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Effect of COVID-19 on Mental Health of Surgeons and Physicians; cross-sectional analytical study

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Abstract

Objective: Comparison of mental health issues among surgeons and physicians due to covid pandemic. **Study design:** Cross-sectional. **Setting:** Aziz Fatima hospital and allied hospital Faisalabad. **Period:** 30th august 2021 to 28th of February 2022. **Material and method:** Data was collected using online questionnaire mainly focused on five components of WHO definition of mental health which was distributed among surgeons and physicians of private and public sectors of Faisalabad. **Result:** A total of 127 surgeons and physicians are included. Overall, 68.9% were male and 31.1% females. Of the total sample 22% of the physicians aged from 18 to 25 years and 78% of the physicians aged from 25 to 65 years similarly 20% of the total surgeons are aged from 18 to 25, 75% of the surgeons are aged from 25 to 65 and 3.3% are above 65 years. Among them 45% of physicians and 59.01% of surgeons think that covid have affected their mental health negatively. 46.6% of physicians and 45% of surgeons were at war with themselves during covid pandemic. 90% of physicians and 91.6% of surgeons were aware of their goals, needs and problems. 95% of physicians and 96.6% of surgeons were able to cope up with stress and anxiety during pandemic. 33% of physicians and 20% of surgeons felt like losing their self-esteem during pandemic. 31.6% of physicians and same percentage of surgeons had self-control problems during COVID pandemic. **Conclusion:** COVID pandemic has almost equally affected the mental health of physicians and surgeons however it is noticed that mental disturbance was slightly more in physicians in terms of losing their self-esteem but most of them were able to cope up with stress and anxiety.

Key words: Mental health issues, surgeons and physicians, covid pandemic, private and public hospitals.

Introduction

COVID-19 is a highly contagious viral infection with human-to-human transmission and having an incubation period of 2-14 days¹. As no anti-viral drug is available for its treatment except for some trial medicines, preventive measures are very important to control its spread.

COVID-19 has affected the general population and specifically healthcare workers globally and one of the post-COVID sequelae is its effect on the mental health of surgeons and physicians. Since the pandemic started, many studies have been conducted and revealed that health workers are undergoing various degrees of mental stress since they are working in the pandemic and it affects tremendously to their social and occupational functioning²⁻⁶.

WHO identifies viral disease outbreaks like the COVID-19 pandemic as a serious threat to public health. COVID-19 has raised many difficulties for healthcare workers around the globe including increased workload, anxiety, depression, and fear of possible infection in themselves and their families.

Physicians and surgeons are most vulnerable even in usual times with increased prevalence of burnout psychological disturbance and morbidity. Studies have shown there are multiple factors that are responsible for disturbance in the mental health of physicians and surgeons which include work overload, witnessing frequent loss of life, disruption of work-life balance, insufficient social support (i.e. stigma, discrimination), lack of adequate supply of PPE, lack of mental health support, lack of specific COVID-19 training, feelings of vulnerability and loss of control, fear of stigma, the uncertainty around infection risk, perception of personal danger due to the high mortality rate that is associated with COVID-19, work impacting household activities and loneliness and isolation due to social distancing⁷⁻¹⁵.

There is very little data that is specifically based on a comparison of mental health issues between surgeons and physicians. Though some factors are common health care workers as surgeons and physicians may behave differently toward challenges related to their work and duties due to the COVID pandemic. My study aims to compare and see the impact of COVID-19 on the mental health of physicians and surgeons.

Psychological manifestation noticed in different studies among healthcare workers includes exhaustion, mood swings, irritability, anxiety, depression, hallucination, nervousness, feeling emotionally detached, sensitivity to criticism, finding difficulty in routine decision ultimately reducing professional efficacy⁷⁻¹⁵.

Multiple articles demonstrate the effect of COVID-19 on the mental health of health care workers but very few of them compare the results between physicians and surgeons. Our study is aimed at comparing this impact and will demonstrate whether it is more in physicians or surgeons.

Objectives

Comparison of impact of COVID-19 on the mental health of physicians and surgeons.

Hypothesis

Null hypothesis: There is no difference in the effect of COVID-19 pandemic on Mental Health of Surgeons and Physicians.

Alternate hypothesis: Effect of COVID-19 pandemic is more on mental health of physicians than that of surgeons.

Study design: cross-sectional.

Setting: Aziz Fatima hospital and allied hospital Faisalabad. Period: 30th august 2021 to 28th of February 2022.

Material and methods

Physicians and surgeons working in Faisalabad dealing with COVID-19 patients were enrolled in this study after informed consent and data was collected from September 2021 to February 2022 by using a preformed questionnaire. Sample size was calculated using OpenEpi. Version. Sample was selected according to the preformed inclusion criteria. Data collected and analyzed using SPSS version 21.

Results:

A total of 127 surgeons and physicians are included. Overall, 68.9% were male and 31.1% females(Table -2). Of the total sample 22% of the physicians aged from 18 to 25 years and 78% of the physicians aged from 25 to 65 years similarly 20% of the total surgeons are aged from 18 to 25, 75% of the surgeons are aged from 25 to 65 and 3.3% are above 65 years(Table-1). Among them 45% of physicians and 59.01% of surgeons think that covid have affected their mental health negatively. 46.6% of physicians and 45% of surgeons were at war with themselves during covid pandemic.90% of physicians and 91.6% of surgeons were aware of their goals, needs and problems. 95% of physicians and 96.6% of surgeons were able to cope up with stress and anxiety during pandemic. 33% of physicians and 20% of surgeons felt like losing their self-esteem during pandemic. 31.6% of physicians and same percentage of surgeons had self-control problems during COVID pandemic.

Table :-1 Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 25 to 65	91	71.7	75.8	75.8
18 to 25	27	21.3	22.5	98.3
65 and above	2	1.6	1.7	100.0
Total	120	94.5	100.0	
Missing System	7	5.5		
Total	127	100.0		

Table :-2 Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	84	66.1	70.0	70.0
Female	36	28.3	30.0	100.0
Total	120	94.5	100.0	
Missing System	7	5.5		
Total	127	100.0		

Table :- 3 Specialty

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Surgeon	60	47.2	50.4	50.4
Physician	59	46.5	49.6	100.0
Total	119	93.7	100.0	
Missing System	8	6.3		
Total	127	100.0		

Table :-4 Nature of job

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Government	85	66.9	70.8	70.8
Private	35	27.6	29.2	100.0
Total	120	94.5	100.0	
Missing System	7	5.5		
Total	127	100.0		

Table :-5 During this pandemic

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid you were at war with yourself	53	41.7	43.8	43.8
you were not at with yourself	68	53.5	56.2	100.0
Total	121	95.3	100.0	
Missing System	6	4.7		
Total	127	100.0		

Table :- 6 Were you aware of your goal, needs and problems during covid pandemic

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	109	85.8	90.8	90.8
No	11	8.7	9.2	100.0
Total	120	94.5	100.0	
Missing System	7	5.5		
Total	127	100.0		

Table :- 7 Were you able to cope with stress and anxiety during covid pandemic

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	116	91.3	95.9	95.9
No	5	3.9	4.1	100.0
Total	121	95.3	100.0	
Missing System	6	4.7		
Total	127	100.0		

Table :-8 Did you feel like losing your self-esteem during covid pandemic

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	32	25.2	26.7	26.7
No	88	69.3	73.3	100.0
Total	120	94.5	100.0	
Missing System	7	5.5		
Total	127	100.0		

Table :- 9 Were you having problems regarding self-control in this pandemic

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	36	28.3	29.8	29.8
No	85	66.9	70.2	100.0
Total	121	95.3	100.0	
Missing System	6	4.7		
Total	127	100.0		

Table :-10 Did covid - 19 affected your mental status negatively

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	50	39.4	41.3	41.3
	No	71	55.9	58.7	100.0
	Total	121	95.3	100.0	
Missing	System	6	4.7		
Total		127	100.0		

Discussion

COVID-19 is a primary venture to the intellectual fitness of running professionals as a vast proportion of our contributors confirmed high values for despair, anxiety, and strain. Clinical experts developed less mental stress than non-medical experts.

The COVID-19 outbreak precipitated sizable difficulty in the whole world. A general public survey in the course of the initial segment of the COVID-19 outbreak in China found that 28% of the participants stated moderate-to-severe tension and 53% as moderate or intense. growing tension and panic in all groups have additionally seriously affected HCW, who are underneath excessive-strain conditions due to an elevated danger of publicity to the virus, carrying the possibility of transmitting the virus to buddies and own family members, the lack of enough understanding, sources, remedy or vaccine and the need to make new and brief decisions in significantly unwell sufferers.

A total of a hundred and twenty seven surgeons and physicians participated from the two primary hospitals of Faisalabad. Even though the number of docs is pretty excessive in each of these hospitals due to the tough timetable of responsibilities a smaller quantity of medical doctors participated as turned into expected.

Amongst them, forty-five % of physicians and fifty-nine .01% of surgeons think that COVID-19 has affected their mental fitness negatively. A possible explanation can be, however, that their scientific background helped them to better understand and classify COVID-19-associated statistics whilst compared to their surgical opposite numbers. Whilst they could experience self-sufficiency, the state of affairs was regarded as extra viable for them. Our effects concur with earlier research about COVID-19 which has stated improved degrees of mental misery at some point during the pandemic

46.6% of physicians and forty five% of surgeons were at war with themselves at some point during the pandemic. Ninety % of physicians and 91.6% of surgeons had been aware of their dreams, desires, and troubles. Ninety five% of physicians and ninety six.6% of surgeons had been capable of coping with stress and anxiety at some stage in the pandemic. A look at SARS survivors concluded that a better feeling of self-care and self-efficacy brought about better psychological adjustment to the situation 33% of physicians and 20% of surgeons felt like dropping their self-esteem for the duration of the pandemic. 31.6% of physicians and an identical percentage of surgeons had strength of mind troubles in the course of the COVID-19 pandemic.

The expanded threat of infection and demanding environment might have contributed to better intellectual fitness impacts among health workers

Bodily contamination became more likely in people with a reduced admission to PPE and every day breaks, that's in step with the properly documented hazard factors for growing a coronavirus infection. There are various results when healthcare employees grow to be bodily sick, especially if they require sick depart as this will have a knock-on impact on the closing group of workers, who will must paintings short-staffed or must paintings unplanned shifts. Within the context of surgical groups, this will actually have a subsequent effect on deliberate operations and provider provision.

The survey showed that COVID-19 or in contact with sufferers had notably better intellectual fitness deterioration than others. Several research studies have already proven that frontline HCWs and COVID-19 patients are prone to growing mental problems thanks to a large workload, inadequate private shielding systems (PPEs), fear of catching contamination, and absence of social touch.

The opposite cause might be that health workers operating in each frontline and 2nd line may experience equally prone to COVID-19-associated mental fitness outcomes at some stage in the pandemic.

In widespread terms, but, it seems that HCWs are experiencing good-sized mental fitness troubles for the duration of the COVID-19 pandemic. HCWs seem to have fundamental wishes for psychiatric assistance, both throughout and after the pandemic. The excessive prevalence of mental health troubles determined within the gift examination indicates that HCWs in Turkey need psychiatric support now and in destiny.

More depression, anxiety, insomnia, and misery signs and symptoms had been observed on this take a look at in females, individuals with a fact of psychiatric contamination, and those requiring psychiatric help. High ranges of despair, tension, insomnia, and misery signs and symptoms emerged as psychological problems experienced by way of HCWs in the gift examination. Notwithstanding those high fees of signs and symptoms, the handiest one in ten HCWs had acquired any psychiatric assistance.

Conclusion

COVID pandemic has almost equally affected the mental health of physicians and surgeons however it is noticed that mental disturbance was slightly more in physicians in terms of losing their self-esteem but most of them were able to cope up with stress and anxiety.

Conflict of interest

Authors declare that there is no conflict of interest.

Ethical approval

Ethical and other necessary approvals were taken from Institutional Review Board of Aziz Fatima Medical & Dental college Faisalabad dated 02-09-2021 with reference number IEC/149-21.



Aziz Fatimah Medical & Dental College Faisalabad
Institutional Ethical Committee

Ref. No: IEC/149-21

Date: 02/09/2021

Research Title: Mental Health Issues among Surgeons and Physicians Due To Covid-19

Principal Investigator(s): Muhammad Shamus Ul Qamar

Department of Principal Investigator*: Student 4th Year MBBS

Affiliation of Principal Investigator: Aziz Fatimah Medical & Dental College, Faisalabad

Date of Approval: 30/08/2021

You are hereby informed that your aforementioned research proposal is approved by ethical committee, after review and discussion. This approval is for a period of one year to conduct this study.

Prof. Dr. Ghulam Abbas Sheikh
Chairman Institutional Ethical Committee

This ethical approval is issued subject to the following conditions:

1. A signed personal declaration of responsibility.
2. If the research question changes significantly so as to alter the nature of the study, a new application for ethical clearance must be submitted.
3. It remains the Principal investigator's responsibility to ensure that all the necessary forms and informed consent are retained for further reference.

*Please quote IEC approval number in all inquiries

Cc: Department of Medical Education

Consent for Publication

All authors approved manuscript for publication.

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