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DEPRESSION, STRESS, ANXIETY AND RELIGIOUS COPING PRACTICES OF INFERTILE WOMEN

Muneeba Shakil*, Ghanwa Safdar, Swaira Aslam & Maleeha Athar
Department of Humanities
COMSATS University Islamabad
Lahore Campus, Lahore-Pakistan

ABSTRACT

This study examined the predictive association of depression, stress, anxiety, with religious coping practices in infertile women. The sample for this study consisted of 100 infertile women (M = 33.59, SD = 5.34) living in Lahore, Pakistan. To recruit participants, the researchers identified potential participants through infertility clinics and support groups in Lahore. The study used a correlational design, and data was collected using a self-report questionnaire that included measures of religious coping practices, depression, stress, and anxiety. Analysis revealed that there is a significant positive correlation between Religious Coping Practices and Depression, Anxiety and Stress. Analysis through stepwise linear regression revealed that anxiety is the most crucial predictor of religious coping practices, followed by depression. Although, religious coping practices did not affect by stress remarkably. These results have implications for healthcare practitioners as these highlight the possible benefits of combining religious coping practices into interventions of treatment for mental health apprehensiveness in infertile females.

Keywords: *Infertile Women; Depression; Stress; Anxiety; Religious Coping Practices*

* Correspondence Address: Muneeba Shakil, PhD; Associate Professor, Department of Humanities, COMSATS University Islamabad, Lahore Campus, Lahore-Pakistan. Email: muneebashakeel@cuilahore.edu.pk

INTRODUCTION

Infertility is a general disorder that effects a large number of women worldwide and can develop in considerable social, medical and emotional consequences. World Health Organization (WHO) defines infertility as, failure to conceive pregnancy after fascinating in unprotected and regular sexual intercourse for 12-month period (WHO, 2019). Infertility effects to women factors accounting for 30% to 40% of case, with around 10% to 15% couples (American College of Obstetricians and Gynecologist [ACOG], 2018). Many factors can impact to infertility of females, including hormonal imbalance, advanced age, specific medical disease such as endometriosis and polycystic ovarian syndrome (PCOS) and anatomical abnormalities (ACOG, 2018). Moreover, the way of living choices including more alcohol consumption, obesity and smoking may negatively impact fertility (ACOG, 2018). Infertility can result in prolong psychological consequences for females such as isolation, feeling of despair, social stigma, frustration and rage (Peddie et al., 2018).

In Pakistan, infertility is a major and disturbing issue that effects females worldwide. The females estimating for around 40% to 50% of all infertility cases, and in Pakistan infertility rates reaches from 21% to 25% (Ali et al., 2018; Zargar et al., 2018). Infertility causes stigma about social and culture in Pakistani females, can exaggerate the mental pressure they bear (Najma et al., 2019). Infertility can be exhibited to several components such as disparity of hormones, bodily problems, infections and agedness in females of Pakistan (Ali et al., 2018). In addition, in Pakistan, fertility level of females is effected by societal and cultural components such as insufficient education, the practice of contraception, decreased availability of healthcare experts and early marriage. Pakistan, a country where high infertility levels can negatively influence on physical and mental health of women and they are experienced with this problem may suffer from raised distress, despair or worry levels (Ali et al., 2018; Najma et al., 2019). Dealing with infertility can be burdensome for the women who are unable to get pregnant, they may suffer from isolation and social rejection specially in society where higher importance puts on having children (Najma et al., 2019). Infertility causes emotional imbalance in infertility women so they manage their stress or emotions by involving in religious habits and practices. To women struggling with infertility, studies have revealed that religious copying can offer assistance and relief, helping them in discovering direction and importance in their pain (Asif et al., 2020). However, when women consider their infertility as a trial or a admirable punishment of their faith, religious copying can also create conflict and grief (Najma et al., 2019).

Many psychological theories can advise the conceptual framework for studying the relationship between religious copying behaviours and stress, anxiety and depression in infertile females. In 1984 Folkman and Lazarus proposed the *Copying And Stress Model* which states that in response to stressful events individuals use behavioral, cognitive and emotional copying methods. For women, infertility can guide to many pressures such as criticism, bereavement and social isolation. Several copying procedures such as religious copying can decrease the affected pain and effectively control these pressures. The *Meaning – making hypothesis* can understand the behaviors related to religious copying, which states that in the time of hardship, individuals effectively search for direction and importance (Park, 2010). For women to understand their infertility, religious copying can provide as a structure by promoting personal change and development as well as providing a feeling of direction and importance. Among Pakistani women, social and cultural background play an important effect in promoting the religious copying techniques and experience of infertility. The *Interconnectivity Theory* suggests that social identities such as religion, gender and culture can integrate to affect how individuals perceive benefit, oppression and disempower (Crenshaw, 1989). Combination of social and cultural variables can influence the mental health outcomes and copying mechanism of Pakistani women, including the negative perception of infertility and significance put on childbirth. These elements might relate with religious practices and beliefs to affect their occurrence.

In the experience of infertility among Pakistani women, a detail understanding of the importance of religious copying techniques can lead to the support services and creations of intervention that are culturally acceptable. For Pakistani women suffering from infertility to increase access to support services and care and increase mental health consequences, government and healthcare practitioners should focus on directing the societal and culture factors that affect their experiences. A comprehensive technique is needed to successfully solve the problem of infertility among Pakistani women. This technique should surround increased awareness campaign, healthcare accessibility, societal and cultural changes and educational initiatives focused on decreasing the infertility social stigma (Zargar et al., 2018). However, to increase awareness of this importance matter, equal access to support and healthcare service and enhance fair for women who are effected, it is important to support attempt and increase research. For this reason, this study's objective was to explore the predictive association of depression, anxiety and stress with religious copying practices in infertile women.

METHOD

Participants

The sample of this study consisted of 100 women who were not able to get pregnant (M = 33.59, SD = 5.34) living in Lahore, Pakistan. The researchers came upon eligible candidates through support groups and infertility clinics located in Lahore in order to volunteer individuals. Effectively, according to the specified criteria for exclusion and inclusion, the participants were evaluated and contacted for their acceptability. In the study, individuals who showed interest and completed the requirement were given an invitation to take role and extended a brief explanation of protocols and objectives of the study. Prior to being engage in the study, all participants were requested to provide written informed consent.

For the participation in the study, the researchers carried out purposive sampling to recruit participants which consist of choosing and identifying individuals who fulfilled specific criteria. Adult women included in this study who meet the specific following criteria: (a) diagnosed with infertility for at least one year, (b) aged between 18-45 years and in their reproductive age, (c) enable of effective communication in English and Urdu, (d) nationals of Pakistan and, (e) willing to participate in study. Women with history of severe psychiatric illness or other mental problems, those who were undergoing infertility treatments or either pregnant and those who were already taking psychotropic medication were excluded from the study.

Measures

Demographic Sheet

The demographic sheet collected data on the attributes of participants. The questionnaire consisted the following demographic variables: age, marital status, education, length of infertility, ethnicity, household income, religion and employment status. With the questionnaire, the demographic information sheet was administered simultaneously, and prior to starting the questionnaire, participants were instructed to fill it out. The reason of the demographic information sheet was to gather the demographic data of participants that account for any expected demographic variables that may affect the statistical analysis and could be used to distinguish the study population.

Depression Anxiety Stress Scale

The Depression Anxiety Stress Scale-21 (DASS-21) (Lovibond & Lovibond, 1995) is a generally implicated questionnaire that individuals utilize themselves to predict the symptoms of depression, stress and anxiety. The scale consists of 21 elements, with 7 elements devoted to measuring each factor. The measure has persistently denoted strong validity and reliability and has experience validation in several populations. The DASS-21 scale consist of related statements such as: *"I stumbled to calm", I was inadequate to feel any positive emotions"* and *"I was concern of the dehydration"*. This scale has Likert method that starts from 0 to 3, 0 indicates *never* and 3 indicates *high*, and 3 score tells the more ranges of anxiety, stress or depression. Subscale score consist of adding the scores of 7 related items. This scale has recommended high validity and reliability rates despite many demographics factors. Many studies have directed that this scale exhibits discriminant and convergent validity, test retest reliability and internal consistency (Sinclair et al., 2012; Taouk et al., 2001).

Pakistani Religious Coping Practices Scale

In Pakistan where females experiencing infertility, Pakistani Religious Coping Practices Scale (PRCPS) developed by Khan and Watson (2009) has been utilized to measure religious coping methods. Many techniques related to religious coping has been assessed by this self reporting questionnaire (i.e. PRCPS). These techniques included gaining guidance from religious groups, relaying on prayers and drugs and to control stress by religious teaching programs. The scale consists of two sample components: *"I actively gain guidance and advice from religious practitioners, when opposed with challenges or problems"* and "*I actively gain comfort and support in religious teachings, During challenging times"*. The PRCPS is 5-point Likert type scale that ranges from *1(never)* to *5(always)*. Higher scores indicate high level of engaging in religious coping strategies on this scale. The scale is estimated by adding up the scores of all components. In Pakistani population, the scale has experienced validation and has implicated strong validity and reliability (Asma & Tabassum, 2013).

Procedure

The study attempted to investigate the religious coping mechanism demonstrated by infertile women as a means of managing anxiety, depression and stress in Pakistan. Correlation research design was used in this study and all the

data was collected by self – report questionnaire that surrounded assessment of anxiety, depression, stress and religious coping practices. The skilled research personnel conducted face-to-face survey with qualified participants. Participants were given sufficient time to finish the questionnaire and were provided with clear guidance on how to fill it.

The ethical principles concerning human subjects were followed in the study. Before their involvement in the study, informed consent was acquired from all participants. Participants were assured of the confidentiality of their responses, and their anonymity was maintained throughout the study. The Institutional Review Board approved the study of the researchers' affiliated institution.

Statistical Analysis

The data obtained from the questionnaire were examined by descriptive statistics and stepwise linear regression analysis. Summary statistics, such as the mean and standard deviation, were employed to describe the data. The correlation analyses was employed to examine the intercorrelation religious coping practices, depression, stress, and anxiety. A stepwise linear regression analysis was performed to assess the predictive relationship of depression, stress, and anxiety with religious coping practices, while accounting for demographic variables including age, education, and marital status.

RESULTS

Table 1
Psychometric Properties of the Scale and Subscales

Scales	*M*	*SD*	*Range*	*α*
Depression Anxiety Stress Scale				
Depression	11.54	5.91	0-21	.89
Anxiety	10.64	5.20	0-21	.81
Stress	12.21	4.94	0-21	.82
Religious Coping Practices Scale	42.12	10.62	-	.89

Table 2
Descriptive Statistics forParticipants' Demographic Characteristics (N=100)

Variables	*f*	%
Education		
Matriculation	14	14.0
Intermediate	13	13.0
Bachelors	59	59.0
Masters	14	14.0
Household Income		
Less than 10,000	3	3.0
20,000-25,000	17	17.0
25,000-50,000	52	52.0
50,000-100,000	25	25.0
More than 100,000	3	3.0
Family System		
Joint	49	49.0
Nuclear	51	51.0
Employment status		
Employed	23	23.0
Unemployed	77	77.0
	M	*SD*
Age	33.59	5.34

Table 3
Intercorrelations between Religious Coping Practices, Depression, Stress and Anxiety in Infertile Women (N=100)

Variables	1	2	3	4
1. Religious Coping Practices	1.00			
2. Depression	.40*	1.00		
3. Anxiety	.44*	.81*	1.00	
4. Stress	.38*	.84*	.79*	1.00

*p <.05

Table 4
Summary of Stepwise Linear Regression Analysis for Predicting Religious Coping Practices in Infertile Women

Predictor	*B*	*SE B*	*ß*	*t*	*Sig.*	*95% CI*	
						LL	*UL*
Step 1 Constant	31.78	2.15		14.77	.00	27.51	36.05
Depression	.72	.17	.40	4.35	.00	.39	1.05
Step 2 Constant	30.07	2.24		13.40	.00	25.62	34.52
Depression	.23	.27	.13	.83	.41	-.32	.77
Anxiety	.70	.31	.34	2.23	.03	.08	1.32
Step 3 Constant	30.05	2.60		11.57	.00	24.90	35.20
Depression	.23	.33	.12	.68	.49	-.43	.88
Anxiety	.70	.34	.34	2.06	.04	.03	1.37
Stress	.01	.39	.00	.02	.99	-.76	.77

*p <.05

DISCUSSION

The outcomes of this study indicate a significant and notable association between depression, anxiety, and stress (Table 3) and religious coping practices in infertile women living in Lahore, Pakistan. These findings align with findings from prior studies that have suggested a significant correlation between mental health outcomes and religious coping practices (Golshan et al., 2020; Rizk et al., 2021). During the period of distress, religious copiing techniques have been perceived to offer individuals help and support. Throughout the challenging situations, it has possible to provide individuals with the feeling of direction and importance (Pragament, 1997). Infertility causing feeling of helplessness and desperation and can be very disturbing for women who are not able to pregnant (Golshan et al., 2020). Consequently, it is predictable that infertile women taking part in this study

showed greater tendency towards religious coping practices, as well as increased levels of stress, anxiety and depression. Eventually, the findings confirm a significant correlation between mental health outcomes and religious coping mechanisms in infertile women living in Lahore, Pakistan.

Further, results (Table 4) reveal that religious coping practices are strongly impacted by anxiety and depression, but stress didn't have an imapct. These findings signify that anxiety is the main factor associated with increased use of religious coping practices along with depression being the following factor in infertile women of Pakistan. Findings from previous researches support these obtained findings. Anxiety and depression are two of the most common mental health problems worldwide. It has been seen in diverse population (Chen et al., 2020; Cobb et al., 2017; Ellison & Fan, 2008; Marques et al., 2019) including women with infertility (Ahmed et al., 2021) that those who suffer from depression and anxiety are more likely to use religious coping strategies. Religious coping techniques encompass the act of finding help and support from religious practices and reliance such as visiting religious gatherings, studying religious book and engaging in prayer. Psychological impairment such as stress, depression or anxiety is seen to lessen by these coping mechanisms (Koenig, 2014). Another notable finding of the present study is that anxiety is found to be the primary determinant of religious coping strategies followed by depression. These findings also corroborate with findings from previous studies which support that anxiety is associated with increased adoption of religious coping strategies (Cobb et al., 2017; Sumbul & Khan, 2021). This implies that individuals undergo religious practices or obtain support from religion with exaggerated level of depression or anxiety.

Furthermore, insignificant findings pertaining to stress (Table 4) obtained in our study are also in line with the findings of the studies on general population by Cobb et al. (2017) and Litz et. (2020) whereas in a sample of women with infertility by Ahmed et al. (2021). They found that use of religion as coping mechanism is not influenced by stress. Though stress is known to be a common initiator of mental health problems and is linked to increased psychological distress and reduced well-being (Cohen et al., 2016). There is a possibility that people can also use nonreligious coping strategies, including exercising or asking for help from others, which might work better for them to cope up with stress.

The study findings may have important therapeutic suggestions for healthcare practitioners who work with women encountering infertility. For

addressing mental health problems, these results signify the possible advantages of including religious coping practices into treatment. The study has certain limitations. One of the restriction of the study was the usage of small sample size, which may not effectively reflect the complete population. However, the study solely examined women living in a specific city in Pakistan, hence constrained the suitability of the findings to other nations or geographic areas. In addition, the study used self-report questionnaire which are responsive to social impracticality may not provide an exact representation of the true behaviour of participants. The limitation of the study may be addressed by the use of greaters sample size and and heterogeneous sample in future research. Moreover, researchers can choose to use a mixed-method approach to corroborate the results and provide a deeper understanding of religious coping strategies among infertile women. Furthermore, to improve the mental health of infertile women, future research might give priority to the formulation of therapeutic unterventions based on religious copingpractices.

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