**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.

**RESULTS**

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 burden1.

Caregivers were considered being natural caregiver such as parents, siblings and spouse 2. 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 caregivers3.

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 distress4.

Caregivers showed subjective and objective burden, somatic symptoms, distress, anxiety, social dysfunctioning5.

 Young people experienced higher burden and stress than elders, while patient’s relatives experienced more burden financially6 . The severity of burden varies among caregivers, as parents experienced a high level of psychological distress than siblings and spouses7.

 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 males8, 9.

Caregivers experienced emotional coping and problem-solving coping styles10. Positive reframing is related to the lesser psychological distress, self-blaming, and avoidance is correlated with the greater distress11. Bodily functions can be restored through stress management techniques12.

 Coping styles are related to the person's thoughts, emotions and behaviour. Caregivers can learn positive coping styles by engaging in social support groups13, 14.

Stigmatisation is an issue in our society that hinders the betterment among patients. Schizophrenic caregivers are more stigmatised, especially females15. Active coping styles were associated with tension reduction; avoidance coping styles were associated with increased psychological distress and emotional involvement16. Caregivers firmly believed that the severe consequences of psychosis are prone to more chronic psychosis17.

 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 belief17. Females are considered as the primary caregiver and experience more distress than males. Men have more emotional inhibition and prioritised the finances8, 18. Family functioning as a predictor of stress while coping styles were not predicting stress among caregivers19.

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-being20, 21, 22.

Quality of life, psychiatric morbidity and knowledge about schizophrenia were associated with the caregiver’s emotional well-being23. 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 environments24.

Prolonged caregiving disrupts psychological well-being and increased the burden of care. Older caregiver’s emotional well-being was affected due to increased psychological distress25.

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 Inventory27**

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 Wellbeing28**

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). (See 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. (See table 5).

**Table 1**

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

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variables | N | M | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1.Psychologicl 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\*\* | \_ |

\*\*p < 0.01, \*\*p < 0.05

**Table 2**

Total Effect of Psychological Distress on Emotional Well-Being

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | 95% CI |
|  | Effect  | SE  | T | p | 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 → 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 |

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

**Table 3**

Direct Effect of Psychological Distress on Emotional Well-Being

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | 95% CI |
|  | Effect  | SE  |  t |  p | 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 → 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 confidence interval; UL=upper limit confidence interval

**Table 4**

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

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

Note .SE=Standard error, LL=lower limit confidence interval; UL=upper limit confidence interval

**Table 5**

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | 95% CI |
|  | Coeff | SE | T | P | LL | 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; CI=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 well-being 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 situation29. Psychological distress was positively correlated with avoidance coping and negatively correlated with active coping30. 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 burden31.

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 well-being 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 style32. 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-being33.

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 caregivers34. This distress depends on work-related different activities. Men are stressed too, but mainly due to work-related issues and have more active coping35.

**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 non-significant effect on emotional well-being directly and indirectly. Thus, the coping style was not mediating between psychological distress and emotional well-being.

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