**Psychological impact of COVID-19 amongst health professionals in a tertiary care Hospital**

NAZIA AYYUB, MAIMOONA ASHRAF, MUHAMMAD ZEESHAN, FAHAD IBRAR

*Department of Obstetrics & Gynaecology, Postgraduate Medical institute/Ameer-u-din Medical College/Lahore General Hospital Lahore.*

**ABSTRACT:**

**Background**: As the unprecedented COVID-19 pandemic is sweeping across the world rapidly the mental health of health professionals is getting at stake.

**Objective:** of this study is to assess and highlight psychosocial impact of COVID-19 amongst health professionals in a tertiary care hospital so that proper interventions can be done to alleviate its negative psychiatric effects.

**Methods:** It is a Cross-sectional, descriptive interview-based study survey at department of Obstetrics & Gynaecology, Postgraduate Medical Institute/Lahore General Hospital Lahore. A self-designed questionnaire was distributed amongst health care professionals (doctors and nurses from different specialties) during April and May 2020.

**Results:** Three hundred health professionals participated in this survey.100% found themselves as health hazard to their family and 90% were having fear of getting socially distant from them.70%- 80% were having anxieties related with going to their job, getting infected, being quarantined and increasing infection rate amongst health professionals. More than 70% were not satisfied with hospital supply of PPES, safety equipment and infection control policy.74% were concerned with long working hours and 79% even wanted to quit from their job.

**Conclusion:** Health care professionals are working on frontline with immense psychological stress which may cause negative psychiatric effects on their mental health. So proper policies and interventions should be implemented to provide them psychological support for their better mental health and resilience.

**Key words:** COVID-19, Pandemic, Psychological impact, Health professionals.

**How to cite this article:** Ayyub N, Ashraf M, Zeeshan M, Ibrar F. Covid-19: Psychological impact of Covid-19 amongst health professionals in a tertiary care hospital. *Pak Postgrad Med J 2020;*31(2): 86-89

|  |
| --- |
| This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/3.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. |

*Correspondence to: Dr Nazia Ayyub, MBBS, FCPS*

*Assistant Professor, Department of OBGYN, PGMI/AMC/LGH, Lahore, Pakistan.*

*Email: drnaziatahir@yahoo.com*

*Received: July 29, 2020;*

*Revised: November 03, 2020*

*Accepted: November 25, 2020*

**INTRODUCTION**

World health organization (WHO) officially announced novel coronavirus as the “Coronavirus disease 2019” on February 11, 2020(1).This lethal virus has currently affected more than 200 countries and it is a risk for further spread globally(2).Rising rate of infection detection in medical workers is making situation even more alarming. As a frontline warrior along with physical health risks they are also suffering through mental trauma such as anxiety regarding high risk for infection, inadequate equipment for safety from contagion, isolation, exhaustion and lack of contact with family(3).

knowledge about the infection and its spread is upgrading frequently and causing rise in concerns regarding safety and protective equipment(4).This is an unprecedented crises and major health hazard to our population so it is crucial to understand its associated psychological impact on our health professionals who are fighting on frontline against an invisible enemy labelled as WORLD WAR V(5,10). So this study aimed to assess health professional burden of psychosocial trauma working in a tertiary care hospital during COVID 19 outbreak and identifying the problems that need to be addressed in time so that urgent policy guidelines should be made for mental well-being of health care professionals. This will go long way to prevent long term and persistent psychological issues as its not known how far we have to live and fight with this pandemic in future(12,13).

**METHODS:**

It was a cross-sectional, descriptive, interview based study survey during April and May 2020.After taking informed consent we distributed self-designed questionnaire amongst health professionals (only doctors and nurses from different specialties) working in Lahore General Hospital Lahore. Survey was consisted of 20 questions containing information about mental stress, depression, fears and anxiety related with disease and its spread, satisfaction and ease in using personal protective equipment (PPEs), personal& family health hazards and concerns about adequacy of hospital infection prevention and control policies. Convenience sampling technique was used .Data was collected and analyzed using descriptive stats as frequencies and percentages.

**RESULTS:**

300 health professionals participated in the study. Response rate was 100%. Majority (83 %)of the health professionals were having fear from going to their workplace, getting infections from patients 96% and being quarantined 78%. As far as hospital administration is concerned 83% of health professionals were not satisfied with the SOP’s and infection prevention measures. 74% wanted to get themselves tested for COVID-19. Regarding counseling of the patients for testing and treating the patients, the response was not significantly different( 52% &50%).71% percent of health not satisfied with the adequate provision of personal protective equipment (PPE) and also 64% not comfortable with wearing PPE while working.

100% professionals felt themselves as a health hazard to their families and 88% found it difficult to balance between work and family care. 90% felt anxiety about social and physical distancing with their families and friends, 72% felt that social distancing is leading to social boycott, 94% felt their families getting worried about their health, 82% got depressed by increasing disease spread amongst health professionals. 74% did not feel satisfied with their working hours and 79% wanted to quit from their jobs.

**DISSCUSSION:**

With the advent of COVID-19 in Pakistan health professionals have been under physical and mental stress. In our study the psychosocial burden includes fears for being high risk for infection, inadequate equipment for safety from contagion, isolation, anxiety and lack of contact with family. A recent study involving 1563 health professionals reported more than half (50.7&) of participants reported depressive symptoms,44.7% anxiety and36.1% sleep disturbance (5,11).The short and long term effects of the pandemic may trigger psychological issues that could have detrimental effects on physical and mental well being of health professionals, resembling the situation during SARS and H1N1 epidemics(6,7)). Similar experience have been found in emerging scientific literature and media reports in two countries at present China and Italy(8), which are more heavily hit by COVID-19. A very recent study among healthcare professionals in tertiary infectious diseases hospital for COVID-19 in China revealed a high incidence of stress and anxiety disorder among front line health staff (9).The health professionals are at high risk of getting infection, and also their great fear is of transmitting it to their family and close contacts. They may also have to face psychological effects of being quarantined (14, 15 16).Moreover they expect that hospitals should be provided with adequate supply of safety equipment and PPEs.It is also necessary for the government to give them full support and security in this adverse situation (17, 18).

**LIMITATIONS:**

This study is showing just TIP OF THE ICE-BERG. More research is required in future to know about short and long term mental health hazards to health care workers.

**CONCLUSION:**

Our study concludes that health care professionals are working on frontline with immense psychological stress so there is an urgent need to redesign policies to provide urgent psychological support to this vulnerable group to improve their quality of work, mental resilience and well-being.

Psychosocial impact of COVID 19 among Health professionals. n=300

|  |  |  |
| --- | --- | --- |
| Question | Number | Percentage |
| 1-Feel dread (fear) going to work?  Yes  No  Don’t Know | 249  45  6 | 83  15  2 |
| 2-Sleep and eat well?  Yes  No  Don’t Know | 156  132  12 | 52  44  4 |
| Question | Number | Percentage |
| 3-Feel burden excessively?  Yes  No  Don’t Know | 141  144  15 | 47  48  5 |
| 4-Feel fear of acquiring disease from patients?  Yes  No  Don’t Know | 288  12  0 | 96  4  0 |
| 5-Fear of being quarantined?  Yes  No  Don’t Know | 234  63  3 | 78  21  1 |
| 6-Want to treat disease patients?  Yes  No  Don’t Know | 150  129  21 | 50  43  7 |
| 7-Face difficulty in counseling the patients about getting tested?  Yes  No  Don’t Know | 156  126  18 | 52  42  6 |
| 8-Want yourself to get tested for disease?  Yes  No  Don’t Know | 222  72  6 | 74  24  2 |
| 9-Feel that your hospital administration is concerned about transmission of disease to health professionals?  Yes  No  Don’t Know | 45  249  6 | 15  83  2 |
| 10-Feel satisfied with SOP’s of hospital administration regarding disease prevention and its transmission?  Yes  No  Don’t Know | 48  240  12 | 16  80  4 |
| 11-Feel satisfied with the provision PPE’s by hospital administration?  Yes  No  Don’t Know | 81  213  6 | 27  71  2 |
| 12-Feel comfortable working while wearing PPE’s?  Yes  No  Don’t Know | 105  192  3 | 35  64  1 |
| Question | Number | Percentage |
| 13-Feel yourself as a health hazard to your family/kids?  Yes  No  Don’t Know | 300  0  0 | 100  0  0 |
| 14-Feel difficult to balance work and family care?  Yes  No  Don’t Know | 264  21  15 | 88  7  5 |
| 15-Feel that your family is getting much worried about your health?  Yes  No  Don’t Know | 282  12  6 | 94  4  2 |
| 16-Get depressed and anxious after hearing and watching disease spread in health professionals on social and public TV?  Yes  No  Don’t Know | 246  48  6 | 82  16  2 |
| 17-Feel satisfied with the duration of your working hours?  Yes  No  Don’t Know | 66  222  12 | 22  74  4 |
| 18-Want to quit your job?  Yes  No  Don’t Know | 60  237  3 | 20  79  1 |
| 19-Feel anxiety of social/Physical distancing resulting in lack of contact with family and friends?  Yes  No  Don’t Know | 270  24  6 | 90  8  2 |
| 20-Feel that social distancing is leading to social boycott?  Yes  No  Don’t Know | 216  72  12 | 72  24  4 |

**ETHICAL APPROVAL**

The study was approved by the Ethical Review Committee of Postgraduate Medical Institute, Ameer ud Din Medical College, Lahore, Pakistan, vide PGMI/AMC/LGH/Article/Research No./00-130-20 dated July 30, 2020.

**references**

1. World Health Organisation: WHO announces COVID-19 outbreak a pandemic. http://www.euro.who.int/en/health topics/healh-emergencies/corona virus-covid-19/news/news/2020/ 3/who-announces–covid-19-outbreak-a-pandemic. Accessed April 3,2020.

2. <https://www.worldometers.info/coronavirus>.

3. Lai MaS, Wang Y, Cai Z, Hu J, Wei N. Factors associated with mental health outcomes among health care workers exposed to Corona virus disease 2019.JAMA Netw Open.2020;3(3):e203976. doi:10.1001/jamanetworkopen.2020.3976

4. Munster VJ, Koopmans M, van Doremalen N, van Riel D, de Wit E. A novel corona virus emerging in Chaina-key questions for impact assessment. N Eng J Med.2020;382(8):692-694.doi:10.1056/NEJM p2000929

5. Ho CS, Chee CY, Ho RC. Mental Health Strategies to combat the psychological I mpact of COVID-19 Beyond Paranoia and Panic.Ann Acad Med Singapore.2020;49(1):1.

6. Chong MY, Wang WC, Hsieh WC, Lee CY, ChiuNM, Yeh WC, et al. Psychological impact of severe acute respiratory syndrome on health workers in a tertiary hospital.Br J Psychiatry 185:127-133,2004

7. Goulia P, Mantas C, Dimitroula D, Mantis D, Hyphantis T. General hospital staff worries,perceived sufficiency of information and associated psychological distress during the A/H1N1 influenza pandemic.BMC infect Dis 10:322,2010.

8. Chen Q, Liang M, Li Y, Guo J, Fei D, Wang L, et al. Mental health care for medical staff in Chaina during the COVID-19 outbreak.Lancet Psychiatry 7:e15-e16,2020.

9. Huang JZ, Han MF, LuoTD, Ren AK, Zhou XP. Mental health survey of 230 medical staff in a tertiary infectious disease hospital for COVID -19.Zhonghua Lao Dong Wei Sheng Zhi Ye Bing Za Zhi 38:E001,2020 [Epub ahead of print].

10. McLuhan A. World War V.The American Mind.March 16,2020. Available from: <http://americanmind.org/features/the-coronacrisis-and-our-future-discontents/world-war-v>. Accessed March 29,2020.

1. Chen S., Li F., Lin C.  Challenges and recommendations for mental health providers during the COVID-19 pandemic: the experience of China’s First University-based mental health team. Global Health 16, 59 (2020). <https://doi.org/10.1186/s12992-020-00591-2>
2. Dong L, Bouey J (2020) Public mental health crisis during COVID-19 pandemic, China. Emerg Infect Dis 26(7).  <https://doi.org/10.3201/eid2607.200407>
3. Duan L, Zhu G (2020) Psychological interventions for people affected by the COVID-19 epidemic. Lancet Psychiatry 7(4):300–302[PubMed](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Abstract&list_uids=32085840)[PubMed Central](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC7128328)[CrossRef](https://doi.org/10.1016/S2215-0366(20)30073-0)[Google Scholar](http://scholar.google.com/scholar_lookup?title=Psychological%20interventions%20for%20people%20affected%20by%20the%20COVID-19%20epidemic&author=L.%20Duan&author=G.%20Zhu&journal=Lancet%20Psychiatry&volume=7&issue=4&pages=300-302&publication_year=2020)
4. Goyal K, Chauhan P, Chhikara K, Gupta P, Singh MP (2020) Fear of COVID 2019: first suicidal case in India. Asian J Psychiatry 49:e101989 [CrossRef](https://doi.org/10.1016/j.ajp.2020.101989)[Google Scholar](http://scholar.google.com/scholar_lookup?title=Fear%20of%20COVID%202019%3A%20first%20suicidal%20case%20in%20India&author=K.%20Goyal&author=P.%20Chauhan&author=K.%20Chhikara&author=P.%20Gupta&author=MP.%20Singh&journal=Asian%20J%20Psychiatry&volume=49&publication_year=2020)
5. Li W, Yang Y, Liu Z-H, Zhao Y-J, Zhang Q, Zhang L et al (2020) Progression of mental health services during the COVID-19 outbreak in China. Int J Biol Sci 16(10):1732–1738[PubMed](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Abstract&list_uids=32226291)[PubMedCentral](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC7098037) [CrossRef](https://doi.org/10.7150/ijbs.45120)[Google Scholar](http://scholar.google.com/scholar_lookup?title=Progression%20of%20mental%20health%20services%20during%20the%20COVID-19%20outbreak%20in%20China&author=W.%20Li&author=Y.%20Yang&author=Z-H.%20Liu&author=Y-J.%20Zhao&author=Q.%20Zhang&author=L.%20Zhang&journal=Int%20J%20Biol%20Sci&volume=16&issue=10&pages=1732-1738&publication_year=2020)
6. Wang C, Pan R, Wan X, Tan Y, Xu L, Ho CS et al (2020a) Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. Int J Environ Res Public Health 17(5):1729[PubMedCentral](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC7084952)[CrossRef](https://doi.org/10.3390/ijerph17051729) [Google Scholar](http://scholar.google.com/scholar_lookup?title=Immediate%20psychological%20responses%20and%20associated%20factors%20during%20the%20initial%20stage%20of%20the%202019%20coronavirus%20disease%20%28COVID-19%29%20epidemic%20among%20the%20general%20population%20in%20China&author=C.%20Wang&author=R.%20Pan&author=X.%20Wan&author=Y.%20Tan&author=L.%20Xu&author=CS.%20Ho&journal=Int%20J%20Environ%20Res%20Public%20Health&volume=17&issue=5&pages=1729&publication_year=2020)
7. Heymann DL,Shindo N.COVID-19; What is next for public health? Lancet.2020;395(10224):542-545. doi: 10.1016/S0140-6736(20)30374.
8. .Urooj U,Ansari A,Siraj A,Khan S,Tariq H.Expectations,Fears and Perceptions of doctors during Covid-19 Pandemic.Pak J Med Sci.2020;36(COVID19-S4):COVID 19-S37-S42. Doi:http://doi.org/10.12669/pjms.36.COVID 19-S4.2643

**Authors’ contribution:**

**NA:** Designed, editing of manuscript and data analysis.

**MA:** Conceived, editing of manuscript.

**MZA:** Data collection.

**FI:** Collection of references.