ORIGINAL ARTICLE

PSYCHOLOGICAL DISTRESS, COPING STYLES AND EMOTIONAL WELL-BEING AMONG CAREGIVERS OF PATIENTS WITH SCHIZOPHRENIA



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ABSTRACT

OBJECTIVE

To determine the relationship between psychological distress, coping style and emotional well-being among caregivers of patients with schizophrenia; to determine the role of coping style as a mediator in the relationship between the psychological distress and emotional well-being; and to determine the gender as a moderator between psychological distress and emotional well-being.

STUDY DESIGN

Cross-sectional research design.

PLACE AND DURATION OF STUDY

The data were collected from both government and private hospitals of Lahore, Pakistan from May 2021 to July 2021.

SUBJECTS AND METHODS

75 participants, which included educated 2(27%), uneducated 73(97.4%), married 37(49.3%) and unmarried 38(50.7%) adult caregivers of schizophrenic patients. Kessler's scale, Brief Cope Inventory and Psychological well-being scale along with demographic sheet were used for the collection of data.

RESILITS

There is a positive significant relationship between psychological distress and coping styles (r=.32**, p<.05) whereas emotional well-being is negatively correlated with coping style (r=-.33**, p<.05) and non-significant relationship with psychological distress (p>0.05) in schizophrenic caregivers. Gender is moderating between psychological distress and emotional well-being. Coping style is not mediating between psychological distress and emotional well-being among caregivers of schizophrenia.

CONCLUSION

Coping style is positively correlated with psychological distress, but emotional well-being is negatively correlated with coping style, and it has a non-significant relation with psychological distress. There is a difference in experiencing psychological distress and emotional well-being gender-wise. Psychological distress has a non-significant effect on emotional well-being through direct or indirect pathways and coping style is not mediating between them.

KEYWORDS

Psychological Distress, Coping Styles, Emotional Well-being, Caregivers, Schizophrenia

INTRODUCTION

Schizophrenia is a serious mental disorder that impairs daily functioning of an individual who has psychopathological symptoms, which are cognitive, positive and negative symptoms. It is a lifelong disorder and considered a burdensome illness all over the world. Caregivers experience physical, emotional, financial and social burden.¹

Caregivers were considered being natural caregiver such as parents, siblings and spouse². Caregivers feel psychological distress as depression and anxiety, which affects their daily activities, directly or indirectly. The burden on family caregivers depends on the gender, level of disability and the age of the family caregivers.³

Psychological distress is significantly associated only with age in demographics, whereas gender, status of education, marital and occupation, a time span of care and the relation with patient is not linked with psychological distress.⁴ Caregivers showed subjective and objective burden, somatic symptoms, distress, anxiety, social dysfunctioning.⁵

Young people experienced higher burden and stress than elders, while patient's relatives experienced more burden financially.⁶ The severity of burden varies among caregivers, as parents experienced a high level of psychological distress than siblings and spouses.⁷

Factors associated with the caregiver's psychological distress are gender, length of illness, number of hospitalisation, religion and the positive and negative symptomatology. Caregivers of chronic schizophrenia experienced more psychological distress. Female caregivers experienced more psychological distress than males.^{8,9}

Caregivers experienced emotional coping and problemsolving coping styles¹⁰. Positive reframing is related to the lesser psychological distress, self-blaming, and avoidance is correlated with the greater distress.¹¹ Bodily functions can be restored through stress management techniques.¹²

Coping styles are related to the person's thoughts, emotions and behaviour. Caregivers can learn positive coping styles by engaging in social support groups. 13,14

Stigmatisation is an issue in our society that hinders the betterment among patients. Schizophrenic caregivers are more stigmatised, especially females. ¹⁵ Active coping styles were associated with tension reduction; avoidance coping styles were associated with increased psychological distress and emotional involvement. ¹⁶ Caregivers firmly believed that the severe consequences of psychosis are prone to more chronic psychosis. ¹⁷

Perception of illness and coping are significant in the variation of distress. Acceptance of the disease would develop a relationship between the distress, illness identity and caregiver's belief. Females are considered as the primary caregiver and experience more distress than males. Men have more emotional inhibition and prioritised the finances. Family functioning as a predictor of stress while coping styles were not predicting stress among caregivers.

Difference in using coping styles among male and female spouses, female spouses used approached coping and males used avoidance coping styles. Continuous caregiving had great depression and poor emotional well-being.^{20,21,22}

Quality of life, psychiatric morbidity and knowledge about schizophrenia were associated with the caregiver's emotional well-being.²³ Patients who participated in any rehabilitation programs were less distressed, as compared to those whose patients were not enrolled, as psychosocial rehabilitation programs have a more positive effect on their family environments.²⁴

Prolonged caregiving disrupts psychological well-being and increased the burden of care. Older caregiver's emotional well-being was affected due to increased psychological distress.²⁵

Although considerable literature is focusing on schizophrenic caregivers in different aspects but a little work has been done on the combination of these variables. As we all know that it is a lifelong disease, institutional burden shifted towards family caregivers. It is necessary to understand the caregiving responsibilities, their related factors that disturbed caregiver's life. So, there are little data available on these three variables in Pakistan, thus the present study was useful to collect quantitative data from caregivers of schizophrenic patients.

The current study was conducted on primary caregivers of patients with schizophrenia. The study aimed to determine:

Relationship between psychological distress, coping style and emotional well-being.

The role of coping style as mediator in the relationship between the psychological distress and emotional well-being. The gender as a moderator in between psychological distress and emotional well-being.

SUBJECTS AND METHODS

Participants

The sample comprised 75 adult caregivers of patients with schizophrenia selected through a purposive sampling technique. Educated, uneducated, married, unmarried adults aged 31-40 years (M=2.55, SD=0.77) of both genders were included in the study. Caregivers who are less than 19 years of age, diagnosed with psychiatric issues and were not in close contact with the patient, were excluded from the study.

Instruments

Kessler's Scale (K-10)²⁶

It was a self-administered scale used to evaluate psychological distress, consisting of 10 items. There are different ranges of the score which demonstrate the severity of the disorder and these scores range from 10 to 50. This scale has strong reliability and validity.

Brief Cope Inventory 27

A self-report questionnaire with a four-point Likert scale, consisting of 28 items. It was used to determine the person's ways of managing himself in stressful situations, having 14 subscales. It showed fairly good reliability and validity.

Ryff's scale of Psychological Wellbeing 28

This scale was used to measures six paradigms of psychological well-being, containing 18 items. The scale is based on a seven-point scale, having adequate reliability and validity.

A separate sheet was developed to get personal information from the participants: age, gender, marital status, education, etc.

PROCEDURE

Permission was obtained from authors to use their scales. When the sample was searched out, written informed consent was given to the participants and briefed about the purpose of the research. Subjects were assured that all their personal information would be kept confidential before administration of the scales. Data were analysed with the help of SPSS (version 21). The descriptive statistics, Pearson product correlation, mediation and moderation analyses (process) were used to draw research findings.

RESULTS

There were (41.3%) 31 male and (58.7%) 44 female respondents with an average age of 31-40 years. 49.3% were married and 50.7% unmarried. 6.7% of respondents were fathers, 13.3% were mothers, 38.7% were sisters, 29.3% were brothers, 5.3% were husbands and 6.7% were wives in relation to the patient.

The findings indicate that psychological distress has a positive significant correlation with avoidance coping (r=.32**,p<.05) and avoidance coping has a positive significant correlation with approach coping (r=.32**,p<.05). Whereas emotional well-being was non significantly and negatively correlated with psychological distress and coping styles (p>0.05). (Table 1)

The results discovered that the total and direct effect of psychological distress on emotional well-being were non-significant, along with the indirect effect of psychological distress on emotional well-being through coping styles i.e. p>0.05. So, coping styles were not mediating between psychological distress and emotional well-being (Tables 2, 3 & 4).

The results about the moderating effect of gender between psychological distress and emotional well-being revealed that gender is moderating for the relationship; males are effective in emotional well-being as compared to females in mitigating the negative effects of psychological distress (Table 5).

Table 1
Correlation between Psychological Distress, Coping Styles and Emotional Well-Being among Caregivers (N=75)

Variables	N	М	SD	1	2	3	4	5	6	7	8	9
1.Psychologic I distress	75	3.16	0.58	-								
2.Avoidance coping	75	2.31	0.34	0.32**	-							
3.Approach coping	75	2.69	0.46	0.14	0.32**	-						
4.Autonomy	75	3.33	1.17	-0.04	0.01	-0.33**	_					
5.Environment mastery	75	3.33	1.00	0.19	0.07	-0.15	0.56**	-				
6.positive relation	75	3.30	0.99	0.12	0.19	-0.11	0.58**	0.58**	-			
7.personal growth	75	3.13	1.03	-0.01	0.15	-0.10	0.38**	0.51**	0.51**	-		
8.purpose in life	75	3.69	1.05	0.20	0.02	0.03	0.34**	0.48**	0.41**	0.33**	-	
9.Self- acceptance	75	3.19	1.02	0.17	0.10	-0.05	0.45**	0.66**	0.51**	0.45**	0.47**	-

Note: M=Mean; SD=Standard Deviation **p < 0.01, *p < 0.05

Table 2
Total Effect of Psychological Distress on Emotional Well-Being

					95%	6 CI
	Effect	SE	T	Р	LL	UL
Psychological Distress → Autonomy	0849	.2364	3590	.7207	5561	.3863
Psychological Distress → Environment mastery	.3349	.1982	1.6898	.0953	0601	.7300
Psychological Distress → Positive relation	.2098	.1985	1.0569	.2940	1858	.6053
Psychological Distress -> Personal growth	0200	.2086	0960	.9238	4357	.3957
Psychological Distress → Purpose in life	.3774	.2077	1.8165	.0734	0367	.7914
Psychological Distress → Self acceptance	.3032	.2029	1.4942	.1394	1012	.7076
Psychological Distress → Autonomy	0849	.2364	3590	.7207	5561	.3863
Psychological Distress \longrightarrow Environment mastery	.3349	.1982	1.6898	.0953	0601	.7300
Psychological Distress → Positive relation	.2098	.1985	1.0569	.2940	1858	.6053
Psychological Distress \longrightarrow Personal growth	0200	.2086	0960	.9238	4357	.3957
Psychological Distress → Purpose in life	.3774	.2077	1.8165	.0734	0367	.7914
Psychological Distress \longrightarrow Self acceptance	.3032	.2029	1.4942	.1394	1012	.7076

Note: SE=Standard Error; p=significance level; LL=Lower Limit; UL=Upper Limit; Cl=Confidence Interval

Table 3
Direct Effect of Psychological Distress on Emotional Well-Being

					95%	6 CI
	Effect	SE	Т	Р	LL	UL
Psychological Distress → Autonomy	1036	.2514	4121	.6815	6046	.3975
Psychological Distress → Environment mastery	.3304	.2108	1.5676	.1214	0898	.7507
Psychological Distress → Positive relation	.1167	.2083	.5602	.5771	2986	.5320
Psychological Distress → Personal growth	1244	.2185	5693	.5709	5600	.3112
Psychological Distress → Purpose in life	.4053	.2207	1.8364	.0704	0347	.8453
Psychological Distress → Self acceptance	.2691	.2154	1.2489	.2157	1604	.6985
Psychological Distress → Autonomy	.0111	.2268	.0489	.9612	4410	.4632
Psychological Distress \longrightarrow Environment mastery	.3792	.1982	1.9134	.0597	0159	.7743
Psychological Distress → Positive relation	.2426	.2000	1.2129	.2291	1561	.6413
Psychological Distress → Personal growth	.0073	.2109	.0345	.9726	4132	.4277
Psychological Distress → Purpose in life	.3752	.2113	1.7754	.0801	0461	.7964
Psychological Distress → Self acceptance	.3233	.2057	1.5715	.1205	0868	.7333

Note: SE=Standard error, p=significance level; LL=lower limit; UL=upper limit; Cl=confidence interval

Table 4
Indirect Effect of Psychological Distress on Emotional Well-Being through Coping Styles

	F66	c.		95% CI	
	Effect	SE	LL	UL	
Psychological Distress \longrightarrow Avoidance coping \longrightarrow Autonomy	.0187	.0897	1683	.1938	
Psychological Distress \longrightarrow Avoidance coping \longrightarrow Environment mastery	.0045	.0703	1386	.1505	
Psychological Distress \longrightarrow Avoidance coping \rightarrow Positive relation	.0931	.0670	0234	.2448	
Psychological Distress \longrightarrow Avoidance coping \longrightarrow Personal growth	.1044	.0876	0583	.2973	
Psychological Distress \longrightarrow Avoidance coping \rightarrow Purpose in life	0280	.0710	1640	.1265	
Psychological Distress \longrightarrow Avoidance coping \longrightarrow Self acceptance	.0341	.0669	0911	.1780	
Psychological Distress \longrightarrow Avoidance coping \longrightarrow Autonomy	0960	.0868	2937	.0506	
Psychological Distress \longrightarrow Avoidance coping \rightarrow Environment mastery	0443	.0516	1735	.0254	
Psychological Distress \longrightarrow Avoidance coping \longrightarrow Positive relation	0328	.0426	1454	.0212	
Psychological Distress \longrightarrow Avoidance coping \longrightarrow Personal growth	0273	.0405	1218	.0410	
Psychological Distress \longrightarrow Avoidance coping \rightarrow Purpose in life	.0022	.0431	0921	.0972	
Psychological Distress \longrightarrow Avoidance coping \longrightarrow Self acceptance	0201	.0387	1141	.0397	

Note: SE=Standard Error; p=significance level; LL=Lower Limit; UL=Upper Limit; Cl=Confidence Interval

Table 5
Moderating Effect of Gender between Psychological Distress and Emotional Well-Being

	Coeff	SE	т	P	LL 9	5% CI UL
Constant	-0.80	1.77	-0.45	0.65	-4.33	2.72
PD	1.64	0.55	2.96	0.004	0.53	2.74
Gender	1.99	0.99	2.01	0.04	0.01	3.98
Int-1	-0.84	0.31	-2.71	0.00	-1.46	-0.22

Note: SE=Standard Error; p=significance level; LL=Lower Limit; UL=Upper Limit; Cl=Confidence Interval

DISCUSSION

The first hypothesis of the present research study was that there is likely to be a negative relationship between psychological distress and emotional well-being. This study showed that psychological distress has a positive significant correlation with avoidance coping, whereas emotional wellbeing has a negative non-significant correlation with coping styles. Emotional well-being has a non-significant correlation with psychological distress. Evidence showed that caregiving experiences can be positive and negative and it is related to the caregiver burden, psychological well-being and coping styles. Negative caregiving experiences lead towards anxiety, depression, burden, stress and passive coping, while positive caregiving experiences lead towards rewarding feelings and active coping. Psychological well-being and active coping depend upon the caregiver's skills and experience to handle the situation.²⁹ Psychological distress was positively correlated with avoidance coping and negatively correlated with active coping.³⁰ The degree of burden experienced depends on the caregiver's and patient's personality traits. While caregivers who are taking care for a long duration also experienced more burden.31

The second hypothesis of the research was that coping styles are likely to be a mediator between psychological distress and emotional well-being. The findings showed that the total and direct effect of psychological distress on emotional well-being was non-significant on emotional well-being, while the indirect effect of psychological distress on emotional wellbeing through coping style was non-significant and was not supported by the data in the present study. Individuals experienced more stress because some personality characteristics are related to passive coping style.³² People with avoidance coping style in response to psychological distress lead toward high stress and low emotional well-being. Adaptive coping strategies do not significantly mediate the effect of psychological distress on well-being and maladaptive coping strategies significantly mediate the effect of distress on well-being.33

The third hypothesis of the study was that gender is likely to be a moderator between psychological distress and emotional well-being. The study showed that there was a moderating effect of gender between psychological distress and emotional well-being, so the hypothesis was supported by our data. A significant difference by gender in family burden and caregiver's distress, more burden in case of male patients as compared to the female patients. Female caregivers experienced more stress and anxiety as compared to the male caregivers. This distress depends on work-related different activities. Men are stressed too, but mainly due to work-related issues and have more active coping. The stress and have more active coping.

LIMITATIONS

A limitation in the study was the small sample size because of the Covid-19 situation, i.e. lockdowns and social distancing (maintaining of physical distance for the protection of the researchers and subjects).

IMPLICATIONS

This research would emphasise the need on the behalf of practitioners to take an active part to target those individuals who are at a greater risk of psychological distress and poor coping. It would help them use a better coping strategy to reduce their distress and control negative emotions for their stability, and provide early intervention before they suffer serious psychological distress. Formation of support groups and to educate the society about this disorder, to manage the psychological distress and enhance the emotional well-being of caregivers.

CONCLUSION

Coping styles were positively correlated with psychological distress, while emotional well-being was negatively correlated with coping style and non-significantly related to psychological distress. Gender is moderating between psychological distress and emotional well-being, and female caregivers experienced more psychological distress and lower emotional well-being as compared to male caregivers. Psychological distress has a nonsignificant effect on emotional well-being directly and indirectly. Thus, the coping style was not mediating between psychological distress and emotional well-being.

REFERENCES

- 1. Schulz R, Sherwood PR. Physical and mental health effects of family caregiving. Am J Nurs. 2008;108(9 Suppl):23-27. doi:10.1097/01.NAJ.0000336406.45248.4c
- Stanley S, Balakrishnan S, Ilangovan S. Psychological distress, perceived burden and quality of life in caregivers of persons with schizophrenia. J Ment Health.
 2 0 1 7 ; 2 6 (2) : 1 3 4 1 4 1 . doi:10.1080/09638237.2016.1276537
- 3. Kumar CN, Suresha KK, Thirthalli J, Arunachala U, Gangadhar BN. Caregiver burden is associated with disability in schizophrenia: Results of a study from a rural setting of South India. International Journal of Social P s y c h i a t r y . 2 0 1 4; 6 1 (2): 157 63. https://doi.org/10.1177/0020764014537637
- 4. Shah ST, Sultan SM, Faisal M, Irfan M. Psychological distress among caregivers of patients with schizophrenia. J Ayub Med Coll Abbottabad. 2013;25(3-4):27-30.
- 5. Anjum, W., Chaudhry, H. R., & Irfan, M. Burden of care in caregivers of patients with schizophrenia and epilepsy. J Pak Psychiatr Soc.2010; 7(2), 79–83.
- 6. Mustafa AB, Zafar U. Frequency of family burden among caregivers of patients with schizophrenia. Journal of Sheikh Zayed Medical College. 2015;6:853-6.
- 7. Kuchhal AK, Kuchhal A, Arya V, Pardal PK. Psychiatry a study of psychological stress and burden on caregivers of schizophrenic patients. Int J Contemp Med Res. 2019;6:1–6.https://doi.org/10.21276/ijcmr.2019.6.8.2
- 8. Mitsonis C, Voussoura E, Dimopoulos N, et al. Factors associated with caregiver psychological distress in chronic schizophrenia. Soc Psychiatry Psychiatr Epidemiol. 2012;47(2):331-337. doi:10.1007/s00127-010-0325-9
- 9. Singh M, & Sousa A. Factors affecting depression in caregivers of patients with schizophrenia. J Ment Health Hum Behav.2011;16(2), 87–94.

- 9. Singh, M., & Sousa, A. Factors affecting depression in caregivers of patients with schizophrenia. J Ment Health Hum Behav. 2011;16(2), 87–94.
- Lazarus RS, Folkman S. Transactional theory and research on emotions and coping. European Journal of Personality. 1987;1(3):141–69. .https://doi.org/10.1002/per.2410010304
- Ong HC, Ibrahim N, Wahab S. Psychological distress, perceived stigma, and coping among caregivers of patients with schizophrenia. Psychol Res Behav Manag. 2016;9:211-218. Published 2016 Aug 16. doi:10.2147/PRBM.S112129
- 12. Can YS, Iles-Smith H, Chalabianloo N, Ekiz D, Fernández-Álvarez J, Repetto C, et al. How to Relax in Stressful Situations: A Smart Stress Reduction System. Healthcare 2020;8:100. https://doi.org/10.3390/healthcare8020100.
- Parasar A, Naik D, Gupta P, et al. A study of coping strategies care-givers of schizophrenia patients. IAHRW Int J Soc Sci. 2015;3:354-9
- 14. Azman A, Jamir Singh PS, Sulaiman J. Caregiver coping with the mentally ill: a qualitative study. J Ment Health. 2017;26(2):98-103. doi:10.3109/09638237.2015.1124395
- 15. Sharma H, Sharma B, & Sharma DB. Burden, perceived stigma and coping style Of caregivers of patients with schizophrenia and bipolar disorder. Int J Health Sci Res. 2017; 7(11), 84-94.
- Cotton SM, McCann TV, Gleeson JF, Crisp K, Murphy BP, Lubman DI. Coping strategies in carers of young people with a first episode of psychosis. Schizophr Res. 2013;146(1-3):118-124. doi:10.1016/j.schres.2013.02.008
- 17. Fortune DG, Smith JV, Garvey K. Perceptions of psychosis, coping, appraisals, and psychological distress in the relatives of patients with schizophrenia: an exploration using self-regulation theory. Br J Clin Psychol. 2005;44(Pt 3):319-331. doi:10.1348/014466505X29198
- 18. McRae K, Ochsner KN, Mauss IB, Gabrieli JJD, Gross JJ. Gender Differences in Emotion Regulation: An fMRI Study of Cognitive Reappraisal. Group Process Intergroup Relat. 2008;11(2):143-162. doi:10.1177/1368430207088035
- Ghazanfar L, & Shafiq S. Coping Strategies and Family Functioning as Predictors of Stress among Caregivers of Mentally III Patients. International Journal of Clinical Psychiatry 2016, 4(1): 8-16 DOI: 10.5923/j.ijcp.20160401.02
- 20. Kelly MM, Tyrka AR, Price LH, Carpenter LL. Sex differences in the use of coping strategies: predictors of anxiety and depressive symptoms. Depress Anxiety. 2008;25(10):839-846. doi:10.1002/da.20341
- 21. Saeed A, Kiani S, Javed S. Caregivers of mentally ill patients: role of coping style and emotional intelligence. Pak Armed Forces Med J. 2019; 69(3), 665–670
- 22. Ehsan N, Johar N, Saleem T, Khan MA, Ghauri S. Negative repercussions of caregiving burden: Poor psychological well-being and depression. Pak J Med Sci. 2018;34(6):1452-1456.doi:10.12669/pjms.346.15915

- 23. Chen PS, Yang YK, Liao YC, Lee YD, Yeh TL, Chen CC. The psychological well-being and associated factors of caregivers of outpatients with schizophrenia in Taiwan. Psychiatry Clin Neurosci. 2004;58(6):600-605. doi:10.1111/j.1440-1819.2004.01309.x
- Koukia E, Madianos MG. The effect of rehabilitation of schizophrenic patients on their family atmosphere and the emotional well-being of caregivers. Eur J Psychiatry. 2005 Mar;19(1):55-64. https://doi.org/10.4321/S0213-61632005000100005
- 25. Gupta A, Solanki RK, Koolwal GD, Gehlot S. Psychological well-being and burden in caregivers of patients with schizophrenia. Int J Med Sci Public Health. 2015;4(1):70-6. doi: 10.5455/ijmsph.2015.0817201416
- 26. Andrews G, Slade T. Interpreting scores on the Kessler Psychological Distress Scale (K10). Aust N Z J Public Health. 2001;25(6):494-497. doi:10.1111/j.1467 -842x.2001.tb00310.x
- 27. Carver CS, Scheier MF, Weintraub JK. Assessing coping strategies: a theoretically based approach. J Pers Soc Psychol. 1989;56(2):267-283. doi:10.1037//0022-3514.56.2.267
- 28. Ryff CD, Keyes CL. The structure of psychological well-being revisited. J Pers Soc Psychol. 1995;69(4):719-727. doi:10.1037//0022-3514.69.4.719
- 29. Zhou Z, Wang Y, Feng P, et al. Associations of Caregiving Knowledge and Skills With Caregiver Burden, Psychological Well-Being, and Coping Styles Among Primary Family Caregivers of People Living With Schizophrenia in China. Front Psychiatry. 2021;12:631420. Published 2021 May 26. doi:10.3389/fpsyt.2021.631420
- 30. Tada A. The Associations among Psychological Distress, Coping Style, and Health Habits in Japanese Nursing Students: A Cross-Sectional Study. Int J Environ Res Public Health. 2017;14(11):1434. Published 2017 Nov 22. doi:10.3390/ijerph14111434
- 31. Rammohan A, Rao K, Subbakrishna DK. Burden and coping in caregivers of persons with schizophrenia. Indian J Psychiatry. 2002;44(3):220-227.
- 32. Afshar H, Roohafza HR, Keshteli AH, Mazaheri M, Feizi A, Adibi P. The association of personality traits and coping styles according to stress level. J Res Med Sci. 2015;20(4):353-358.
- Aazami S, Shamsuddin K, & Akmal S. Examining behavioural coping strategies as mediators between work-family conflict and psychological distress. The Scientific World Journal, 2015; 1-7. doi:10.1155/2015/343075
- 34. Yu Y, Zhou W, Liu ZW, Hu M, Tan ZH, Xiao SY. Gender differences in caregiving among a schizophrenia population. Psychol Res Behav Manag. 2018;12:7-13. Published 2018 Dec 20. doi:10.2147/PRBM.S187975
- 35. Viertiö S, Kiviruusu O, Piirtola M, et al. Factors contributing to psychological distress in the working population, with a special reference to gender difference. BMC Public Health. 2021;21(1):611. Published 2021 Mar 29. doi:10.1186/s12889-021-10560-y