ORIGINAL ARTICLE

RESILIENCE AS A PROTECTIVE FACTOR FOR DEPRESSION AMONG INFERTILE WOMEN OF FAISALABAD

Ammarah Saleem, Nazia Yaqoob

Department of Applied Psychology Government College Women University Faisalabad, Pakistan

Background: Infertility is one the major cause of depression among married women of Pakistan. Resilience is a psychological skill that can help to manage depression in married women. This study was designed to assess depression and resilience among infertile women of Faisalabad. **Methods:** A correlational study was conducted from May to Aug 2022. Purposive sampling technique was used to gather information from different infertility centers and hospitals of Faisalabad, Pakistan. The Mean age of the subjects was 31.38±5.57 years. To assess the level of depression and resilience among infertile women, the Urdu version of the Siddiqui-Shah Depression Scale (SSDS) and the Resilience Scale (RS) were used. Statistical analysis was done on SPSS-26. **Results:** Out of the 110 participants, 89 (81%) were primary while 21 (20%) were secondary infertile. Resilience and depression negatively correlated significantly (p=0.000) in infertile women. The respondents from rural areas (p<0.05), those with increased number of treatments (p<0.05) and those having primary type of infertility (p<0.05) showed significantly high level of depression. **Conclusion:** Resilience and depression have negative association. Depression is predominant among rural as compared to urban residents, and in primary infertile women with increased number of treatments compared to secondary infertile women.

Keywords: Infertility, Depression, Resilience

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INTRODUCTION

Infertility is defined as the inability of men and women to reproduce. The World Health Organization's definition of infertility is based on 12 months (or longer) of unsafe sexual relation.[1] In Pakistan current infertility ratio is 21.9%, 3.5% primary (not yet conceived) and 18.5% secondary infertile cases (at least one conception but not repeated).[2] All over the world 10–15% couples in their reproductive age are affected by infertility.[3]

Unfortunately, women are considered sole responsible of infertility. This inequality has caused extensive psychological changes such as depression.[4] Level of depression is higher among women than men. Fertility-related distressed is more common among primary infertile than secondary.[5] This health issues are prevailing rapidly in Pakistan because of limited resources and unawareness about the aetiology or treatment process.[6] Family and cultural pressures exacerbate the stress which results into anxiety and depression. Infertility related social stigma, loneliness, separation, and uncertainty about treatment process also contribute a lot in the development of depression in females.[4]

Infertility is positively associated with distress or depression. Anxiety, tension, guilt, hopelessness, loss of self-control, worthlessness, humiliation, inadequacy and negative cognitive scripts impair acceptance and psychological flexibility in women.[7] Suicidal ideation and attempts also have been reported in infertile women.[8] Infertility is more stressful experience than COVID-19 pandemic.[9] Infertility-related depression level resembles to female cancer patients.[4]

Resilience improves psychological tolerance and reduces the negative effects of infertility. Resilient individuals are optimistic, confident, problem solvers and satisfied with their lives. Resilience is the individual's ability to stay calm in stressful and challenging situations.[10] Individual's infertility-related stress response is determined by this factor. It works as a non-specific protector against psychological distress among the infertiles.[11]

Keeping in view the above it was aimed to explore a relationship between depression and resilience among infertile women. In addition, it is aimed to investigate the differences in terms of demographic variables (residential area, type of infertility, number of treatments) in women with primary and secondary infertility in Faisalabad city and suburbs.

SUBJECTS AND METHODS

This correlational study was conducted from May to Aug 2022. Purposive sampling technique was used to gather information from different infertility centres, private clinics and hospitals of Faisalabad, Pakistan. Outdoor patients aged 21–45 years who came from different cities of Punjab diagnosed with infertility were taken as study sample after written informed consent. G*Power 3.9.1.2 was used to calculate sample size.[12]

The study included infertile women with any reason of infertility, and from a nuclear or joined familial system diagnosed with primary or secondary infertility while living with their husbands. Infertile women with any chronic condition, having special children, as well as whose husbands were addicted to any kind of drug were excluded from the study.

A brief interview form was designed in Urdu to collect socio-demographic information as well as the participants' marital history. To assess the level of depression Urdu version of Siddiqui-Shah Depression Scale (SSDS)[13] was used. On a 4-point rating scale, each item was given a score ranging from 0 to 3 (0=never to 3=most of the time) with alpha coefficient 0.94. Urdu translated Resilience Scale (RS)[14] was administered for measurement of resilience among infertile women. Resilience scale was a 25-item questionnaire with a 7-point likert scale (strongly agree to strongly disagree, from 7 to 1). The translated scale reliability was 0.91. Descriptive statistics, correlational analysis, and independent-sample *t*-test were applied using SPSS-26.

RESULTS

Of the 110 subjects, 89 (81%) were primary while 21 (19%) were secondary infertile. Mean age of the subjects was 31.38±5.57 years. Demographic characteristics of the subjects are presented in Table-1.

Depression and resilience scales proved highly reliable measures (Table-2). Resilience and depression significantly negatively correlated (r= -0.42, p=0.000) (Table-3). Level of depression and resilience were significantly different in urban and rural residents, with type of infertility, and number of treatments (Table-4).

Table-1: Demographic Characteristics

Participant's Characteristics	n	%
Birth order		
1st Born	30	27
Middle child	60	55
Youngest	20	18
Education		
Matric	36	33
Above Matric	74	67
Family system		
Nuclear	25	23
Joint	85	77
Residential area		
Rural	31	28
Urban	79	72
Type of infertility		
Primary	89	81
Secondary	21	19
Treatment number		
1–3 times	84	49
≥4 times	56	51

Table-2: Psychometric properties of study variables scales

Scale	Mean±SD	Range	*a*
Depression Scale	31.70±18.80	2–84	0.94
Resilience Scale	133.97±26.89	27–175	0.91

a=Cronbach's alpha

Table-3: Summary of correlational analysis

Variables	Depression	Resilience
Depression	-	
Resilience	-0.42*	-

*p<0.01

Table-4: Mean comparison of demographic variables on depression and resilience (Mean±SD)

Variables	Rural (n=31)	Urban (n=79)	*t* (108)	*p*	Cohen's d
Depression	40.58±20.59	28.22±16.95	-3.23	0.002*	0.65
Resilience	124.65±27.50	137.63±25.92	-2.32	0.022*	0.48
	Primary (*n*=89)	Secondary (*n*=21)			
Depression	33.81±19.38	22.76±13.07	2.47	0.015*	0.67
Resilience	133.57±26.40	135.65±29.50	-0.31	0.752	0.07
	1–3 times (*n*=54)	≥4 times (*n*=56)			
Depression	27.59±19.69	35.93±17.20	-2.35	0.020*	0.45
Resilience	140.11±23.04	128.16±29.40	-2.35	0.020*	0.45

*Significant

DISCUSSION

Siddiqui-Shah Depression Scale (SSDS) and Resilience Scale (RS) Urdu versions appeared to be highly reliable measures to assess depression and resilience among infertile women. Depression and resilience have a negative relationship. Literature showed that infertility stress had positive connection to depression, whereas resilience and depression are negatively associated.[15] Infertility stress brings depression and marital adjustment issues, but resilience can help people to effectively manage this problem as shown by our study results. Resilience may be utilized to help people to avoid clinical depression.[16]

The level of depression is reported significant among rural residential, primary type of infertility and increased number of treatments. Rural women suffered more from depression.[17] Cultural expectations, societal pressure and conservative views on life and parenting are commonly observed in rural communities.[18] Infertility may have a greater negative impact on people living in rural areas, resulting in more emotional anguish.[19] It brings more detrimental effects and mental agony for rural women.

Depression is prevalent among primary than secondary infertile women.[20] Primary infertile women experienced more fertility-related sufferings as compared to secondary infertile women.[21] Only 21 (19.09%) women had secondary while 89 (80.9%) had primary infertility in this study. Secondary infertility is prevalent in Pakistan. Some studies found that secondary infertility is more common in Asian countries, while Shamila *et al*[22], reported that 82.48% of women had primary infertility, which backed up our findings.

Prolonged infertility and infertility treatment failure boost psychological discomfort among women.[23] The prevalence of depression was high among primary type of infertile women because factors like the duration of infertility, treatment, and fear of husband remarrying contribute a lot in this perspective.[24] Depressed women have less possibility to initiate infertility treatment and have more chances to abandon it.[25]

CONCLUSION

Infertility is a distressing health condition for women. It affects their personal, societal and psychological aspects of life. Due to depressive symptoms their marital adjustment also suffers a lot. In this condition, resilience protects their mental health. Women who live in rural areas and have primary infertility with increased number of treatment (repeated referrals) face significantly high depression and less resilience than urban residents, decreased number of treatment failure and secondary type of infertility. There is a negative association between resilience and depression. Depression is predominant among rural residents and primary infertile women with increased number of treatments.

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Address for Correspondence:

Ms. Nazia Yaqoob, Lecturer Department of Applied Psychology, Government College Women University, Faisalabad, Pakistan. **Cell:** +92-320-3057455

Email: naziayaqoob@gcwuf.edu.pk

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