Factors of Mental Health Issues and Its Impacts on Health Care Professionals during Different Waves of Covid-19 in Karachi

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Abstract

Covid-19 had exaggerated millions of lives and proved fatal for hundreds of thousands in approximately more than 200 countries, including Pakistan, as per WHO report. "Outbreak had brought 36O degree angle change in all walks of life, and the most affected beat was Health Care Professionals, parting them most vulnerable". From the fear of catching virus to long job hours, combating short medical supplies, till carrying personal issues in mind such as family concerns and job loss, had mutually contributed to generating mental stress, depression, and psychological disorders among Health-Care Professionals, resulted in making their life miserable. Situation was even same in Pakistan's scenario, but worst in megacities like Karachi, where influx of COVID-19 cases was beyond imagination, with the availability of low number of Health Care Professionals, causing   mental   and physical stress among Health Care Professionals. Growing mental health issues among Health Care Professionals, in Pakistan was an issue of prime importance, referring the need to address the issue of high rate of mental health issues among Health Care Professionals, in Pakistan, during different waves of COVID-19 especially in megacity like Karachi.

As data related to active factors influencing mental health among Health Care Professionals during different waves of COVID-19,was not readily available, the research required to collect data through primary research, in   order to obtain result orientated data, Primary research was conducted, using convenient and snowball sampling, where sample size was 250.

Consequently, this research was intended to discover the factors of mental health issues on Health Care Professionals, during different waves of COVID-19 in Karachi because there was a need to mark specific interventions aimed at mitigating adverse psychological of pandemic while increasing well being among Health Care Professionals.

Keywords*: Mental health factors, Anxiety, Depression, insomnia, HRH policies*

Introduction

The first reported case of corona virus was in late December 2019, speeded like a wild fire in January 2020 as (WHO, Director-General's Opening Remarks at the Media Briefing on COVID-19 , 2020) Chinese authorities specified Wuhan City as the source of the virus spread, exclusively the seafood marketplace. Originally named "severe acute respiratory syndrome corona virus 2" ,(SARS-CoV-2) due to its genetic similarities to SARS, the World Health Organization (WHO) named it corona virus disease 2019 "COVID-19" on February 11, 2020 (World Health Organization [WHO] . Rolling Updates on Coronavirus Disease. Geneva: WHO, 2020) . Around 7,553,182 people are infected with COVID-19 across the globe. Between 423,349 people have lost their lives due to the pandemic. (World Health Organization [WHO] . Coronavirus Disease (COVID-19) Situation Report , 2020). This pandemic, a mysterious nature of the clinical appearance, changing symptoms, and rapid spread methods of COVID-19 have caused high psychological terror among Health-Care Professionals fighting as frontline workers. (Rana W. M., 2020).On February 26, 2020, in Karachi, Pakistan reported the first COVID-19 confirmed case (Coordination, 2020), with around 139,230 confirmed COVID-19 cases and 632 deaths till June, 2020. Furthermore, WHO warned Pakistan for an intensification of cases till 200,000 by middle of July (International, WHO Warns Pakistan's COVID-19 Cases can Surge to 200,000 by Mid July, 2020), after the spread of virus over 115 districts mainly in two provinces, Punjab and Sindh.

Since Pakistan has ranked as 122nd among 191 countries in overall quality of health-care systems, for inadequate health infrastructure and Health Care Professionals. (International, WHO Warns Pakistan's COVID-19 Cases can Surge to 200,000 by Mid July, 2020) (WHO, Coronavirus Disease (COVID-19) Situation Report, 2020).Situation turned more terrible when the Human Development Index (HDI) value turned as low as 0.56, which positioned the nation at 152 out of 189 countries (UNDP, 2019)Health Care Professionals considered as frontline soldiers for the COVID-19 treatment and vital medical care against it. It makes Health Care Professionals at the most vulnerable for being infected. (Ali, 2020). 480 Health Care Professionals were infected and five doctors died, In April, since the COVID-19 outbreak hit the country on February 26. (Ayaz Gul, 2020) The worst situation of intensifying in infections gave concern causing situation to take safety and prevention among, and this pressure forced them to refuse to execute their duties in line of COVID-19. Strike in Quetta city against the pity working

conditions and lack of medical supplies, e.g., PPE. In addition, the Health Care Professionals. made situation more worst where Health Care Professional ,were protesting about the inability of the government and health department to deal with the pandemic and for inaccurately risking the Health Care Professionals (Hashim, 2020).Situation got tensed when government Instead of responding to their concerns, used force to disperse protesting Health Care Professionals . Situation was not very different in public and private both hospitals, where frontline workers were dealt in appropriately, combating not only with COVID-19 but also with short of supplies and bad human resource management, included with its factors leading to mental health issues causing disturbance in personal and professional lives, among Health Professionals Care. Promotion of factors affecting mental health among health care professional is important for development of member states (World Health Organization, 2005).

After dealing with the COVID-19 disasters, mental fitness experts urgently called for a higher expertise of the concern, especially in mega cities like Karachi, in post pandemic situation related to factors of mental health issues and Its impacts on Health Care Professionals, during different waves of COVID-19 to become able to rapidly deploy actionable efforts to steer this prospective post pandemic mental health crisis during different waves.

Hypothesis

HO: HRH (Human Resource for Health) factors don't affect the mental health conditions of Health Care Professionals.

HA: HRH (Human Resource for Health) factors do affect the mental health conditions of Health Care Professionals.

Literature Review

Health Care Professionals worked as front-line workers during COVID-19 and were affected distinctively. This could be because of direct exposure to the virus and terrible tension in their surroundings, with the addition of threats to their personal lives. Moreover, the clinical work environment was infested with sufferers' senses of grief and panic, lack of safety gadgets, and ill-researched antidotes, nevertheless long and inadequate working hours became physical and psychological nightmares for front-line healthcare professionals.

"In any economy, health care professional plays an important role to provide physical and psychological strength to deal with public health challenges, during COVID-19, in making the

pandemic time easier for COVID-19 victims, health care professional had been through great psychological pressure, which enhanced psychological baseline in almost every economy, led by psychopathological disorders like stress, anger, and mood dysregulation. (Zinjun Liu, 2020)"

"After the breakout of COVID-19 and increasing number of confirmed cases and deaths, both of medical staff and public, health care workers were experiencing psychological problems, including anxiety, depression and stress majorly. As preventive measure, Health Commission of China published the guidelines, stated with principles for emergency psychological crisis intervention for the COVID-19   and generated hotlines for assisting on psychological issues. (Shuai Liu, 2020)"

"As the time of exposure to the virus increases, the mental state of the medical staff deteriorates. Regarding the factor of risk cognition, the negative psychological state of the medical staff gradually intensifies with the passage of time, whereas the optimistic hope dimension presents the inverted U-curve change. In the physical and mental response dimension, the sleep quality of the medical staff was generally poor, and the level of demand for psychological counseling was not significant. This may be because, in the early days of the outbreak, a large number of patients poured into hospital emergency rooms and fever outpatient departments, increasing the already heavy workload and responsibility of all medical staff. Meanwhile, the high intensity of work continued without rest, there were inadequate protective supplies and protective isolation measures, the outpatient procedure organization became cluttered, and other phenomena have continually aggravated the psychological burden of medical staff, reducing the confidence of medical workers in prevention and control. As the epidemic situation gradually came under control, medical work tended to stabilize, so the confidence in prevention and control steadily recovered. However, the negative feelings of healthcare workers had not been effectively vented, such as the grievances, fears, and powerlessness of medical staff in the face of dissatisfaction from patients and their families because of the lack of timely treatment. The inner suffering cannot slowly be dissipated over time. By contrast, it is highly likely that the backlog of negative emotions caused some mental health issues, especially PTSD, requiring the attention of psychological workers". (Yang zhang, 2020)

"Poor mental health amongst healthcare people was a challenge for each of them and the sufferers for whom they care. Mental distress of medical staff can negatively affect healthcare thru absences, in addition to leading to lower fines of care supplied.

As an end result, providing psychological help to healthcare employees can be useful both for the people at once affected and for their sufferers. Understanding of the scale of mental (CLIMENT QUINTANA-DOMEQUE, 2022) fitness-demanding situations faced by way of healthcare employees, and their prevalence, is useful for the design of such mental interventions."

"Health care professional faced Insomnia, Loneliness, Sleep disorder and mental depression as a result of the workload and related stress. Furthermore anxiety attacks as well as frustration were suffered by health care professionals in result of lack of knowledge, environmental changes and fear of infection. (Shahrior Rahman Razu, 2021)"

"Health care professionals in Bangladesh have suffered high level of fear, depression and anxiety due to the lack of sufficient medical personnel, low healthcare resources, and inadequate supply of quality protective equipment. (Md Riad Hossain, 2021)"

"As the increase in stringent measures to keep humans aside through lockdown to slow the spread of the corona virus sickness (COVID-19) pandemic (1) came a profound, annoying effect on all components of society, consisting of mental fitness and bodily health may be expected (2)Tension is the most common intellectual fitness problems within the popular populace and may be characterized by means of the feelings of hysteria and disturbing mind (3)Proof suggested that human beings with tension disorders were at better risk of growing some of continual scientific conditions (4)The superiority of anxiety differed from social and cultural factors as well as in one-of-a-kind classes of ethnic companies (5)The superiority of anxiety had been mentioned formerly among isolated humans due to center East respiratory Syndrome(6)The core symptoms of hysteria encompass excessive and uncontrollable worries, sleep disturbances, and difficulty in concentrating (7)During disease outbreaks, community tension could upward push following the first dying, elevated media reporting, and an escalating quantity of new instances (8)A look at evaluated the mental outcomes of folks who have been quarantined, which is an excessive shape of social distancing, at some stage in outbreaks of SARS, H1N1 flu, Ebola and different infectious diseases for the reason that early 2000s. They found that individuals experienced each brief time period and long term intellectual fitness troubles (9)As an instance, one specific look at in comparison quarantined as opposed to non-quarantined individuals

throughout an equine influenza outbreak, reporting excessive stages of hysteria, in the course of the outbreak in comparison with only 12 in step with cent in non-quarantined individuals". (Niels De Brier, 2020)

"Frontline healthcare workers suffered anxiety, depression, burnout, insomnia, and stress related disorders led to biopsychological vulnerabilities of individuals, socio-environmental factors, like risk of exposure of virus, job related stress. (Psychiatr, 2020)".

Research Objective

"Research objectives precisely define the core objectives as the vital task (Ryan, 2022)." "The objectives need to be specific and reflect to the main issues on what the research will be done, According to (Khoo, 2005)."

Thus, this research aims to address the factors contributing to mental health imbalance and Its Impacts on Health Care Professionals, during Different Waves of COVID-19 in Karachi, so that this research could lead to identify causes and relationship of mental health problems with HRH (Human Resource for Health), among Health Care Professionals in a metropolitan city like Karachi, having large population and less available resources, during difficult times like pandemic.

Research Methodology

Data Collection Strategy and Method

Quantitative research strategy with experimental approach had been adopted to address the main research objective, "as quantitative research is the process of collecting and analyzing numerical data, in order to help find patterns, predictions, casual relationships, and generalize results to wider populations." (Bhandari, Nov24,2020.) Moreover, "As quantitative research helps gathering big data with small and no human help, through automatic, remote and network." (Gray, 2007). Quantitative research is used to provide desired and calculated Insights of problems that might have remained unnoticed earlier.

This is an experimental research, where we have systematically examined causes; effects and relationship between variables. "As experimental designs create a set of procedures to systematically test a hypothesis. A good experimental design requires a strong understanding of the system you are studying." (Bevans, December 5,2022).Furthermore in this research we have tried to manipulate the independent variable which can affect the experiment's external validity to know how far results could be generalized and applied to the wide spectrum. Secondly with

the help of quantitative variable we inferred result. Hence this research tried to highlight unaddressed mental health problems faced by Health care professionals, during different waves of pandemic in Karachi. The participants of this research include ,doctors, nurses, Pharmacists, Physiotherapist, dentists, operating, staffs, psychologists and others, who tend to work in the pressured hooked situation of Pandemic, and COVID-19 wards or emergency units and had undeviating contact with confirmed and alleged COVID-19 patients, contributing to qualitative research (Creswell, 2016). The participants of study are chosen regardless of their experiences and medical specialty. The research was conducted in mega city Karachi, as it's the largest city of Sindh, considered as an economic hub of Pakistan with a population of more than 30 million. It has emerged as the most-affected city of Pakistan. (Times, 2020), Where Sindh province was majorly affected province of Pakistan with high numbers of positive cases. (Health Department ,Sindh Confirmed Cases. , 2020).

Population and Sampling

Both purposive and snowball sampling techniques were used to obtain the loaded experiences of the Health Care Professionals. As this study were conducted during different waves of pandemic. Whereas during some chaotic waves the semi countrywide social distancing, fear of the virus, and difficulty in accessing to hospitals and Health Care Professionals has made the fieldwork challenging. Despite these conditions, we managed to conduct interviews.

Out of seven, five hospitals were contacted to participate in the study. 250 participants were recorded. For participants, to work in any health care system of Karachi during COVID-19 was mandatory. Among the five, three were government hospitals and two were private hospitals. As aim is to contact with hospitals with largest number of Health Care Professionals.

Research Instrument

Research Instrument like Quantitative Questionnaire, with simple English language understood by all participants was used. Questionnaire was closed-ended, volunteer and developed under supervision of psychiatric professors based on the published validated scales. Closed ended questionnaire was chosen because they are amazingly useful in guiding participants to furnish certain answers and to meet main objectives in this research, and to provide careful and desired relationship of problems that might have not discussed earlier (Rana W. M., 2020).

Initially participants were contacted for consent through SMS/ Whatsapp rather than a direct call to make sure their privacy. After respondents' consent, initially we introduced the main reason of the contact, and we requested to respond our questionnaire and participate in our study through electronic platforms like Google Form App .Duplicate entries were avoided by requesting respondents to sign in before starting the survey.

In the first section of questionnaire, it consists of personal demographic questions.

Data Analysis

In Quantitative analysis , this research dealt with descriptive statistics initially and later inferential statistics were used to analyse data and to test hypothesis in order to predict the dots based on observation in our sample data .Furthermore it also address population by identifying relationship between variables. Percentages, frequencies, bar charts and pie charts are used to establish patterns for easy understanding and interpretation of the findings. Data collected was reported using graphical illustrations like tables, charts, etc.

Demographic Characteristics

This section identifies the demographic characteristics of the respondents. The demographic characteristics were gender, age and job title.

Gender of Respondents The study sought to know gender composition of respondents to define the extent of gender response towards the topic. The result shows 53.85 % of females and 46.15% of males were participated in data gathering.
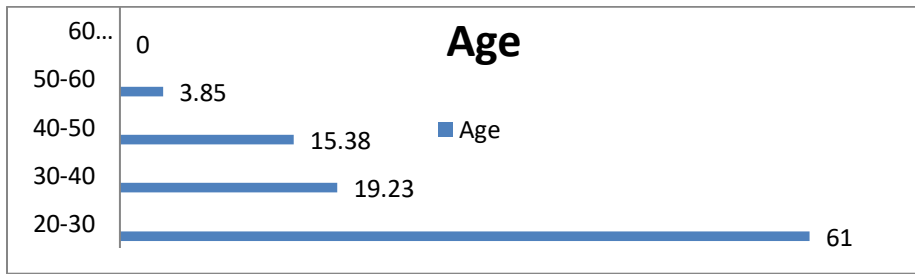
Figure 1
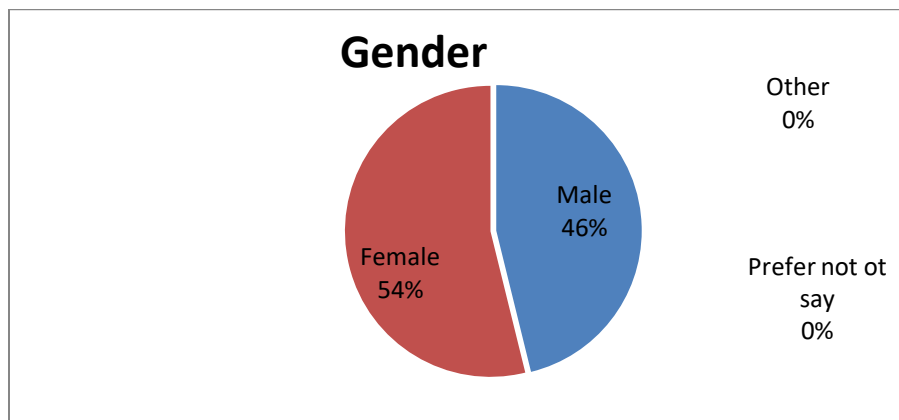
In Figure 1 46% were male and 54% respondents were females

Respondents Age: The research sought to develop the age of respondents to ensure that the view of different age range was considered
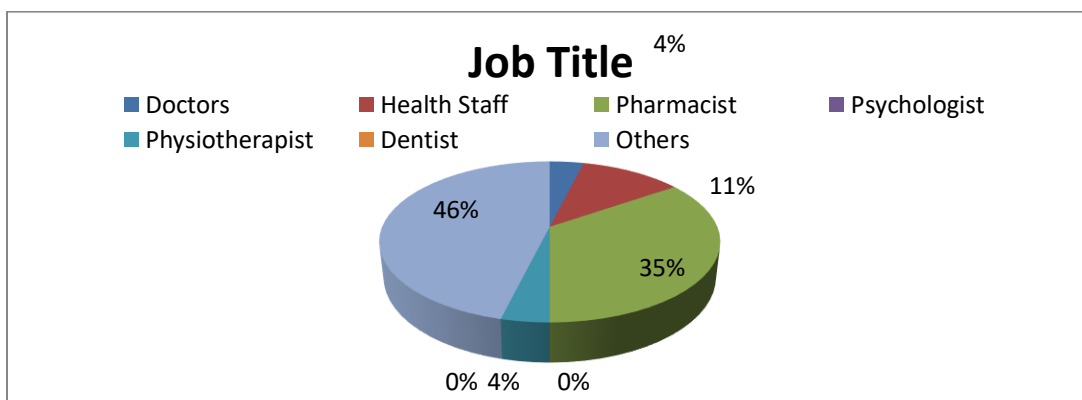
Figure 2

Respondents Age:.**2:** As mentioned in table 2, 61% were between the age of 20-30 years, 19.23% were in the age slab 30-40 years, and 15.38% were between 40-50 years, and 3.8% were between 50-60 years this indicates that most of respondents were below 61 years.

Job Title: The research sought to develop the Job Title of respondents to ensure the view from different job types was considered.
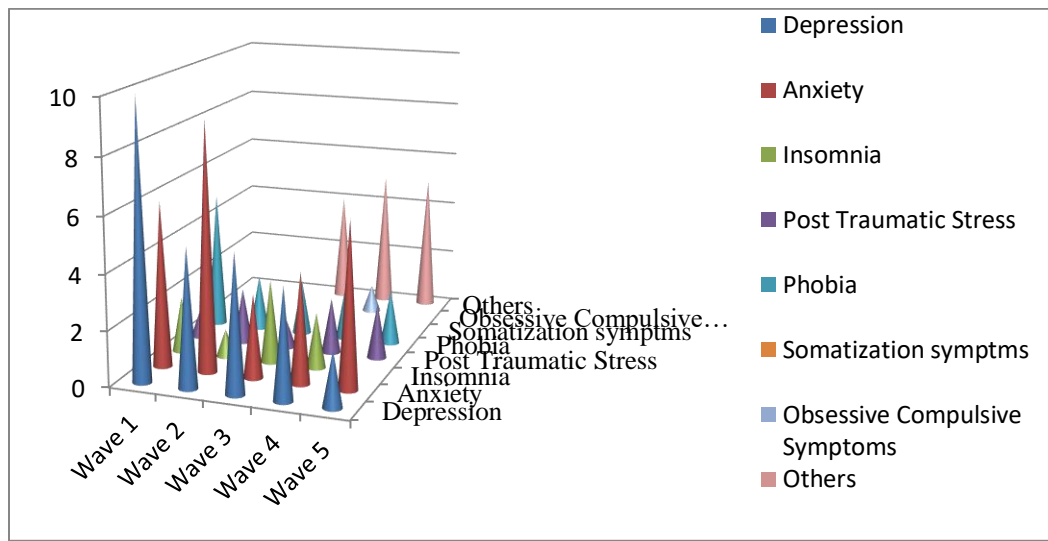
Figure 3

As mentioned in bar figure **3**, 3.85% work as doctor, 11.54% work as doctor Health staff, 34.62% work as Pharmacist, 3.8% work as Physiotherapist, 46.15% work as others , this indicates that none on dentist and psychologist participated.

Factors Affecting Mental Health

Figure 4

Mental Health Challenges during different waves of COVID-19

As mentioned in 3D cone figure 4

Depression: 38% Health Care Professionals in wave 1, 23% Health Care Professionals in wave 2, 24% Health Care Professionals in wave 3, 20% Health Care Professionals in wave 4, 12% Health Care Professionals in wave 5 had been through depression.

Anxiety: 23 % Health Care Professionals in wave 1, 41 % Health Care Professionals in wave 2, 14 % Health Care Professionals in wave 3, 20% Health Care Professionals in wave 4, 35 %Health Care Professionals in wave 5 had been through Anxiety.

Insomnia: 8% Health Care Professionals in wave 1, 4% Health Care Professionals in wave 2, 14%Health Care Professionals in wave 3, 10% Health Care Professionals in wave 4 had been through Insomnia

Post Traumatic Stress:4 % Health Care Professionals in wave 1, 9% Health Care Professionals in Wave 2, 5%lth Care Professionals in wave 3, 10% Health Care Professionals in Wave 4, 12%Health Care Professionals in wave 5 had been through Post. Traumatic Stress
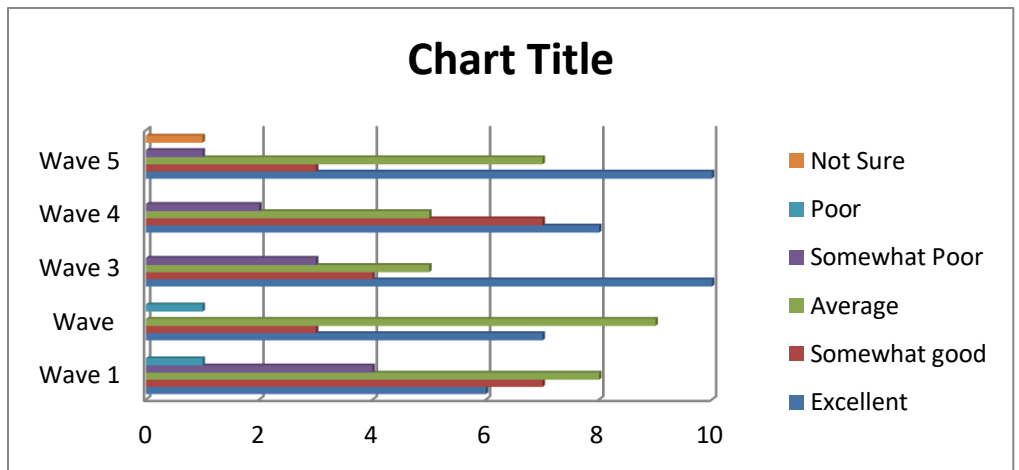
Phobia: 19 % Health Care Professionals in wave 1, 9 % Health Care Professionals in wave, 9 % Health Care Professionals in wave 3, 10 % Health Care Professionals in wave 4, 12% Health Care Professionals in wave 5 had been through Phobia.

Obsessive Compulsive Symptoms: 5% Health Care Professionals had been through Obsessive Compulsive Symptoms during wave 3.5% Health Care Professionals during wave 4.

Others: 8% Health Care Professionals in wave 1 , 14% Health Care Professionals in wave 2, 19% Health Care Professionals in wave 3, 25% Health Care Professionals in wave 4, 29% Health Care Professionals in wave 5 faced others challenges.

Mental Health condition during different waves of Covid-19

Figure 5

As mentioned in bar chart **7.2.2,**

Excellent: 22% Health Care Professionals in wave 1, 26% in wave 2, 37% in wave 3, 29 % in wave 4, and 37 % in wave 5 had excellent mental health conditions.

Somewhat Good : 25% Health Care Professionals in wave 1, 11% in wave 2, 11% in wave 3, 26 % in wave 4,and 11% in wave 5 had somewhat good mental health conditions.

Average: 30%Health Care Professionals in wave 1, 33% in wave 2, 19% in wave 3, 19 % in wave 4,and 26 % in wave 5 had average mental health conditions.
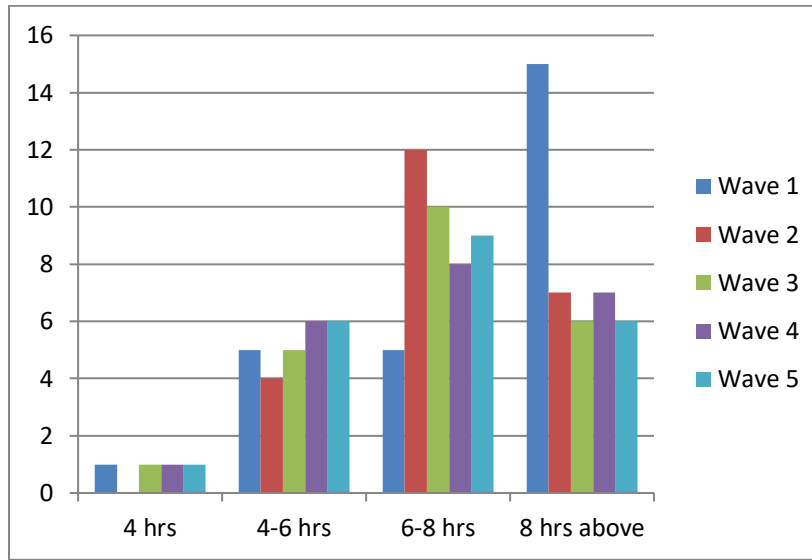
Somewhat Poor: 15% Health Care Professionals in wave 1, 7% in wave 2, 11% in wave 3, 7 % in wave 4, and 4 % in wave 5 had average mental health conditions.

Poor: 4% Health Care Professionals in wave 1, 4% in wave 2, 11% in wave 3 had poor mental health conditions.

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Not Sure: 4% Health Care Professionals in wave 1, were not sure about their mental health conditions.

Sleep duration during different waves of COVID-19

Figure 6

As mentioned in bar chart **6**

4 Hours: 4% Health Care Professionals in wave 1, 4% Health Care Professionals in wave, 4% Health Care Professionals in wave 4, 4% Health Care Professionals in wave 5 slept 4 hours a day.
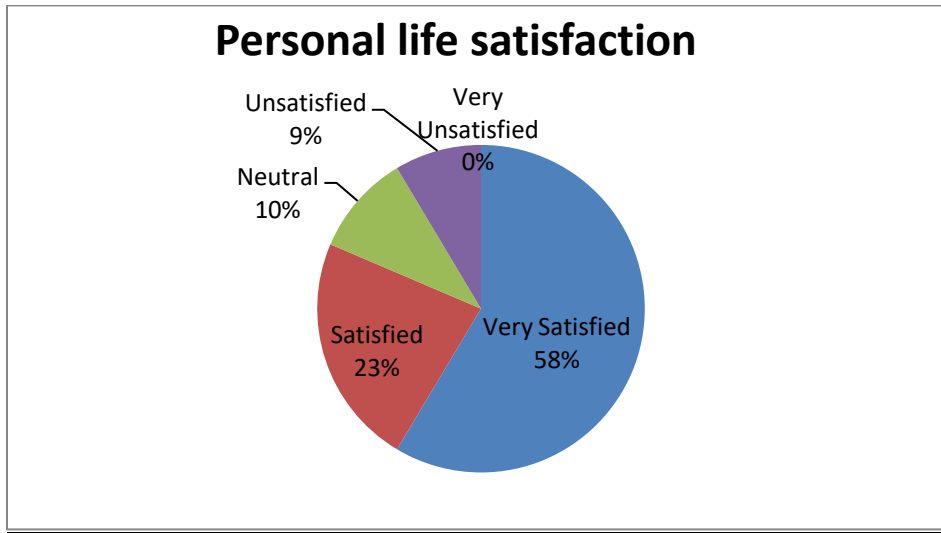
4 -6 Hours : 19 % Health Care Professionals in wave 1, 15% in wave 2, 19% in wave 3, 23% in wave 4,and 23% in wave 5 Health Care Professionals slept 4-6 hours a day.

6-8 Hours: 19% Health Care Professionals in wave 1, 44% Health Care Professionals in wave, 37% Health Care Professionals in wave 3, 30% Health Care Professionals in wave 4,and 33% Health Care Professionals in wave 5 slept 6-8 hours a day.

8 Hours and above: 56% Health Care Professionals in wave 1, 26% Health Care Professionals in wave, 30% Health Care Professionals in wave 3, 26% Health Care Professionals in wave 4,and 23% Health Care Professionals in wave 5 slept 8 hours and above a day.

Satisfaction in personal life during different waves of COVID-19

Figure 7

As mentioned in pie figure**,** 6

Satisfied: 37% Health Care Professionals in wave 1, 37% Health Care Professionals in wave 2, 37% Health Care Professionals in wave 3, 30% Health Care Professionals in wave 4, and 41% Health Care Professionals in wave 5 were satisfied during different waves of COVID-19.

Very Satisfied: 26% Health Care Professionals in wave 1, 14% Health Care Professionals in wave 2, 19% Health Care Professionals in wave 3, 26% Health Care Professionals in wave 4,and 26% Health Care Professionals in wave 5` were very satisfied during different waves of COVID-19.
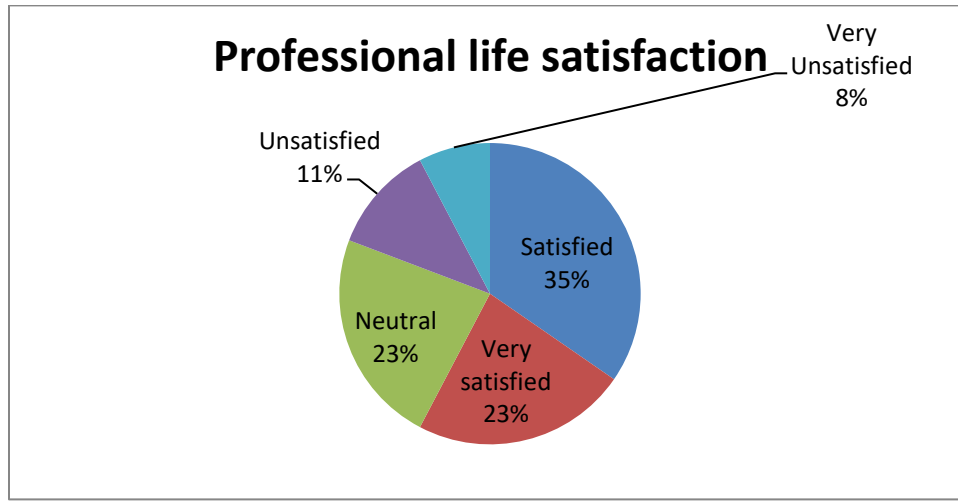
Neutral: 23% Health Care Professionals in wave 1, 11% Health Care Professionals in wave 2, 11% Health Care Professionals in wave 3, 19% Health Care Professionals in wave 4,and 15% Health Care Professionals in wave 5` were neutral during different waves of COVID-19.

Unsatisfied: 11% Health Care Professionals in wave 1, 15% Health Care Professionals in wave 2, 15% Health Care Professionals in wave 3, 7% Health Care Professionals in wave 4, were unsatisfied during different waves of COVID-19.

Very Unsatisfied: 4% Health Care Professionals in wave 1, 7% Health Care Professionals in wave 2, were very unsatisfied during different waves of COVID-19.

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Satisfaction in professional life during different waves of COVID -19

Figure 8

As mentioned in pie chart **8,**

Satisfied: 37% Health Care Professionals in wave 1, 37% Health Care Professionals in wave 2, 37% Health Care Professionals in wave 3, 30% Health Care Professionals in wave 4, and 41% Health Care Professionals in wave 5 were satisfied during different waves of COVID-19.

Very Satisfied: 26% Health Care Professionals in wave 1, 14% Health Care Professionals in wave 2, 19% Health Care Professionals in wave 3, 26% Health Care Professionals in wave 4, and 26% Health Care Professionals in wave 5` were very satisfied during different waves of COVID-19.
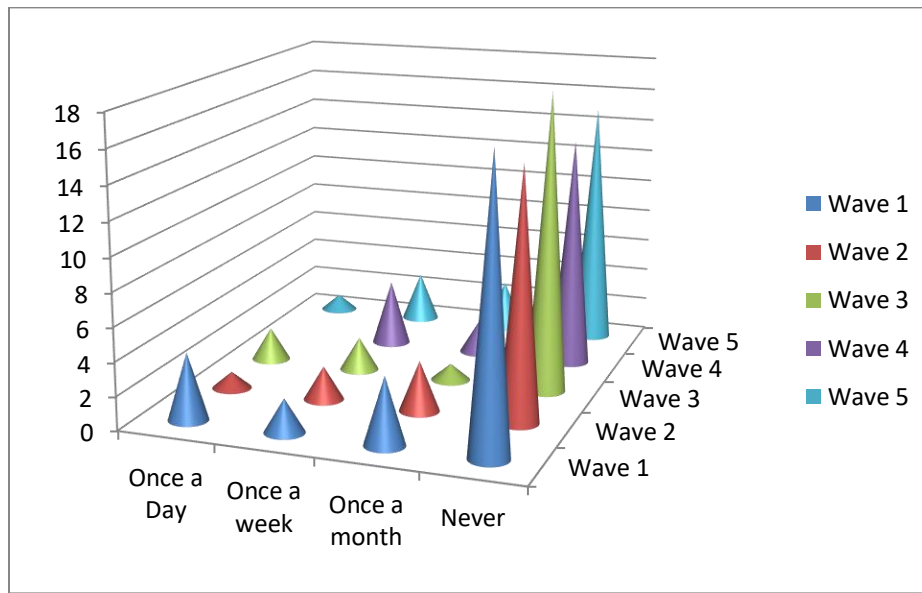
Neutral: 23% Health Care Professionals in wave 1, 11% Health Care Professionals in wave 2, 11% Health Care Professionals in wave 3, 19% Health Care Professionals in wave 4,and 15% Health Care Professionals in wave 5` were neutral during different waves of COVID-19.

Unsatisfied: 11% Health Care Professionals in wave 1, 15% Health Care Professionals in wave 2, 15% Health Care Professionals in wave 3, 7% Health Care Professionals in wave 4, were unsatisfied during different waves of COVID-19.

Very Unsatisfied: 4% Health Care Professionals in wave 1, 7% Health Care Professionals in wave 2, were very unsatisfied during different waves of COVID-19.

How much time you thought to change your profession.

Figure 9

As mentioned in above chart **7.2.6,**

Once a day: 14% of Health Care Professionals in wave 1, 3.7% in wave 2, and 3.7% in wave 5 thought to change their profession once a day.

Once a week: 7.4% of Health Care Professionals in wave 1, 7.4% in wave 2,7.4% in wave 3,14.8% in wave 4 and 11.11% in wave 5 thought to change their profession once a week.

Once a month: 14.8% of Health Care Professionals in wave 1, 11.11% in wave 2,3.7% in wave 3,7.4% in wave 4 and 11.11% in wave 5 thought to change their profession once a month.

Never: 63% of Health Care Professionals in wave 1, 55.55% in wave 2,66.66% in wave 3,51.8% in wave 4 and 55.5% in wave 5 never thought to change their profession.

Expected Finding

The findings are expected to show dedication and high level of professionalism among Health Care Professionals like doctors, nurses and etc, to fight battle against the COVID-19 pandemic. The thematic analysis of the survey questionnaire resulted in two major themes or categories, demography and factors affecting mental health of Health professionals. The major themes would be to address personal constraint (mental stress and related problems), during different waves of Pandemic, which were hindering Health Care Professional, to perform their jobs

effectively and disturbing work life balance. All the factors considered in research are interconnected and interdependent and their interdependence is discussed below.

- **Mental Health Issues**: Research findings showed that Health Care Professionals went through depression in the initial COVID-19 waves followed by Anxiety and Phobia in later waves due to lack of equipment, which steers the.

- **Mental Health**: Research findings showed that mental health of Health Care Professionals was mostly average and gradually turned excellent the reason behind average health conditions were Mental Health Conditions.

- **Sleeping hours:** Health Care Professionals sleep was highly affected during different waves of COVID-19, in initial waves it was just 4 hours followed by 6-8 hours sleep, reason of low sleeping duration could be average mental conditions.

- **Personal Life:** Due to number of problems and above mentioned issues Health Care Professionals satisfaction level was just satisfied with their personal life in initial waves of COVID-19. No one obtained maximum satisfaction with their personal life.

- **Professional Life:** Due to number of problems and above mentioned issues Health Care Professionals' satisfaction level was just satisfied with their professional life and in later waves they seemed confused to identify the difference between being satisfied and being neutral, in later waves satisfaction level observed to be reduced below Satisfactory level in comparison to the initial waves of Covid-19.

- **Change in Profession:** Despite of many problems and hectic working hours, Health Care Professionals were very dedicated throughout the 5 waves of Pandemic, and no one ever think to change their profession.

Discussion

The research is attention orientated because, as Health Care Professionals known as front line soldiers in combating different waves of COVID-19.As a frontline soldiers their problems related to mental health and their impacts are of prime concern. So this research will fulfill its objectives through quantitative research. One of the main aim of this research were to find the main factors that contributed the efficacy during different waves of pandemic within Health Care Professionals, which were identified like Depression, Anxiety, and Insomnia etc.

The second aim was to find out relationship between factors impacting mental health of Health Care Professionals. Among which HRH policies stood at first. "Later research findings showed that the main causes of troubles related to mental health were lack of good HRH policies and adequacy of their equipment and instruments, led by poor working conditions, lack of motivation" (Natasha Shaukat, 2020) ,job satisfaction (S. Bello, 2021).

Moreover, the HRH policy dimension though very critical is less revealing area and survey showed varying levels of development and implementation of HRH framework and policies are demanded in megacities more than any other place due to population influx and HRH policies demands further exploration. We had observed that in our study in initial waves of COVID-19 Health Care Professionals were more going through Depression and Anxiety mostly, considered as an apple of discord behind other physical and mental ailments ,like sleep disorder, negative thoughts and daily routine disturbance. The weak HRH policies resulting in work stress, risk adaptability and fatigue etc, which demands HRH polices to be revised like by hiring more work forces so that in extraordinary conditions frontline soldiers could feel more motivated and positive about their work load and could maintain their work life balance. Risk allowance and family insurance during extraordinary conditions like COVID-19 could keep morale of Health Care Professionals' high, and they could feel owned and supported. Insufficient supply of proper equipments and supplies proved as havoc for Health Care Professionals and development of fear, anxiety and depression. We could conclude that proper and advanced HRH policies like human development strategies, work coordination strategies, modeling health structure of developed countries could make Health Care Professionals stress free and mentally problem free due to smart working conditions. Which will help employee's organization attaining following benefits: Employees retention, Boost productivity, encouraging better work life balance and for organization too smart working conditions would have following benefits: Attracting high performing employees, Reducing absenteeism, decreasing hiring and office cost.

Hence, we could conclude that certain HRH factors affects mental health conditions of Health Care Professionals and by practicing them, mental health of Health Care Professionals could be at better off proving our hypothesis;

"HA: HRH (Human Resource for Health) factors do affect the mental health conditions of Health Care Professionals."

Research Significance

The above research helps out in identifying factors affecting mental health during different waves of COVID-19 which helps out to find solution by implementing effective HRH strategies such as: (Global strategy on human resources for health:Workforce 2030)

- By furnishing accurate HRH information to have proper health policy and planning.HR data availability, relationship with all strategic partners and track progress of HRH implementation of HRH (Human Resources for health strategic plan, 2011-2016).

- Adequate number of trained health care professional.

- Development of strong human resource planning, management and development systems at all levels by introducing and implementing HR policies, plans and strategies, by strong HRML/HRD and sustaining existing professional bodies.

- Improve performance of Health Care Professionals by conducting training and development programs and by adequate supply of relevant equipments and protection wear.

- To be in line with objective agenda of Global strategy on human resources
for health: Workforce 2030, following milestones must be in mind:

  - Improved strategic policies on human resources for health leading to healthy lives and well being.

  - Investing in human resources for health with the current in future needs of population, taking into account labor market dynamics to cope up with labor unrest, to maximize productivity followed by economics welfare and growth.
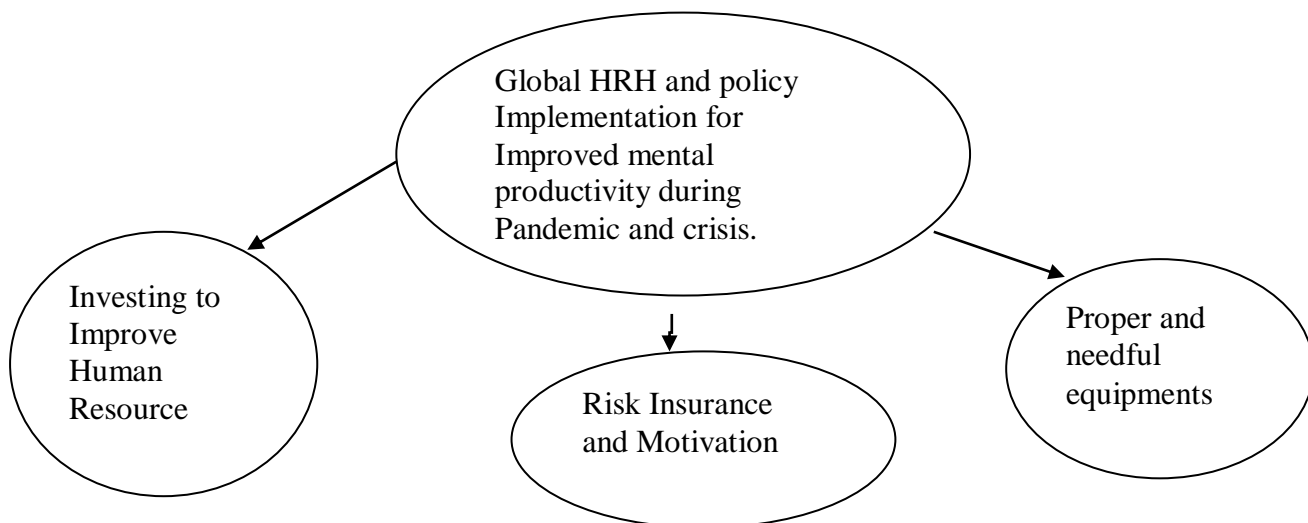
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