Task Force on Evidence-Based Practice. (2006). Evidence-based practice in psychology. *American Psychologist*, *61*(4), 271–285. https://doi.org/10.1037/0003-066X.61.4.271

Faramarzi, M., Alipor, A., Esmaelzadeh, S., Kheirkhah, F., Poladi, K., & Pash, H. (2008). Treatment of depression and anxiety in infertile women: Cognitive behavioral therapy versus fluoxetine. *Journal of Affective Disorders*, *108*(1), 159–164. https://doi.org/10.1016/j.jad.2007.09.002

Farmer, C. C., Rossi, F. S., Michael, E. M., & Kimerling, R. (2020). Psychotherapy utilization, preferences, and retention among women veterans with post-traumatic stress disorder. *Women's Health Issues*, *30*(5), 366–373. https://doi.org/10.1016/j.whi.2020.06.003

Farren, J., Jalmbrant, M., Ameye, L., Joash, K., Mitchell-Jones, N., Tapp, S., Timmerman, D., & Bourne, T. (2016). Post-traumatic stress, anxiety and depression following miscarriage or ectopic pregnancy: A prospective cohort study. *BMJ Open*, *6*(11), e011864. https://doi.org/10.1136/bmjopen-2016-011864

Farren, J., Mitchell-Jones, N., Verbakel, J. Y., Timmerman, D., Jalmbrant, M., & Bourne, T. (2018). The psychological impact of early pregnancy loss. *Human Reproduction Update*, *24*(6), 731–749. https://doi.org/10.1093/humupd/dmy025

Ford, H. B., & Schust, D. J. (2009). Recurrent pregnancy loss: Etiology, diagnosis, and therapy. *Reviews in Obstetrics and Gynecology*, *2*(2), 76–83.

Frederiksen, Y., Farver-Vestergaard, I., Skovgard, N. G., Ingerslev, H. J., & Zachariae, R. (2015). Efficacy of psychosocial interventions for psychological and pregnancy outcomes in infertile women and men: A systematic review and meta-analysis. *BMJ Open*, *5*(1), e006592–e006592. https://doi.org/10.1136/bmjopen-2014-006592

Freedle, A., & Kashubeck-West, S. (2021). Core belief challenge, rumination, and posttraumatic growth in women following pregnancy loss. *Psychological Trauma: Theory, Research, Practice, and Policy*, *13*(2), 157–164. https://doi.org/10.1037/tra0000952

Gelbaya, T. A., Potdar, N., Jeve, Y. B., & Nardo, L. G. (2014). Definition and epidemiology of unexplained infertility. *Obstetrical & Gynecological Survey*, *69*(2), 109–115. https://doi.org/10.1097/OGX.0000000000000043

Greil, A. L., Slauson-Blevins, K., & McQuillan, J. (2010). The experience of infertility: A review of recent literature. *Sociology of Health & Illness*, *32*(1), 140–162. https://doi.org/10.1111/j.1467-9566.2009.01213.x

Haghparast, E., Faramarzi, M., & Hassanzadeh, R. (2016). Psychiatric symptoms and pregnancy distress in subsequent pregnancy after spontaneous abortion history. *Pakistan Journal of Medical Sciences*, *32*(5), 1097–1101. https://doi.org/10.12669/pjms.325.10909

Huberty, J. L., Matthews, J., Leiferman, J., Hermer, J., & Cacciatore, J. (2017). When a baby dies: A systematic review of experimental interventions for women after stillbirth. *Reproductive Sciences*, *24*(7), 967–975. https://doi.org/10.1177/1933719116670518

Johansson, R., Sjöberg, E., Sjögren, M., Johnsson, E., Carlbring, P., Andersson, T., Rousseau, A., & Andersson, G. (2012). Tailored vs. standardized internet-based cognitive behavior therapy for depression and comorbid Symptoms: A randomized controlled trial. *PLOS ONE*, *7*(5), e36905. https://doi.org/10.1371/journal.pone.0036905

Johnson, J. E., Price, A. B., Kao, J. C., Fernandes, K., Stout, R., Gobin, R. L., & Zlotnick, C. (2016). Interpersonal psychotherapy (IPT) for major depression following perinatal loss: A pilot randomized controlled trial. *Archives of Women's Mental Health*, *19*(5), 845–859. https://doi.org/10.1007/s00737-016-0625-5

Jordan, C., & Revenson, T. A. (1999). Gender differences in coping with infertility: A meta-analysis. *Journal of Behavioral Medicine, 22*, 341-358. https://doi.org/10.1023/A:1018774019232

Kee, B. S., Jung, B. J., & Lee, S. H. (2000). A study on psychological strain in IVF patients. *Journal of Assisted Reproduction and Genetics*, *17*(8), 445-448. https://doi.org/10.1023/a:1009417302758

Kersting, A., Kroker, K., Steinhard, J., Hoernig-Franz, I., Wesselmann, U., Luedorff, K., Ohrmann, P., Arolt, V., & Suslow, T. (2009). Psychological impact on women after second and third trimester termination of pregnancy due to fetal anomalies versus women after preterm birth—a 14-month follow up study. *Archives of Women's Mental Health, 12*(4), 193. https://doi.org/10.1007/s00737-009-0063-8

Klemetti, R., Raitanen, J., Sihvo, S., Saarni, S., & Koponen, P. (2010). Infertility, mental disorders and well-being – a nationwide survey. *Acta Obstetricia et Gynecologica Scandinavica*, *89*(5), 677–682. https://doi.org/10.3109/00016341003623746

Koert, E., Malling, G. M. H., Sylvest, R., Krog, M. C., Kolte, A. M., Schmidt, L., & Nielsen, H. S. (2019). Recurrent pregnancy loss: Couples' perspectives on their need for treatment, support and follow up. *Human Reproduction*, *34*(2), 291–296. https://doi.org/10.1093/humrep/dey362

Kolte, A. M., Olsen, L. R., Mikkelsen, E. M., Christiansen, O. B., & Nielsen, H. S. (2015). Depression and emotional stress is highly prevalent among women with recurrent pregnancy loss. *Human Reproduction*, *30*(4), 777–782. https://doi.org/10.1093/humrep/dev014

Koszycki, D., Bisserbe, J.-C., Blier, P., Bradwejn, J., & Markowitz, J. (2012). Interpersonal psychotherapy versus brief supportive therapy for depressed infertile women: First pilot randomized controlled trial. *Archives of Women's Mental Health*, *15*(3), 193–201. https://doi.org/10.1007/s00737-012-0277-z

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, *16*(9), 606–613. https://doi.org/10.1046/j.1525-1497.2001.016009606.x

Krosch, D. J., & Shakespeare-Finch, J. (2017). Grief, traumatic stress, and posttraumatic growth in women who have experienced pregnancy loss. *Psychological Trauma: Theory, Research, Practice, and Policy*, *9*(4), 425–433. https://doi.org/10.1037/tra0000183

Lakatos, E., Szigeti, J. F., Ujma, P. P., Sexty, R., & Balog, P. (2017). Anxiety and depression among infertile women: A cross-sectional survey from Hungary. *BMC Women's Health*, *17*(1), 48. https://doi.org/10.1186/s12905-017-0410-2

Latifnejad Roudsari, R., & Allan, H. T. (2011). Women's experiences and preferences in relation to infertility counselling: A multifaith dialogue. *International Journal of Fertility & Sterility*, *5*(3), 158–167.

Li, G., Jiang, Z., Han, X., Shang, X., Tian, W., Kang, X., & Fang, M. (2020). A moderated mediation model of perceived stress, negative emotions and mindfulness on fertility quality of life in women with recurrent pregnancy loss. *Quality of Life Research*, *29*(7), 1775–1787. https://doi.org/10.1007/s11136-020-02460-2

Markin, R. D., & Zilcha-Mano, S. (2018). Cultural processes in psychotherapy for perinatal loss: Breaking the cultural taboo against perinatal grief. *Psychotherapy*, *55*(1), 20–26. https://doi.org/10.1037/pst0000122

Morrow, K. A., Thoreson, R. W., & Penney, L. L. (1995). Predictors of psychological distress among infertility clinic patients. *Journal of Consulting and Clinical Psychology*, *63*(1), 163–167. https://doi.org/10.1037/0022-006X.63.1.163

Murphy, F. A., Lipp, A., & Powles, D. L. (2012). Follow-up for improving psychological well being for women after a miscarriage. *The Cochrane Database of Systematic Reviews*, *3*, CD008679. https://doi.org/10.1002/14651858.CD008679.pub2

Musters, A. M., Koot, Y. E. M., van den Boogaard, N. M., Kaaijk, E., Macklon, N. S., van der Veen, F., Nieuwkerk, P. T., & Goddijn, M. (2013). Supportive care for women with recurrent miscarriage: A survey to quantify women's preferences. *Human Reproduction*, *28*(2), 398–405. https://doi.org/10.1093/humrep/des374

Musters, A. M., Taminiau-Bloem, E. F., van den Boogaard, E., van der Veen, F., & Goddijn, M. (2011). Supportive care for women with unexplained recurrent miscarriage: Patients' perspectives. *Human Reproduction*, *26*(4), 873–877. https://doi.org/10.1093/humrep/der021

Nakano, Y., Akechi, T., Furukawa, T. A., & Sugiura-Ogasawara, M. (2013). Cognitive behavior therapy for psychological distress in patients with recurrent miscarriage. *Psychology Research and Behavior Management*, *6*, 37–43. https://doi.org/10.2147/PRBM.S44327

The American College of Obstetricians and Gynecologists. (2019). *Repeated Miscarriages*. https://www.acog.org/en/womens-health/faqs/repeated-miscarriages

Shaohua, L., & Shorey, S. (2021). Psychosocial interventions on psychological outcomes of parents with perinatal loss: A systematic review and meta-analysis. *International Journal of Nursing Studies*, *117*, 103871. https://doi.org/10.1016/j.ijnurstu.2021.103871

Soltani, M., Shairi, M. R., Roshan, R., & Rahimi, C. R. (2014). The impact of emotionally focused therapy on emotional distress in infertile couples. *International Journal of Fertility & Sterility*, *7*(4), 337–344.

Spinhoven, P., Penninx, B. W., van Hemert, A. M., de Rooij, M., & Elzinga, B. M. (2014). Comorbidity of PTSD in anxiety and depressive disorders: Prevalence and shared risk factors. *Child Abuse & Neglect*, *38*(8), 1320–1330. https://doi.org/10.1016/j.chiabu.2014.01.017

Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine*, *166*(10), 1092–1097. https://doi.org/10.1001/archinte.166.10.1092

Tavoli, Z., Mohammadi, M., Tavoli, A., Moini, A., Effatpanah, M., Khedmat, L., & Montazeri, A. (2018). Quality of life and psychological distress in women with recurrent miscarriage: A comparative study. *Health and Quality of Life Outcomes*, *16*(1), 150. https://doi.org/10.1186/s12955-018-0982-z

Volgsten, H., Jansson, C., Svanberg, A. S., Darj, E., & Stavreus-Evers, A. (2018). Longitudinal study of emotional experiences, grief and depressive symptoms in women and men after miscarriage. *Midwifery*, *64*, 23–28. https://doi.org/10.1016/j.midw.2018.05.003

Wing, D. G., Burge-Callaway, K., Rose Clance, P., & Armistead, L. (2001). Understanding gender differences in bereavement following the death of an infant: Implications of or treatment. *Psychotherapy: Theory, Research, Practice, Training*, *38*(1), 60–73. https://doi.org/10.1037/0033-3204.38.1.60

Zarbo, C., Tasca, G. A., Cattafi, F., & Compare, A. (2016). Integrative psychotherapy works. *Frontiers in Psychology*, *6*, 2021. https://doi.org/10.3389/fpsyg.2015.02021

Zhou, R., Cao, Y.-M., Liu, D., & Xiao, J.-S. (2021). Pregnancy or psychological outcomes of psychotherapy interventions for infertility: A meta-analysis. *Frontiers in Psychology*, *12*, 643395. https://doi.org/10.3389/fpsyg.2021.643395