Journal of Professional & Applied Psychology *Original Article*

Coping Strategies as Predictors of COVID-19 related Anxiety among General Physicians of Faisalabad

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Abstract

Emergence of COVID-19 pandemic created numerous physical and psychosocial upheavals for all. Specifically, health care professionals are at great risk of being contaminated by this life-threatening virus; consequently, they may prone to fear and anxiety related to COVID-19 situation. Thus, the present study aimed to examine the coping strategies as predictors of COVID-19 in general physicians of Faisalabad. The present correlational study was done on general physicians working in the outpatient departments of public and private sector hospitals of Faisalabad, Pakistan. Demographic Information Form, Brief Cope Scale and COVID-19 related Anxiety Scale were used to meet the present objectives. Multiple regression analysis revealed active coping (β = -.247, $t(118) = -2.446$, $p < .05$), venting (β = .332, $t(118) = 3.959$, $p < .001$), religion (β = -.274, $t(118) = -3.058$, $p < .01$), emotional support (β =.207, $t(118) = 2.085$, $p < .05$), behavioral disengagement (β = .336, $t(118) = 3.873$, $p < .001$), humor (β = -.199, $t(118) = -2.659$, $p < .01$) and substance use (β = .363, $t(118) = 4.158$, $p < .001$) as significant predictors of COVID-19 related anxiety in general physicians. Three types of coping strategies seemed effective in overcoming COVID-19 related anxiety among general physicians. However, venting, behavioral disengagement, emotional support and substance abuse may decrease the COVID-19 related anxiety, if are used less by general physicians at work. The present findings have implications for general physicians who need to use coping strategies which may effectively reduce their anxiety associated with COVID-19 situation.

Keywords: Coping Strategies, Physicians, Anxiety, COVID-19

Received: 19 November 2021; Revised Received: 04 December 2021; Accepted: 06 December 2021

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Introduction

Coronavirus (COVID-19) apparently seemed pneumonia, although emerged from China by the end of 2019 but rapidly wrapped up the entire world (Wang et al., 2020). At that time, health care workers of Wuhan encountered countless difficulties in response to perilous pandemic COVID-19. In the meantime, health care workers experienced stress and apprehension owing to the direct threat of contamination and infection, excessive workload, discrimination, rare contact with significant ones, isolation and exhaustion as well (Fiorillo & Gorwood, 2020).

The sudden and severe outbreak of COVID-19 resulted in wide range of mental health problems encompassing stress, fears, anxiety, depression and sleep difficulties. Such kinds of problems are deleterious for healthcare staff at work, impair their attention, decision making abilities and influence their overall health status (Kang et al., 2020). Hence, it is essential to save health professionals/workers from mental health chaos in order to have

control over this terrible disease and affiliated consequences for the world (Brooks et al., 2020).

COVID-19 pandemic, albeit, is a physical nature of problem but it is evident to be responsible for developing various psychological problems along with physical one (Shigemura et al., 2020). A study reported posttraumatic stress symptoms among frontline healthcare workers developed during COVID-19 pandemic in Italy (Rossi et al., 2020). An adverse impact on mental health was also observed in medical healthcare as compared to the nonmedical healthcare staff (Zhang et al., 2020).

People from all over the world, have encountered physical, psychological and social problems owing to COVID-19. Besides, in response to this life threatening pandemic, they also have struggled to overcome their issues with the numbers of preventive measures and strategies, for instance; social distancing, wearing masks and so on. Similarly, problems of psychological nature can be overcome with the use of effective coping strategies. Existing scientific evidences prove the significant role of coping strategies in determining psychological health during pandemic COVID-19 in general population. In a study, people reported significant depression, anxiety, stress and insomnia during COVID-19, while intolerance and coping strategies such as; denial and self-blame were found to be associated with severe psychological symptoms (Al-Hadi et al., 2021). Researchers (Ames-Guerrero et al., 2021) also documented the positive association of coping strategy (e.g., emotional support with somatic symptoms, anxiety and social dysfunction. Planning coping strategy was inversely related with depression, while active coping strategies (e.g., positive reframing and humor) did not have significant association with psychological problem. Association of active and adaptive coping skills was noted with lower psychological distress, while maladaptive coping strategies (i.e., self-blame, denial, disengagement, venting, and substance abuse) were significantly associated with poor psychological health among emergency room physicians (Mong & Noguchi, 2021).

No doubt, the COVID-19 is a life destructing virus, devastating almost all domains of life. Besides using medical procedures for self-protection, it is immensely essential to adopt some alternative coping methods which could prevent our mental and social health as well. Considering the associated psychosocial repercussions of COVID-19 for health professionals, the present study has envisioned to investigate what kinds of coping strategies are effective in reducing the anxiety related to COVID-19 pandemic. In this regard, the objective of the present study was to examine the coping strategies as predictors of COVID-19 related anxiety. Hence, the following hypotheses had been postulated:

1. Problem-focused coping strategies (i.e., active coping, planning, positive reframing and acceptance) would significantly predict COVID-19 related anxiety in general physicians of Faisalabad.
2. Emotion-focused coping strategies (i.e., use of instrumental support, venting, religion and emotional support) would significantly predict COVID-19 related anxiety in general physicians of Faisalabad.
3. Avoidance coping strategies (i.e., self-blame, behavioral disengagement, humor, denial, self-distraction and substance use) would significantly predict COVID-19 related anxiety in general physicians of Faisalabad.

Method

Participants

The present study employed correlational research method whereby coping strategies were examined as determinants of COVID-19 related anxiety among general physicians. In this regard, the present sample size was determined through G-Power software and the value of required sample of 119 was obtained with medium effect size 0.15 and statistical power of 0.95 at 0.05 (level of significance). Then, general physicians (required sample) working in outpatient departments of public and private sector hospitals (i.e., Aziz Fatima Hospital, Rabia Memorial Hospital, Faisal Hospital, Mujahid Hospital, Khadija Memorial Hospital, Sahil Hospital, United Hospital and Prime Care) were recruited using convenient sampling method.

Measures

Demographic Information Form was designed to have personal information of every participant of the study. The Brief Cope Inventory (Carver, 1997) was used to examine three different types of coping strategies: Problem Focused Coping (Active coping, Planning, Positive reframing and Acceptance) Emotion Focused Coping (Use of instrumental support, Venting, Religion and Emotional support) and Avoidance Coping (Self-blame, Behavioral disengagement, Humor, Denial, Self-distraction and Substance use) among general physicians. All items of the full scales and its subscales are scored on 4-point likert scale ranging from [I usually do not do use it at all=0, I usually do this a little bit= 1, I usually do this a medium amount= 2, I usually do this a lot=3]. The value of alpha ranged from 0.50 to 0.95 (Craver, 1997) and 0.54 to 0.91 (Kato, 2015).

Another scale used in the present study was Coronavirus related Anxiety Scale (CAS). It comprised of 5 times with 5 point of continuum for scoring (not at all= 0 to Nearly every day = 4). CAS is also evident as a strong reliable research tool (α=0.92) as author reported (Lee, 2020).

Procedure

Having approval from the Ethical Review Committee of principal author's institution, the data collection was initiated using selected measures. For data collection, general physicians of Faisalabad were approached using convenient sampling strategy. First, their written consent was taken and then individual meetings were held with them at their own workplace. After giving instructions regarding data collection procedure, all selected measures were given them to be answered appropriately. In last, all participants were obliged for their kind response and cooperation during data collection.

Statistical Analysis

Obtained raw data of the present study was statistically analyzed via SPSS, version 25.0. Demographic information was summarized with the help of descriptive statistics, while research hypothesis was tested through Multiple Regression Analysis.

Results

Table 1

Summary of Demographic Information of the Participants (N =119)

Age ranges	***f***	***%***
25-30	12	10.08
31-35	69	57.98
36-40	38	31.93
Gender		
Male	87	73.10
Female	32	26.89
Marital Status		
Single	89	74.78
Married	30	25.21
Family System		
Nuclear	28	23.52
Joint	91	76.47
Socio-economic status		
Lower	1	0.84
Middle	113	94.95
High	5	4.20
Duration of Job		
1-10	98	82.35
11-20	21	17.64
Duty shift		
Morning	77	64.70
Evening	42	35.29

Table 1 showed most of the general physicians (57.98%) selected for the present study falling in the age range of 31 to 35 years. About 73.10 % physicians were male, while 26.89% were females. Among them, 74.78% were single, 76.47% were living in joint family, whereas 94.95% participants were from middle socioeconomic status. Majority of general physicians (82.35%) had 1 to 10 years duration of job. Majority (64.70%) physicians were working in the morning shift.

Table 2 *Summary of Multiple Regression Analysis with Problem Focused Coping Strategies as Predictors of COVID-19 related Anxiety (N=119)*

Model	***B***	***SE***	***B***	***t***	***p***
Constant	17.29	2.13		8.10	.000
Active Coping	-.76	.312	-.24	-2.44	.01
Planning	-.34	.30	-.11	-1.12	.26
Positive Reframing	-.43	.28	-.14	-1.50	.13
Acceptance	-.19	.24	-.06	-.78	.43

$R^2 = .17$; $\Delta R^2 = .14$; $F = 6.05$

a. Dependent Variable: COVID-19 related Anxiety

Multiple regression analysis (Table 2) revealed that among problem focused coping strategies, only active coping (β = -.247, t = (118) = -2.44, p < .05) significantly predicted COVID-19 related anxiety among general physicians. Planning (β =-.11, t = (118) = -1.12, p >.05), positive reframing (β = -.14, t = (118) = -1.50, p > 0.05) and acceptance (β =-.06, t = (118) = -.78, p > 0.05) did not predict COVID-19 related anxiety in general physicians working in Faisalabad.

Table 3

Summary of Multiple Regression Analysis with Emotional Focused Coping Strategies as Predictors of COVID-19 related Anxiety (N=119)

Model	***B***	***SE***	***β***	***t***	***p***
Constant	4.60	2.10		2.18	.03
Use of Instrumental Support	.21	.24	.089	.87	.38
Venting	1.17	.29	.332	3.95	.000
Religion	-.88	.29	-.274	-3.05	.003
Emotional Support	.63	.30	.207	2.08	.03
			R^2 = .23; ΔR^2 = .20; F = 8.49		

a. Dependent Variable: COVID-19 related Anxiety

Regression analysis (Table 3) showed emotion focused coping strategies such as: venting (β = .33, t = (118) = 3.95, p = < .001), religion (β = -.27, t = (118) = -3.05, p < .01) and emotional support (β =.20, t = (118) = 2.08, p < .05) as the significant predictors of COVID-19 related anxiety among general physicians of Faisalabad. However, use of instrumental support (β = .08, t = (118) = .87, p > 0.05) has not predicted the COVID-19 related anxiety in the present sample.

Table 4

Summary of Multiple Regression Analysis with Avoidance Coping Strategies as Predictors of COVID-19 related Anxiety (N=119)

Model	***B***	***SE***	***β***	***t***	***p***
Constant	.15	1.64		.09	.92
Self-blame	.31	.30	.08	1.02	.30
Behavioral Disengagement	.90	.23	.33	3.87	.000
Humor	-.53	.20	-.19	-2.65	.009
Denial	.34	.26	.11	1.29	.20
Self-distraction	.15	.22	.05	.72	.47
Substance Use	1.15	.27	.36	4.15	.000
			R^2 = .42; ΔR^2 = .39; F = 14.03		

a. Dependent Variable: COVID-19 related Anxiety

Statistical analysis of raw data (Table 4) revealed that among avoidance coping strategies, behavioral disengagement (β = .33, t = (118) = 3.873, p < .001), humor (β =

-.19, t = (118) = -2.65, $p < .01$), substance use ($\beta = .36$, t = (118) = 4.15, $p < .001$) have been emerged as significant predictors of COVID-19 related anxiety among participants of the present study. On the other hand, self-blame ($\beta = .08$, t = (118) = 1.0, $p > 0.05$), denial ($\beta = .11$, t = (118) = 1.29, $p > 0.05$) and self-distraction ($\beta = .05$, t = (118) = .72, $p > 0.05$) did not predict COVID-19 related anxiety in general physicians.

Discussion

There is no need to elaborate how doctors and general physicians have been on front line while serving the nation in crucial situation of COVID-19. They worked from dawn to dusk to save the human life exhibiting loyalty to their profession. It is known to all how doctors' lives are in jeopardy amid COVID-19 pandemic like others and they might prone to develop anxiety related to life damaging virus. While keeping this in mind, the present endeavor ruled out how general physicians tried to cope up with pandemic situation and related anxiety. Results of this study demonstrated some of the coping strategies predicting COVID-19 related anxiety among general physicians. Three kinds of coping strategies were identified in the present sample which somehow seemed to help them in dealing with COVID-19 related anxiety.

Amidst problem focused coping strategies, only active coping negatively significantly predicted COVID-19 related anxiety in general physicians (Table 2). General physicians who preferred to take some preventive measures and steps in response to COVID-19 pandemic learnt well how to combat with this life destructing virus. Timely use of strategies to find the solution of the problems helps people in overcoming their fears and apprehension when problems are on their way. Previous studies also showed a link between social anxiety and problem focused coping strategies (Tamannaeifar & Sanatkarfar, 2017). Problem solving was protective factor during pandemic COVID-19 lessening the symptoms of anxiety and depression (Ferreira et al., 2021).

The present findings also demonstrated venting, religion and emotional support, from the domain of emotion-focused coping strategies, as significant predictors of COVID-19 related anxiety among general physicians (Table 3). Venting involves focusing and expressing negative feelings. It means when general physicians did not pay attention to their negative feelings, effectively handled their anxiety in response to COVID-19 situation or vice versa. Previous studies also support the association between negative emotions and quality of life (Geng et al., 2020). Emotions regulation is associated with more adaptive functioning but decreased psychopathology (Eftekhari et al., 2009).

The emotional support coping strategy predicted the COVID-19 anxiety but positive sign indicated that less the emotional support general physician had from others, less anxiety they experienced related to COVID-19 situation. Contrary to that, it can be interpreted that when general physicians have been sympathized by others in crucial situation, they experienced anxiety related to the COVID-19. Only sympathy did not seem to them enough to stay firm at workplace as sometimes, sympathetic words become meaningless for people especially when they are in trouble. Perhaps, they needed or expected more or something else rather than merely having emotional support from others or significant one.

Religion also boosts the psychological health during stressful circumstances. Religious beliefs and faith help in accepting the death and circumstances which are beyond of person's own control. Religious beliefs have

an inverse association with mental health disorder (Marashian & Esmaili, 2012). Religious involvement correlated with multiple health indications (Williams & Strenthal, 2007). In the same way, religious coping also helped general physicians of the present study in overcoming COVID-19 related anxiety.

It also has been noted that behavioral disengagement, humor and substance use, from the domain of avoidance coping strategies significantly predicted COVID-19 related anxiety in general physicians. When general physician did not like to do something against COVID-19 (used behavioral disengagement coping), their level of anxiety got increased. When people take steps back, in a problematic situation, without any cogent reason, they cultivate more frustration and apprehension in own self. Previous studies also indicated an association between avoidance coping and chronic life stressors (Holahan et al., 2005).

Humor is one kind of avoidance coping strategy used by the general physicians and seemed effective in response to COVID-19 related anxiety. General physicians who used more humor as a coping strategy experienced less anxiety related to COVID-19 or vice versa. Previous studies are in the support of present findings and documented humor having positive impact on one's mental health (Aller et al., 2019). Humor has been used a viable coping strategy for combating with stressful or traumatic life situation (Abel, 2002).

Similarly, general physicians, who avoided taking substance in a problematic situation, seemed to experience less anxiety related to COVID-19 situation or, contrary to that, it can say that taking substance in problematic situation might have temporarily released their tension regarding disease. Substance use is an avoidance coping and previous scientific literature has described the significant link of avoidance coping with the problem of anxiety (Pozzi, et al., 2015).

Conclusion

It is concluded that some of the coping strategies such as active coping, religion and humor, from the domains of problem-focused, emotion-focused and avoidant coping strategies, are effective strategies in overcoming COVID-19 related anxiety among general physicians. However, venting, behavioral disengagement, emotional support and substance abuse may decrease the COVID-19 related anxiety, if are used less by general physicians at work. Having central position in public health, general physicians/doctors always remain in the direct contact with patients coming to them with various physical complaints. Risk of having COVID-19 from patients, their anxiety is likely to persist that may further impair their working. With the use of effective coping strategies, they may mentally relax them to be productive at work.

Implications

Whether COVID-19 exists or go away, doctors/general physicians will be on the line of duty to serve the nation. Resultantly, they are fully vulnerable to be the victim of COVID-19 while dealing out patients at work. Thus, doctors/general physicians need to learn how to cope up with the stress and anxiety they may experience in response to COVID-19 pandemic and the present research findings may benefit them a lot.

Limitations

The present study was carried out only on general physicians working in OPD. Other physical health professionals were not focused, although they may also be adversely affected by COVID-19. Secondly, sample was drawn using convenient sampling, although random sampling method could provide equal chance to all physicians to be part of present study and reduce the sample bias as well.

Conflict of interest
The authors declared no conflict of interest.
Source of Funding
The authors declared no source of funding.

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