

The Quality of Life of Indian doctors: Role of fear of COVID-19

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ABSTRACT

With the worldwide spread of COVID-19, the pressure has fallen onto the healthcare system and the doctors. They are being overworked, exposed to this deadly disease, self-isolating all the time away from their families, which is bound to create some psychological implications on the mental health of doctors. The present study aimed to understand the association between Fear of COVID-19 and Quality of Life along with its domains among Indian doctors. A sample of 275 doctors living in Delhi and NCR, India participated in the study. This quantitative study involved two measures, namely WHOQOL-BREF and FCV-19S. Responses were analysed by factor analysis technique where Pearson correlation and confirmatory factor analysis were computed through the SPSS, SPSS-AMOS software. Findings of the study represented a significant and negative relationship between Fear of COVID-19 and Quality of Life and its domains, namely, physical health, psychological health, social health and environmental health. Fear of COVID-19 has had adverse effects on the mental health of the average population and health care workers. Empirical evidence concerning its impact on positive psychological aspects should also be considered as the chief area of research. Only then the researchers can design interventions to prevent psychological dysfunctions and uplift well-being among healthcare workers.

1. Introduction

COVID-19 or Coronavirus arose in the Hubei province of Wuhan, in China, in December 2019 (Singhal, 2020). In most of the cases, this virus affects the mild upper respiratory tract, causes infections and severe respiratory illnesses. Severe Acute Respiratory Syndrome (SARS) and Middle-East Respiratory Syndrome (MERS) in 2003 and 2012, respectively (Roy et al., 2020) clarified the effects of such viruses. January 2020, World Health Organization (WHO) declared the outbreak of Coronavirus- a new disease; in February 2020, this outbreak was officially named as COVID-19, and had been classified as a pandemic in the following month (WHO, 2020). Coronavirus has not only led to high mortality rate but also has led to an economic and mental collapse, with people suffering from hunger and unemployment, especially in developing countries (Ghosh et al., 2020).

India is the second most peopled country across the world with a rural-based and growing-urban developing financial system, which has also been affected by the pandemic. Prime Minister of India, Narendra Modi, implemented a fourteen-hour lockdown on 22nd march which got extended for three weeks. The lockdown was welcomed by several experts who insisted that it was "the right move, at the right time" (Pulla, 2020). It was a necessary and effective way to ensure social distancing to break the cycle for corona infections; a study by Lau et al. (2020) showed that when the lockdown was implemented, there was a notable reduction in the rate of growth in the number of COVID-19 cases while the time is taken for the number of cases to double; of the infectious cases increased. The lockdown restricted 1.3 billion people from moving out of their homes, educational institutes were shut down, transport facilities suspended, and factories were closed (Ray et al., 2020). The lockdown also provided the government time to prepare for a

possible surge in cases. During this current situation, it is essential to protect our healthcare workers. Mechanical ventilators and intensive care beds which are a necessary need for treating extreme covid-19 cases are short in supply (Tanne et al., 2020). The COVID-19 crisis has created a stressed situation in the Indian health system.

The whole medical fraternity frequently faces significant mental challenges due to the high pressure to cure and survive threats during the coronavirus pandemic (Li et al., 2020). A study in China among healthcare workers found that they were at a high risk of developing adverse mental health outcomes and might need psychological support and interventions (Lai et al., 2020). The healthcare workers are going through the most challenging phase of their lives while they serve the society without worrying about their health and their own lives (Brahmi et al., 2020). The healthcare workers are also at high risk for undergoing psychological distress. In India, many incidents have been there of doctors and their relatives being forcefully evicted by landlords as well as physically attacked, which has caused significant psychological stress (Pathania et al., 2020). Other factors contributing to their psychological distress might be the rate of infection among doctors, feeling of not being able to support, news of COVID-19, unavailability of PPE kits and the excessive workload or working hours. (Cai et al., 2020). Healthcare workers need to take utmost care of themselves at this time.

A large percentage of the medical fraternity has no one to look after their children or families while the former are in self-isolation or quarantine. Additionally, whenever a doctor falls ill, it is a blow to the already exhausted health system. Also, it adds a fear in the doctors that they will be unable to help patients, making them feel that they are betraying the healthcare system (Urooj et al., 2020). Whenever there is new information updated

about Coronavirus, concerns also increase. Doctors who are experiencing mental health issues may suffer from negative repercussions, such as, chemical abuse (Felton, 1998), diminished productivity (Dewa et al., 2014), excessive drinking (Baldwin et al., 1997), life satisfaction and poor health (Buddeburg-Fischer et al., 2008). Workplace safety measures, along with psychological support services for these doctors, are essential requirements to relieve the heaviness they are facing amid pandemic (WHO Mental Health, 2020). had a history of mental illness.

1.1. Quality of life

Holmes & Dickerson (1987) described the Quality of life as a 'complex as well as abstract term that represents the individual replies to the social, mental and physical factors contributing to normal daily living. WHO defined Quality of life as an individual's perception of their life in the framework of the value system and culture in which they live and concerning their goals, standards, concerns and expectations (WHOQOL group, 1995). Quality of life was first introduced to the medical literature in the 1960s, and Health-Related Quality of Life (HRQOL) was a term seen for the first time in the 1980s (Post, 2014). Dijkers defined HRQOL as an objective part of the Quality of life, and it mentions the components that centre around or either indirectly or directly affected by injury, disorder or health disease. On the other hand, subjective Quality of life is the congruence between accomplishments and aspirations, as assessed by the person involved (Dijkers, 1997).

2. Rationale

Considering the adverse psychological effects of COVID-19 on doctors and other health care workers, studies have reported the symptoms of depression, anxiety, and insomnia or sleeping difficulties to be the most common (Pappa et al., 2020; Spoorthy et al., 2020) while studies also found massive strain due to stress experience along with anxiety and depression symptoms (Bohlken et al., 2020). The symptoms, in all the studies, differed with differences in gender, age, specialisation, occupation, type of activities performed and their proximity to COVID-19 patients.

It is crucial to combine the findings of numerous primary researches to update the empirical base of this pandemic situation. Review-based studies possibly provide a partial conception of how the pandemic has affected the mental health of the health care workers. Fear of COVID-19 is a source of stress, and it significantly impacts the psychological well-being of individuals. However, different individuals may undergo a mental crisis at different levels (Dymecka et al., 2020) which affects them in different ways. What is the story of life satisfaction of doctors amid this pandemic? Has the fear or anxiety of Coronavirus affected the 'state of flow' in health care workers? Or does this fear of virus affect the other positive mental constructs as well? The present study, to examine such concerns, entails understanding the relationship between the fear of COVID-19 and Quality of life among Indian doctors. The researcher formed the following hypothesis to test the theory of the relationship between these variables empirically:

- There will be a significant association between the Fear of COVID-19 and Quality of life among Indian doctors.
- The fear of COVID-19 will be a significant predictor of Quality of life among Indian Doctors.

3. Method

3.1. Participants

A sample of two-seventy-five doctors (171- Males, 103- Females and one person preferred not to say) working in Delhi and, Delhi and NCR, India, voluntarily participated in the study. Participants were between the age range of twenty-four to seventy years, out of which the sample included twenty-six young adults (9.5%), one-sixty-eight middle adults (61.1%) and eighty older adults (29.5%). Considering the education qualification of the sample, fifty-eight doctors were super-specialist, one-sixty-two were Doctorate of Medicine (M.D.), twenty-nine were Diplomate in the National Board (DNB), and twenty-six completed their Bachelor of Medicine and Bachelor of Surgery (MBBS). Considering the years of experience they have, two-fifty-six had six or more years of experience, eleven doctors had three to six years of experience, and eight doctors had two or less than two years of experience. Sixty-six doctors reported to have a history of physical illness, and eight doctors had a history of mental illness.

3.2. Measures

- Fear of COVID-19 scale (FCV-19S): The seven-item tool was developed by Ahorsu et al. (2020) to assess the Fear concerning COVID-19 among individuals. The tool has strong psychometric properties where its internal consistency is 0.82, and test-retest reliability is 0.72. Higher levels of fear of the person represented greater scores in the analysis.
- Quality of Life scale- Bref (WHOQOL-BREF): this short form instrument is a compressed version of the WHOQOL-100 (WHO, 1998) having a subset of twenty-six-items with four broad domains. The four health domains of an individuals' life in the scale are physical health, psychological health, social health and environmental health represented in a total of twenty-four-items with two general health items. WHOQOL-Bref has been found to have excellent psychometric properties, and it is an excellent cross-cultural assessment of the Quality of life (Skevington et al., 2004).

4. Results

For evaluating the response of the first hypothesis, the researcher used Pearson's correlation coefficient. Table 1 represents the coefficient of Correlation between the fear of COVID-19 and Quality of life among doctors with the four health domains. Results indicated a significant negative association ($p < 0.01$) between fear of Coronavirus and Quality of life having $r = -0.35$. The four areas of Quality of life namely, physical health ($r = -0.38$), psychological health ($r = -0.28$), social health ($r = -0.16$) and environmental health ($r = -0.32$) of the doctors showed significant negative association ($p < 0.01$) with fear of COVID-19.

Table-1
Coefficient of Correlation between fear of COVID-19, Quality of life and its Domains.

	V1	V2	V3	V4	V5	V6
V1		-.35**	-.38**	-.28**	-.16**	-.32**
V2	-.35**		.87**	.86**	.73**	.91**
V3	-.38**	.87**		.67**	.50**	.72**
V4	-.28**	.86**	.67**		.61**	.69**
V5	-.16**	.73**	.50**	.61**		.60**
V6	-.32**	.91**	.72**	.69**	.60**	

** Correlation is significant at the 0.01 level (2-tailed).

Abbreviations: V1=Fear of COVID-19, V2=Quality of life, V3=Physical health, V4=Psychological health, V5=Social health and V6=Environmental health

Table 2 represents Fear of COVID-19 as a predictor of Quality of life. It can be interpreted that the predictor has a 12 per cent impact on the criterion quality of life of doctors (R²= 0.12).

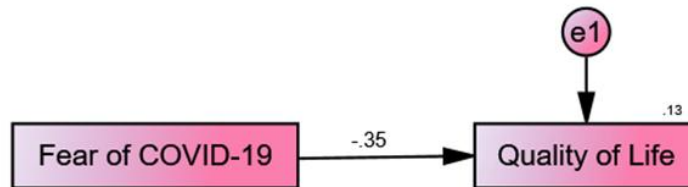
Table-2

Regression table representing the standardised and unstandardised regression weights, squared multiple correlations and standard error of fear of COVID-19 and Quality of life.

Criterion	Predictor- Fear of COVID-19				
	B	S.E	P	β	R ²
Quality of life	-0.77	0.12	***	-0.35	0.12

Figure-1

Path diagram with standardised regression weights of Fear of COVID-19 as a predictor of Quality of Life.



5. Discussion

This paper aimed to understand the relationship between fear of COVID-19 and the Quality of life of doctors in the Delhi and NCR region, India. On analysing the data, the results showed that there was a significant negative association between fear of COVID-19 and Quality of life, thus confirming our first hypothesis. The study found that the domains of Quality of life, namely, physical health, psychological health, social health and environmental health, were significantly and negatively associated with the fear of COVID-19. Further analysis of data showed that the Quality of life of doctors is strongly getting affected by the predictor, fear of Coronavirus, thus confirming the second tentative statement of the study.

Numerous studies have discussed the impact of COVID-19 on psychological and emotional health. Elbay et al. (2020) in their study found that out of a sample of 442 physicians, 41 per cent of them reported symptoms of stress, 52 per cent of them reported symptoms of anxiety and 65 per cent of them reported symptoms of depression during the covid-19 pandemic. Similar findings were revealed in the other study where out of 330 healthcare workers, 27 per cent had clinical levels of depression, 71 per cent reported anxiety, 37 per cent reported post-traumatic stress and 34 per cent were going through stress (Giusti at el., 2020). In a systematic review and meta-analysis of 13 cross-sectional studies with a total of 33,062 participants,

Pappa et al. (2020) found that at least one in five healthcare workers reported symptoms of depression and anxiety while almost four in ten healthcare workers experienced insomnia. Few more studies have found similar results across the globe.

However, limited studies have explored the effects of Coronavirus on the positive psychological constructs like happiness, life satisfaction, job satisfaction among health care workers or resilience among the affected population. Trzebinski et al. (2020) measured the impact of the meaning of life, life satisfaction and other variables to the COVID-19 pandemic, where the study concluded that stronger primary hope and higher levels of purpose in life and life satisfaction has an association with lower state anxiety and lower COVID-19 stress. A survey analysis of 361 patients (Chen et al., 2020) showed significant physical and psychological impairment of health-related Quality of life among coronavirus patients at the one month follow up. A study done in Morocco demonstrated moderate disruption in Quality of life of 279 participants who were non- infected but were in quarantine (Samlani et al. 2020). The disturbance in Quality of life was more if there was a pre-existing chronic health problem.

It is vital to have a considerable sum of research studies in this area, as, only when we understand the extent of the psychological impact of Coronavirus on the healthcare workers, only then it would be possible and appropriate to design the

interventions to enhance their psychological resilience and strengthen the capacity of our healthcare systems (Bao et al., 2020). Because one thing is quite clear, that the spread of Coronavirus is severely impacting the mental health of doctors, and there must be interventions in place, to tackle these mental health issues and ensure that our healthcare workers take utmost care of their psychological health along with their physical health.

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