
RESEARCH ARTICLE

Examining the Association between Psychosocial Support and Resilience in People Diagnosed with Infertility

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ABSTRACT

Infertility and infertility treatment cause great suffering for individuals and couples, particularly when they lack psychosocial support and resilience. The purpose of the study was to examine the association between the role of psychosocial support and resilience in 152 infertility patients at 2 hospitals in North Vietnam. Participants completed the Connor–Davidson Resilience Scale (CD-RISC) and The Multidimensional Scale of Perceived Social Support (MSPSS). The findings demonstrated that resilience in infertility patients, both generally and specifically in women, was significantly predicted by support from friends and family. Meanwhile, psychosocial support sources have no effect on resilience in infertile men. The findings highlight the importance of psychosocial support for people diagnosed with infertility in the Vietnamese cultural context.

KEYWORDS

Resilience, psychosocial support, infertility, Vietnam

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1. Introduction

Pregnancy and becoming parents are the desires of many couples, yet it has been recorded as increasingly challenging to many of them, particularly for people affected by infertility. According to the American Society for Reproductive Medicine (ASRM), infertility is a disease characterized by the failure to establish a clinical pregnancy after 12 months of regular, unprotected sexual intercourse or due to an impairment of a person's capacity to reproduce either as an individual or with his/her partner (Zegers-Hochschild et al., 2017). From the medical perspective, both women and men have similar infertility rates (WHO, 2010; ASRM; 2018, CDC, 2018), and when facing childlessness, both men and women experience psychological suffering and reduced self-esteem (Domar et al., 2012). Even in modern society, the importance of childbirth and becoming parents is so deeply embedded, and infertile people often feel isolated in their own experiences (Cousineau & Domar, 2007). Many studies show that having offspring plays a special role in families in many cultures, such as Africa and Asia. Having descendants has critical spiritual and practical meanings, as they are expected to take care of their parents in old age and worship them after they pass away (Lee et al., 2001; Lau et al., 2008). In many cultures, childlessness is a traumatic experience for men and women and is associated with abandonment, divorce, discrimination, and violence (Dyer et al., 2005; Ombelet, 2008; Domar et al., 2012). Therefore, people experiencing childlessness need psychological resilience and psychosocial support to cope with infertility-related stress.

2. Literature Review

When individuals cope with adversity, resilience plays an important role in mental health, helping maintain subjective well-being and improving their life quality (Wermelinger Ávila et al., 2017). It refers to a cluster of personal psychological characteristics that help individuals resist and adapt to negative life events (Windle, 2011). Resilience plays a positive role in coping with the adverse effects of disease and stigma in infertile patients (Yu et al., 2014; Zhao et al., 2022). Infertility examination and treatment is a long

process, and it is not easy for all infertile couples to have children. This further aggravates psychological problems for patients, especially when they have poor resilience and do not receive the necessary psychosocial support. Therefore, for individuals to overcome the painful experiences related to infertility, resilience plays an important role (Zhao et al., 2022). In infertile couples, high resilience correlated with men's quality of life, and it also correlated with low infertility-related stress in women (Herrmann et al., 2011; Vatanparast et al., 2020).

Moreover, for individuals to overcome adversity, psychosocial support is of great significance to each person, helping them feel valued, cared for, and supported (Kossek et al., 2011). Individuals with psychosocial support resources are much better off than individuals without (Feeney & Collins, 2015). Sources of support may be from family, friends, meaningful people in life, or a close pet (Allen et al., 2002). In patients, psychosocial support helps them reduce stress, enhance resilience, and increase their general health (Sippel et al., 2015; Ruiz-Rodríguez et al., 2022). Previous studies show a significant relationship between psychosocial support and resilience in women experiencing infertility; women who receive high social support have a high level of resilience (Safitri et al., 2020; Yu et al., 2014).

In Vietnam, there are some previous studies show that the relationship between resilience and social support has positive implications for students' mental health (Trang, 2022) and the role of resilience in academic stress and depressive disorder in Vietnamese adolescents (Ho et al., 2022), and with mental health in left-behind children (Dat & Luot, 2022). Additionally, family support tends to reduce infertility-related stress in Vietnamese women (Truong et al., 2022). To the best of our knowledge, there are currently no studies examining psychosocial support and resilience in infertility patients in Vietnam. Although previous studies have confirmed the relationship of these factors to infertility-related stress in many cultural contexts, no study has shown this in the Vietnamese cultural context. The study results would provide implications on psychological support suggestions to increase resilience in infertile people and increase psychosocial support resources, helping them overcome the suffering of infertility and the treatment process.

3. Methodology

3.1. Sample

The participants were recruited from two hospitals in Hanoi City and Hai Phong City in northern Vietnam, using convenient sampling. The participants were eligible if they were: (1) 18 years or above; (2) staying married; (3) having a diagnosis of primary infertility; (4) self-reporting no pregnancy at the time of this study; and (4) able to understand and complete the survey. In total, 152 participants agreed to participate in this research. Table 1 summarizes the demographic and characteristics of participants. The sample consisted of 108 women (71.1%) and 44 men (28.9%) whose mean age was 32.7 years (SD = 4.74), with a range of 21–47 years. Regarding education, 97 participants (63.82%) had college and higher levels, and 49 participants (32.23%) had high school and lower levels. Additionally, 95 participants (62.5%) were undergoing IVF treatment, 20 participants (13.2%) were undergoing IUI treatment, 11 participants (7.2%) had just been diagnosed, 15 participants (9.9%) were taking medication and waiting to get pregnant naturally, and 10 participants (6.6%) just failed treatment.

3.2. Measures

The Resilience Scale: The Connor - Davidson Resilience Scale CD - RISC - 10 (Connor & Davidson, 2003). This scale was extracted from the original CD-RISC (Campbell-Sills and Stein, 2007). This is a self-report scale, designed on a 5-level Likert scale running from 0, "not true at all", to 4, "true nearly all the time". A total of 10 items were included, such as: "I am able to adapt to change", "I can stay focused under pressure", and "I try to see the humorous side of problems". The total resilience score ranges from 0 to 40, with higher scores indicating greater resilience. In Vietnam, this scale was used with students and showed high reliability (Cronbach's alpha was 0.84; Minh-Uyen & Im, 2020), and in our study, Cronbach's alpha was 0.87.

The psychosocial support Using the Multidimensional Scale of Perceived Social Support (MSPSS, Zimet et al., 1988) has a total of 12 items. In the present research, this scale was used to assess participants' perceptions of psychosocial support from three main sources: (1) family (e.g., *My family is willing to help me make decisions*); (2) friends (e.g., *I have friends with whom I can share my joys and sorrows*); and (3) significant others who were not family and friends (e.g., *There is a special person who is around when I am in need*). Each subscale has 4 items. Respondents rate each item on a 7-point Likert scale, ranging from 1, "very strongly disagree", to 7, "very strongly agree". Higher scores indicate more support from family, friends, and significant others support. In the present study, Cronbach's alpha coefficients for three subscales were 0.90, 0.88, and 0.91, respectively.

3.3. Procedure

This study was conducted following the approval of the Committee for appraisal and issuance of research ethics codes of the university where we are working (assignment number 2444/CN-XHNV). Data were collected with the approval of hospital leadership and coordination with the Department of Reproductive Medicine. With the support of medical staff, eligible patients were selected from the patient list and then invited to participate in the study. The researcher had direct contact with infertile patients and clearly explained the purpose of the study. Informed consent was obtained from all participants. They were granted

the right to refuse to answer any questions or withdraw from the study at any time. After receiving their consent, the researcher distributed the questionnaires to the participants and collected them immediately upon completion, which often took approximately 20 minutes. During the interview process, the interviewer answered any questions that were unclear to the participant. All information was completely anonymized and kept confidential throughout the study.

4. Results and Discussion

The demographics of the sample are shown in Table 1. The findings are shown in Tables 2 and 3.

Table 1: Descriptive characteristics of the study sample (N = 152)

Variables	% (n) or [M–n – Max]	Mean (SD)	Cronbach’s alpha
Demographic characteristics/ Covariates			
Age	[21– 47]	32.75 (4.74)	
Gender			
Female	71.10 (108)		
Male	28.90 (44)		
Geographic area			
Hanoi city	40.80 (62)		
Hai Phong city	59.20 (90)		
Education			
High school and lower	32.23 (49)		
College and higher	63.82 (97)		
Missing	3.95 (6)		
Residence			
Urban areas	44.10 (67)		
Rural areas	40.80 (62)		
Other place	11.20 (17)		
Missing	3.90 (6)		
Treatment status			
Just been diagnosed	7.20 (11)		
Take medicine and wait to get pregnant naturally	9.90 (15)		
IUI	13.20 (20)		
IVF	62.50 (95)		
Just failed	6.60 (10)		
Missing	0.70 (1)		
Years of diagnosed infertility	[1 – 15]	4.43 (2.98)	
Determinants			
Family support	[4 - 28]	22.40 (4.69)	0.90
Friend support	[4 – 28]	20.26 (5.25)	0.88
Significant others support	[4 – 28]	20.92 (5.41)	0.91
Outcome variables			
Resilience	[16 – 40]	30.53 (4.25)	0.87

* Note: obs: observations; n: number, SD: Standard Deviation

Table 2: Multivariate regression model of resilience

	Standardized Coefficients (β)	
	Model 1	Model 2
Social support		
Family	.227*	.217*
Friends	.240*	.189
Significant other	-.059	.019
Covariates		
Residence (Urban areas)	-	.291**
Years of diagnosed infertility	-	-.003
Treatment status (IVF)	-	.095
Education (College and higher)	-	.086
R ²	0.152*	.249*
Adjusted R ²	0.135*	.209*

* $p < 0.05$; ** $p < 0.01$ **Table 3:** Multivariate regression model of resilience in male and female patients

	Female		Male	
	Standardized Coefficients (β)			
	Model 1	Model 2	Model 1	Model 2
Social support				
Family	.288*	.265*	.091	.063
Friends	.280*	.282*	.119	.035
Significant other	-.062	-.017	-.102	.073
Covariates				
Residence (Urban areas)	-	.269**	-	.434**
Years of diagnosed infertility	-	.108	-	-.353*
Treatment status (IVF)	-	-.039	-	.546**
Education (College and higher)	-	.088	-	.051
R ²	.237*	.324*	.025*	.366*
Adjusted R ²	.215*	.273*	-.052*	.232*

* $p < 0.05$; ** $p < 0.01$

In Table 2, model 1 shows that support from friends and family was found to have a significant effect on resilience in infertile patients ($\beta = 0.227$, and $\beta = 0.240$). In model 2, only family support predicts a significant effect on resilience ($\beta = 0.217$). When combined with demographic variables, it demonstrates that residence can predict increased resilience in infertile people ($\beta = 0.291$).

Table 3 shows that support from family and friends both were found to have a significant effect on resilience in infertile women. People living in urban areas are predicted to have increased resilience ($\beta = 0.269$). Meanwhile, both models do not predict the effect of psychosocial support on resilience in infertile men. However, model 2 shows that residence and treatment status are predicted to have increased resilience in men ($\beta = 0.434$ and $\beta = 0.546$). In contrast, longer periods of infertility have been shown to reduce resilience in these men ($\beta = -0.353$).

Thus, the findings indicate a certain role of psychosocial support for resilience in infertility patients in Vietnam, specifically support from family and friends. This suggests that a person with a social support network is better off than a person without or lacking a support network when coping with adversity. Consistent with previous research, these sources of support increase resilience in infertile people (Safitri et al., 2020). As a consequence, people who are more resilient cope better, helping them reduce infertility-related stress (Fernandez-Ferrera et al., 20220). However, we believe it is also important to consider the appropriateness of these support sources because some previous studies show that although support from family is necessary if the intervention is too deep and there are unrealistic expectations about the treatment cycles, this support will not be effective and will also increase the pressure on couples (Wiersema et al., 2006, Patel et al., 2018).

The results also show the effect of psychosocial support on resilience in women and men diagnosed with infertility. Support resources from family and friends are believed to influence resilience in women. Consistent with previous research, women adjust better to infertility-related stress when they receive support from their partners, family, or friends (Gibson & Myers, 2002; Mahajan et al., 2009; Martins et al., 2011). These findings could be explained by the fact that in addition to enduring the physical burden of

infertility, women report higher levels of distress related to infertility (Greil, 1997); therefore, they will mobilize more psychosocial support than men (Cousineau & Domar, 2007). Furthermore, infertility examination and treatment in Vietnam is a stressful and financially costly process. Previous studies show that with limited financial resources, infertile patients often easily give up treatment (Franco & Baruffi, 2002; Patel et al., 2018). In a certain way, support from family and friends is considered useful for women experiencing infertility.

In contrast, these findings indicate that psychosocial support sources do not increase resilience in infertile men. This could be explained by cultural context. Men may ignore taking care of their own health, suppress and hide their distress to support their spouses (Throsby & Gill, 2004; Cousineau & Domar, 2007; Agostini et al., 2011), and asking for help is traditionally associated with feminine behavior (Miner et al., 2018). Furthermore, from a cultural perspective, men are affected by infertility and cannot avoid negative discussions that put them under pressure about "masculine" culture; childlessness and sexual dysfunction are often considered synonymous (Throsby & Gill, 2004; Wischman & Thorn, 2013). So, the longer the period of infertility is said to reduce resilience in men. This shows that, in the Vietnamese cultural context, men diagnosed with infertility are under high pressure because children are valued in the family. Meanwhile, infertility and infertility treatment are uncontrollable problems, while pregnancy and having children depend on women, so men can only accompany and support their partners. Therefore, this is the reason it helps increase psychological resilience in men.

Research results show that infertile patients' resilience is predicted by where they live, particularly in urban areas. This could be explained by two reasons. Firstly, the lifestyle of people living in urban areas is more comfortable than that of people living in rural areas. In addition, infertility treatment hospitals are concentrated in cities, which is convenient for patients during treatment. Invasive interventions during treatment, such as aspiration, embryo transfer, and cycle monitoring... can easily increase stress and fatigue for patients (Keylor & Apfel, 2010). Furthermore, people in rural areas are affected by work interruptions. In addition to paying for medical examination and treatment, they also pay for accommodation, travel, etc., which raises financial costs that they cannot afford.

5. Conclusion

This study has some limitations: First, the results are only based on infertility patients seeking medical intervention, so the findings may not be generalizable to infertile people in Vietnam. Second, the number of participants is small, so socio-demographic variables do not have a significant effect on resilience. Third, because the study only included a limited number of men, the findings may not reflect the role of psychosocial support in men's resilience. Furthermore, this is a cross-sectional study, so achieving resilience takes time.

Despite some limitations, the present findings demonstrate that support from family and friends serves as protective factors to predict the level of resilience in infertile patients in Vietnam. These supports are also meaningful for women experiencing infertility and seeking medical interventions. These findings have important implications for psychological counseling for infertile women and men to help them increase their resilience. Furthermore, our study results are evidence for individuals in society to better understand and support people affected by infertility. In future research, we will examine the psychosocial support needs of people experiencing infertility in the Vietnamese cultural context because the quality and appropriateness of support play an important role in reducing infertility-related stress.

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