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The Well-being of Healthcare Workers 'Psychological State Amid COVID-19 Pandemic

Abstract

This study's goal was to learn more about the mental health of medical staff members during the pandemic COVID-19. A sample size of 377 participants, including professional physicians, physical therapists, and pharmacists, was taken. SPSS version 23 was used for data analysis. Frequency and percentage of age of participants, 25-30 years of age showed frequency of 55 and 18.3%, 30-35 of age showed 68 frequencies and 22.7%, 40-45 of age showed 60 frequencies and 20.0% and from age 45-50 showed frequency of 49 and 16.3%. Mostly participants have the highest depression scores ranging from 10 to 13 (mild) and total anxiety scores ranging between (10-14 moderate). Mean score of total stress was 1.56 ± 638 , total anxiety scored 2.82 ± 753 and total depression scored 1.87 ± 0.692 . There moderated anxiety level with mild stress and depression score among health care professionals because in healthcare professionals taken stress regarding health concerns and clinical responsibilities during covid-19.

Key Words: Covid-19, corona virus, mental health, anxiety, stress, depression

Introduction

Mental wellbeing can be described either positively to indicate a state of emotional and psychological prosperity or negatively to indicate the presence of mental health issues. Additionally, the term may also indirectly refer to services provided to or mandated for individuals with mental health concerns, known as "mental health services". (Pilgrim, D., 2022).

Severe Acute Respiratory Syndrome Corona virus, also known as COVID-19 pandemic has as its main cause Sars-Cov-2. This illness is highly contagious and has a lengthy incubation period. The most typical symptoms exhibited by individuals who with COVID-19 positive test results were cough, dyspnea, and fever, in addition to pneumonia and lower respiratory tract infections. Due to the virus's preference for lower airway cells, patients with COVID-19 experienced fewer upper respiratory tract symptoms. Other, more general symptoms included vomiting, diarrhea, headache, dizziness, and weakness. Corona virus has the ability to infect people of all ages, but those who are elderly or have pre-existing medical conditions, notably heart ailments, diabetes, and asthma, are at a larger risk of contracting the disease. People of all ages can safeguard themselves by adhering to the safety precautions outlined by the WHO, including the use of face masks and frequent hand washing. (Anjorin, A. A., 2020).

An outline is given of momentum execution structures and techniques and emotional wellness advancement execution research, featuring why execution is significant and what we know from considers that have been completed to date. The job of shared practice and inter scrotal organizations in executing emotional wellness advancement is talked about. Drawing on the writing, various execution factors that are basic to compelling association working are analyzed. Suggestions for supporting quality mediation execution are laid out. (Barry, M. M., 2019).

The COVID-19 pandemic's impacts on psychological disorders and psycho-social wellness have voiced doubts among the World Health Organization (WHO). As a result of tactics like soul and quarantine, the WHO has issued an advisory: An increased risk of loneliness, anxiety, despair, sleeplessness, dangerous drug and alcohol use, soul, or suicide behavior has been reported. Domestic violence cases have increased as a result of global lockdowns, particularly between women and children who have no way to leave their abusers while in confinement. A recent analysis by the Indian National Alliance on mental illness discovered that the prevalence of mental disorders had grown by 20% since the start of COVID-19 in India. (Barry, M., 2019). Psychologists and mental health experts anticipate that the pandemic will have a significant detrimental impact on people's mental health, resulting in an increase in melancholy, murder, self-harm, as well as

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other COVID-19-related illnesses worldwide. (Kumar, A., & Nayar, K. R., 2021). Examples of co-morbidity among mental problems are thought to mirror the characteristic association of psychological sickness. (Haidari, E., 2022). Factor examination can be utilized to research this design and build a quantitative characterization framework. Earlier examinations recognized 3 components of psychopathology: disguising, externalizing, and thought problem. (Agberotimi, S. F., 2022).

Literature Review

2020, Adam Gabbatt et al found out upon the effects of isolation on health both psychologically and physically during the COVID-19 outbreak. The present pandemic has limited people to their houses and apart from working from home they are unable to go to bars, restaurants, cinemas or to relatives following social distancing but according to some experts this is implementing intense effect on physical and mental health. (Asghar, M. S., 2021). This long lasting isolation not only executes economical downfall but enhances the possibility of early deaths led by immense psychological effects which can be terms as social recession. People who socially express less inflammation in comparison to those or are not so social and express high inflammation with respect to the variety of persistent illnesses. Evidently, this isolation theory has drastic effects on circulatory systems, hormonal system and process of ageing. According to the statement, mortality rates rise by 26% due to loneliness, 29% due to social isolation, and 32% due to living alone. (Barry, M. M., 2019).

In 2020, Neil Greenberg and colleagues undertook a study to assess the psychological well-being of health professionals between ages of COVID-19. During the whole period of pandemic, many healthcare workers (HCWs) had labored for long hours in persuasive conditions. Those workers might have been exposed to high-risk traumas and ethical dilemmas associated to the delivery of premium-quality care, potentially because of the lack of required experience, apparatus, or a low staffing levels. The likelihood of mental health issues is most likely to increase in the presence of the kinds of unusual circumstances indicated above. A few of these issues include substance abuse, depression, anxiety symptoms, post-traumatic stress disorder (PTSD), and suicide, but there are other issues as well. Likewise, infection danger for HCWs who treat individuals with COVID-19 is also higher. (Kumar, A., & Nayar, K. R., 2021). Eventually, it also increases the danger of contaminating their families. Additionally, a few people, especially those from Black, Asian, and minority (BAM) backgrounds, are thus substantially more likely to experience adverse results; they might be more likely to experience different types of mental health problems. The hazard of mental damage is however, not restricted to forefront HCWs; in truth, the majority of HCWs, in addition to their knowledge, they are likely to have faced historically unprecedented challenges since the epidemic first spread, that includes varying the approach they work and, from time to time, also being incapable of delivering the quality

of critical care they would generally offer. While a few HCWs will indisputably prosper in such nerve-racking circumstances, it is also significant at the same time, HCW leaders have to take necessary measures to protect the psychological state of the employees, identify individuals who experience mental trauma, & ensure that they can provide reasonable, scientific proof of maintenance or care. (Gabbatt, A., 2020).

In 2020, Sofia Pappa et al found out the commonness of discouragement, nervousness, throughout the COVID-19 ebola outbreak, sleeping condition was prevalent among medical care workers. Corona virus pandemic can possibly essentially influence the emotional well-being of medical care laborers (HCWs), who remain in the forefront of this emergency. (Datta, S. S., Mukherjee, A., & Maitra, R., 2022). It is, subsequently, a quick need to screen paces of temperament, rest and other emotional well-being issues to comprehend interceding factors and illuminate custom-made mediations. The point of this survey is to blend and dissect existing proof on the predominance of misery, tension and sleep deprivation among. (Tandon, P. S., & Christakis, D. A., 2022).

During the COVID-19 epidemic in 2019, Felipe Ornell and his coworkers conducted a study on the mental health of medical personnel. Healthcare professionals are more vulnerable to problems with mental health and develop mental illnesses due to the increased workload and stress-related symptoms. The anxiety, vulnerability, and uncertainty brought on by the pandemic can have an impact on interpersonal relationships even though healthcare teams, particularly those who work as emergency responders can serve as a physical and emotional tiredness (Goel, A. D., 2020). According to the Brazilian Intensive Care Association, it is crucial to identify risks and put treatments in place to limit damage to the mental wellness of professionals currently participating in the treatment of people who do have COVID-19 health professionals who come into direct touch with infected patients should routinely be checked and examined for mental health issues, especially sadness, anxiety, and suicide thoughts (Abdayem, P., & Planchard, D., 2021). Also, Individuals with a history of involvement in psychosocial lifestyle factors must be classified and give persons with more severe psychological health difficulties priority access to mental health therapy. It is crucial to address psychosocial aspects that are secondary but may potentially cause stress with reference to the cognitive fellow human of hospital personnel during in the COVID-19 incident (AlAteeq, D. A., 2022). Those who fit this description include those with long-term illnesses, those who live with young children or elderly relatives, among others (Mairesse, M., and Weigandt, J., 2020).

Materials and Method

Data was collected using a descriptive cross-sectional study approach from various medical hospitals in Karachi, Pakistan. The study duration spanned six months from the approval of the synopsis. Sample size of the study was 377

(calculated through Rao soft calculator). The sample technique was convenient sampling method. Inclusion criteria included Medical healthcare professionals in practice, while exclusion criteria were non-medical professionals. Data was collected by adapted questionnaire DASS21 from the previous study (Muhammad Subhan Arshad et al. in 2020). Questionnaires were distributed among the recruited participants who fulfill the inclusion criteria. Informed consents were signed by all participants. Using SPSS version 23, the data were examined, which produced descriptive statistics “frequency and percentage” (Zimmerman, M., 2019)

Result

Table 1 shown the frequency and percentage of age of participants, 25-30 years of age showed frequency of 55 and 18.3%, 30-35 of age showed 68 frequency and 22.7%, 40-45 of age showed 60 frequency and 20.0% and from age 45-50 showed frequency of 49 and 16.3%.

Table 2 appear the gender of participants, out of 300 participants 131 (43.7%) were male and 169 (56.3%) were females.

Table 3 showed that 99 (33%) of professionals were MBBS, 123 (41.0%) were D-pharmacy and 78 (26.0%) were DPT.

Table 4 revealed that depression score ranging from 0-9 (normal) were 92(30.7%), 155 (51.7%) participants were at range 10-13 (Mild), 52 (17.3%) professionals at 14-20 (moderate) scale and 1 (0.3%) were at (severe) 21-27.

Table 5 manifest scale of total anxiety score, 23 (7.7%) participants were at normal ranging from 0-7, 46(15.3%)

were at mild 8-9, 193 (64.3%) participants at moderate 10-14 while 37 (12.3%) of severe 15-19 and only 1 (0.3%) at extremely severe 20+.

Table 6 showed total stress score which assure that 155(51.7%) participants were at normal score 0-14, 121(40.3%) of them were at mild range 15-18 and 24 (8.0%) at moderate range 19-25.

Table 7 showed the professional status of the participants and total depression score in cross tabulation form. MBBS, pharmacists and DPT were professions with ranges of normal (0-9), mild (10-13), moderate (14-20) and severe (21-27). There frequency and percentages were mentioned as 29 MBBS participants ranging normal, 56 mild, 14 moderate and 0 severe. 39 pharmacists were in normal range, 61 mild, 22 moderate and 1 severe. 24 therapist lie in normal range, 38 in mild, 16 in moderate while 0 in severe.

Table 8 showed professional status of participants with total anxiety score in cross tabulation, professions include MBBS, pharmacists and DPT while scoring with ranges of normal (0-9), mild (10-13), moderate (14-20) and severe (21-27). 7 participants appear as normal, 15 as moderate, 68 mild and 9 severe. 12 pharmacists appear as normal, 17 moderate, 73 mild and 20 severe. 4 therapists appear as normal, 14 as mild, 52 moderate and 8 severe.

Table 9 showed professional status and total stress score in cross tabulation, professions were MBBS, pharmacists and DPT while scoring with ranges of normal (0-14), mild (15-18), moderate (19-25) 52 participants appear as normal, 41 as mild and 6 moderate. 67 pharmacists appear as normal, 43 mild and 13 moderate. 36 therapists appear as normal, 37 as mild and 5 moderate.

Table 1. Participants' ages

		Frequency	Percentile	Valid Percent	Cumulative Percentile
Valid	25-30	55	18.3	18.3	18.3
	30-35	68	22.7	22.7	41.0
	35-40	68	22.7	22.7	63.7
	40-45	60	20.0	20.0	83.7
	45-50	49	16.3	16.3	100.0
	Total	300	100.0	100.0	

Table 2. The Participants' gender

		Frequency	Percentile	Valid Percent	Cumulative Percentile
Valid	Male	131	43.7	43.7	43.7
	Female	169	56.3	56.3	100.0
	Total	300	100.0	100.0	

Table 3. Participants' level of Professional Experience Participants' level of Professional Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MBBS	99	33.0	33.0	33.0
	Pharmacists	123	41.0	41.0	74.0
	DPT	78	26.0	26.0	100.0
	Total	300	100.0	100.0	

Table 4. Total Depression score Total depression score

		Frequency	Percentile	Valid Percent	Cumulative Percentile
Valid	0-9, Normal	92	30.7	30.7	30.7
	10-13, Mild	155	51.7	51.7	82.3
	14-20, Moderate	52	17.3	17.3	99.7
	21-27, Severe	1	.3	.3	100.0
	Total	300	100.0	100.0	

Table 5. Total anxiety score Total anxiety score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-7, Normal	23	7.7	7.7	7.7
	8-9, Mild	46	15.3	15.3	23.0
	10-14, Moderate	193	64.3	64.3	87.3
	15-19, Severe	37	12.3	12.3	99.7
	20+, Extremely Severe	1	.3	.3	100.0
	Total	300	100.0	100.0	

Table 6. Total stress score Total stress score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-14, Normal	155	51.7	51.7	51.7
	15-18, Mild	121	40.3	40.3	92.0
	19-25, Moderate	24	8.0	8.0	100.0
	Total	300	100.0	100.0	

Table 7. Participants' level of professional experience * Total depression score Cross tabulation Count

		0-9, Normal	10-13, Mild	Total depression score 14-20, Moderate	21-27, Severe
Participants' level of professional experience	MBBS	29	56	14	0
	Pharmacists	39	61	22	1
	DPT	24	38	16	0
Total		92	155	52	1

Table 8. Participants' level of professional experience * Total anxiety score cross tabulation Count

		0-7, Normal	8-9, Mild	Total anxiety score 10-14, Moderate	15-19, Severe
Participants' level of professional experience	MBBS	7	15	68	9
	Pharmacists	12	17	73	20
	DPT	4	14	52	8
Total		23	46	193	37

Table 9. Participants' level of professional experience * Total stress score cross tabulation Count

		0-14, Normal	Total stress score 15-18, Mild	19-25, Moderate	Total
Participants' level of professional experience	MBBS	52	41	6	99
	Pharmacists	67	43	13	123
	DPT	36	37	5	78
Total		155	121	24	300

Statistics

Discussion

In 2020, Adam Gabbatt and colleagues conducted research to determine how isolation during the Covid-19 virulent

sickness affected both mental and physical health. The study recorded a median age of 28 years (IQR 26–31) among the respondents, where 86% of the inhabitants being over 23 years old. The results demonstrated a substantial link

between general anxiety (mild) and moderate depression scores among specific healthcare professions (Papoutsis, E., & Katsaounou, P., [2022](#)).

	Total stress score	Total anxiety score	Total depression score
N	300	300	300
Valid	0	0	0
Missing Mean	1.56	2.82	1.87
Std. Deviation	.638	.753	.692

Ram Sandesh conducted a study in Pakistan in 2020 to ascertain how the COVID-19 outbreak affected medical personnel's psychological well-being. The research found that the general mean score for depression was 18.12 ± 10 , for anxiety as 19.01 ± 9.2 , and while for stress it was 20.12 ± 12.0 . A considerable number of partakers were found to be enduring moderate to extremely severe depression (81 or 72.3%), anxiety (96 or 85.7%), and stress (101 or 90.1%). (Kessler, F. H. P., & Narvaez, J. C. D. M., [2022](#)).

Deemah A. AlAteeq et al. carried out a study in Saudi Arabia in 2020 with the objective of exploring the levels among the health professionals, of sadness and nervousness for the duration of the COVID-19 outbreak. The results showed that over half of the participants i.e. 55.2% had depressive disorder. Among them, 24.9% were classified as mild, 14.5% as moderate, while 10% as

moderately severe and 5.8% as severe. Additionally, 51.4% of the participants had GAD, generalized anxiety disorder. The disorder was further classified as 25.1% mild, 11% moderate (11%), and 15.3% severe (Rizwan, A., [2022](#)).

Conclusion

The study found that moderate levels of anxiety were common among healthcare practitioners, with mild levels of stress and depression scores throughout the pandemic, COVID-19. This is attributed to the healthcare professionals' concerns about health risks and clinical responsibilities. Given that healthcare professionals are the frontline workers of the nation, it is crucial to prioritize their well-being and alleviate their stress to improve the quality of healthcare services.

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Form for Informed Consent

The process and logic of my study have been fully disclosed. I investigated to see if there were any concerns about the process, and I tried my hardest to respond to any that were posed.

Name of the Researcher _____

Signature of the Researcher _____

The technique to be followed has been properly explained to me. I hereby accept to take part in the study by signing this consent form. I am aware that I can decline to take part in the study at any moment, revoke my consent, or stop taking part altogether. Also, I am aware that the researcher will respond to any questions I may have.

Name of Subject _____

Signature of the Subject _____

Dated _____

Questionnaire: Dermographics:

Age: _____

Gender: _____

Professional status: _____

Marital status: _____

Dated: _____

Please read the following statements, and then circle the number (0, 1, 2, or 3) that best represents how much of each statement applies to you personally right now. No response is correct or wrong. Never give a statement too much thought.

The following is the rating scale:

1. Not at all appropriate for me
2. Applied somewhat or a considerable amount of time
3. Applicable to me in a significant way or for the majority of the time
4. Often or almost always applied to me

Q1. (s)	It is challenging for me to relax.	0	1	2	3
Q2. (a)	I was cognizant of the dryness in my mouth.	0	1	2	3
Q3. (d)	I was unable to feel any good emotions at all.	0	1	2	3
Q4. (a)	My breathing was laboured (excessively quick, for example). Without physical effort, breathlessness while breathing	0	1	2	3
Q5.(d)	I thought I was expending a lot of anxious energy.	0	1	2	3
Q6. (s)	It was challenging for me to get the motivation to take action.	0	1	2	3
Q7. (a)	I have a tendency to overreact in certain circumstances.	0	1	2	3
Q8. (s)	Trembling was something I felt (e.g., in the hand)	0	1	2	3
Q9. (a)	I was concerned about scenarios in which I would freak out and seem foolish since	0	1	2	3
Q10. (d)	I was concerned about scenarios in which I would freak out and seem foolish since	0	1	2	3
Q11. (s)	I could feel my temper rising.	0	1	2	3
Q12. (s)	It was tough for me to unwind.	0	1	2	3
Q13. (d)	I was depressed and blue.	0	1	2	3
Q14. (s)	Each obstruction to my ability to do my task angered me.	0	1	2	3
Q15. (a)	I thought I may panic.	0	1	2	3
Q16. (d)	I could never get excited about anything.	0	1	2	3
Q17. (d)	I believed I was not very valuable as a person.	0	1	2	3
Q18. (s)	I thought I was rather sensitive.	0	1	2	3
Q19. (a)	Without engaging in any physical activity, I was aware of my heart's activity (e.g., sense of heart rate increase , heart missing a beat)	0	1	2	3
Q20. (a)	Without any explanation, I experienced fear	0	1	2	3
Q21. (d)	Life seemed pointless to me.	0	1	2	3