Study on Stress Management among Health Care Workers during COVID 19, in a Tertiary Care Children's Hospital, Bengaluru

By

Chandana Jadav

Dissertation submitted in partial fulfillment of the requirements of the degree

MBA Hospital and Health Management

Academic year, 2018-2020

The IIHMR University, Jaipur

1, Prabhu Dayal Marg, Sanganer, Airport
Jaipur 302029, Rajasthan
Ph: 0141 3924700, Fax: 3924738
Website: **www.iihmr.edu.in**

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A Study on Stress Management among Health Care Workers during COVID 19, in Rainbow Children's Hospital, Marathahalli, Bengaluru

The spread of novel corona virus (COVID-19) across the globe and its out turn to associated morbidity and mortality challenged the country by several means. One such critical aspect is delivering health services in covid times, is a tedious job for healthcare workers and overloaded work has created very tight bottlenecks in the provision of services that lead to under recognized and unaddressed area of the stress levels of health care workers develop during the pandemic condition. The wellbeing and emotional resilience of healthcare workers are key components of maintaining essential healthcare services during the pandemic. Being in Stress is not always harmful but once it shoots above the threshold level which is individualistic, then it would begin to affect a person's productivity leading to possible unwanted physical or cognitive or behavioural or psychosomatic symptoms of stress on a person's health.

Therefore, it will be crucial to anticipate the stresses associated with this work and put in place supports for healthcare workers. Employee stress has a big impact on the workforce: stressed out workers are typically less productive and more distracted and tend to experience higher rates of illness. Healthcare workers at the forefront of the war against coronavirus are not only facing the daunting task of handling patients, are also fighting to keep their own worries and emotional stress at bay. Monitoring and assessment of mental health and wellbeing of healthcare personnel will be important. The psychological impacts of which are beginning to show on medical and non-medical health personnel, especially the frontline workers.

LITERATURE REVIEW:

Research in the past had shown that epidemics can cause severe and variable psychological effects on people. In the general population, this can lead to the development of new psychiatric symptoms, worsening of pre-existing illnesses. Irrespective of getting exposed or being infected people can develop a fear of falling ill or dying, excessive worry/anxiety, helplessness, tendency to blame other people who are ill. The psychiatric illnesses that people develop include depression, anxiety, panic attacks, somatic symptoms, and posttraumatic stress disorder symptoms, to delirium, psychosis and even suicidality (Hall et al., 2008; Muller, 2014; Sim et al, 2010). As health care workers face a wide range of psychosocial stressors, they are at a high risk of developing burnout syndrome, which in turn may affect hospital outcomes such as the quality and safety of provided care.

A Qualitative analysis, through interviews done by R. Mahindra, et al., 2020 among the Frontline health care providers (HP) involved in the care of patients with COVID-19 or suspected COVID-19, Sample size- Not specified Tertiary hospital in North India. Following are the main themes identified for mental health promotion of Healthcare providers: 1. Positive Motivational factors a. Intellectual b. Emotional 2. Negatives, frustrations associated with patient care 3. Personal fears and annoyances experienced by doctors.

A study done on Mental Health Effects of COVID-19 on Healthcare Workers in China by Peter Roy- Byrne showed that the effects were greatest in nurses, women, those directly caring for virus patients, and those working at the epicentre in Wuhan.

During infectious disease outbreaks, healthcare workers have suffered adverse psychological reactions. To learn whether this was true of the COVID-19 outbreak, researchers conducted a cross-sectional, geographically stratified survey of 1257 healthcare workers (39% physicians; 61% nurses; 72% of nurses had junior titles) from 34 hospitals (20 in Wuhan; 7 elsewhere inside Hubei province, and 7 outside the province).

The researchers used validated rating scales to assess anxiety, depression, insomnia, and distress/post-traumatic stress symptoms from January 29 to February 3, 2020, close to the Wuhan outbreak's peak. Overall, 42% were directly caring for patients with COVID-19. There were high rates of depression (50%), anxiety (45%), insomnia (34%), and distress (72%); median scores, however, barely reached the mild range. Symptoms were higher in nurses, women, people caring for COVID-19 patients, and those in Wuhan (symptoms were lowest outside Hubei). Of these higher-risk groups, 10% to 20% scored in the moderate or severe range.

A Cross-sectional study done by Seshadri Sekhar Chatterjee et al revealed that out of 152 study participants, 34.9% were depressed and 39.5% and 32.9% were having anxiety and stress, respectively. Significant predictors for psychiatric morbidities were experience in health sector, duty hours, use of protective measures, and altruistic coping. Multivariable logistic regression showed most of the factors to be significantly associated with depression, anxiety, and stress level.

Cross-Sectional study done by Kang L, 2020 994 among the medical and nursing staff Wuhan, using a Patient health questionnaire for the Generalized Anxiety Disorder, Insomnia Severity Index and the Impact of Event Scale-Revised. Findings of the study revealed that 36.9% had subthreshold mental health disturbances, 34.4% had mild disturbances, 22.4% had moderate disturbances, and 6.2% had severe disturbances.

A Cross-sectional region stratified study conducted by Lai J, 2020 1257 HCW 20 hospitals in Wuhan, 7 hospitals in other regions of Hubei province 7 hospitals from 7 other provinces, Patient Health Questionnaire, Generalized Anxiety Disorder scale, Insomnia Severity Index, and the Impact of Event Scale-Revised, revealed that 50.4% reported symptoms of depression, 44.6% anxiety, 34.0% insomnia, and 71.5% reported distress.

A study done by Boehken J et al on COVID-19 Pandemic Stress Experience of Healthcare workers,14 studies on healthcare workers in departments of infectiology, internal medicine, and fever wards including intensive care wards as well as surgery and psychiatry, were included. The Patient Health Questionnaire 9 (PHQ9), Self-Rating-Anxiety Scale (SAS) and Impact of Event Scale (IES-R) were the most often used test instruments. The sample size ranged between 37 and 1257 participants consisting of mostly nursing and medical personnel. The fraction of COVID-19-associated activities varied from 7.5 % to 100 %. An extensive strain was reported due to stress experience as well as depression and anxiety symptoms. Severe degrees of those symptoms were found in 2.2 % to 14.5 % of all participants. The severity of mental symptoms was influenced by age, gender, occupation, specialization, type of activities performed and proximity to COVID-19 patients. As mediator variables selection of personnel, preventive interventions, resilience, and social support were reported.

The purpose of the present study was to investigate the moderating effect of job control on the relationship between workload and burnout.

RESEARCH QUESTION:
What are the stress causing factors that are leaving an impact amongst the healthcare workers of Rainbow Children's Hospital, Marathahalli?

Objectives:

- To assess and analyse the factors causing stress among the employees
- To analyse the impact of stress on a health care worker
- To suggest the strategies to reduce the stress levels

Keywords: Health care workers, stress, psychological, COVID-19

MATERIALS & METHODS:

Study design: Cross-sectional study

Setting: Rainbow Children's Hospital, Marathahalli, Bengaluru

- **Study population:** Employees of Rainbow Children's Hospital
- **Inclusion criteria**: All the employees who worked during COVID times
- **Exclusion criteria:** Employees who did not work during the study period and who were working from home
- **Duration of Study:** May 20th to June 1st
- **Sample size:** 210
- **Sampling technique:** Convenience sampling

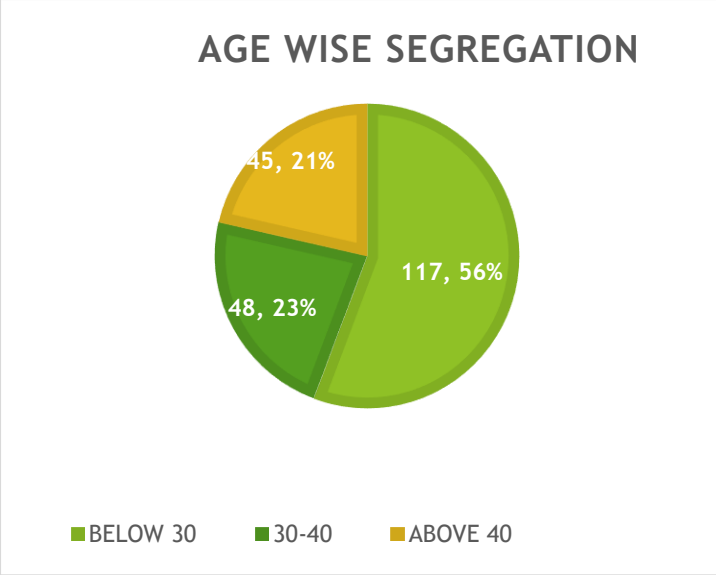
DATA ANALYSIS: Analysis was done through Google forms and Microsoft excel 2016.

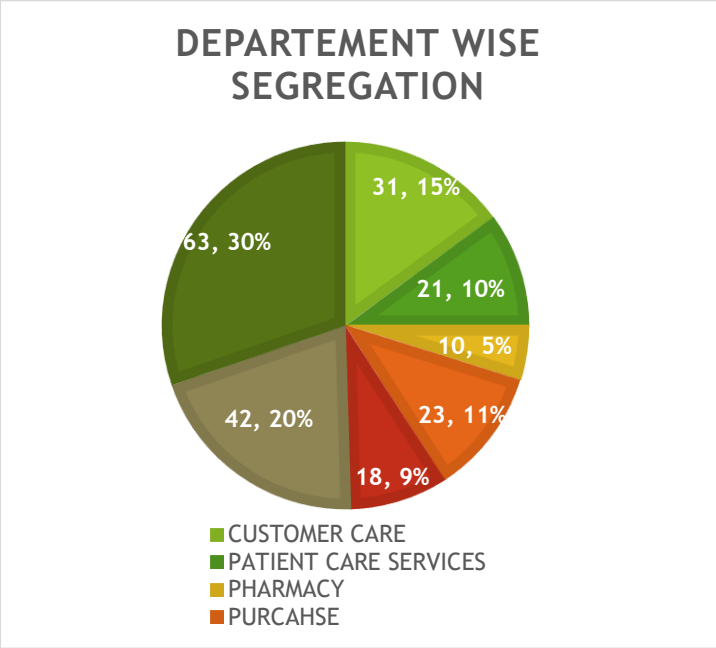
Amongst the received 210 responses (117)56% were aged below 30 years of which (76) 65% were females and (41)35% were males. (48)23% were between the age group 30-40 of which (22)45% are females and (26)55% are males. Above 40 age group contributed (45) 21% of the total responses of which (30)67% were females and (16)15% were male population. (75) 36% are highly satisfied, (86) 41% are satisfied and (48)23% are dis satisfied with the working conditions in the organization. (74)35% agree that during the last 30 days they often felt tired for no reason, (56)27% disagree and (48)23% neither agree nor disagree and (32)15% strongly agree with this statement. (88)42% of the employees reported confusion, (48)23% had difficulty in problem-solving, (67)32% of the employees had faced misinterpretation of the situation, the (48)23% of the people who had difficulty in problem solving also reported difficulty in thinking, (74) 35% of the cognitive issues were recorded from the nursing department during the last 30 days. A considerable proportion of participants reported physical symptoms headache (95)45%, (71)34% reported nervousness and (40)19% of the employees reported gastric irritation. Findings also shows, (23)11% of the employees agree that they

didn't feel like interacting with the patients or involve in the treatment process, while (54)26% strongly disagree with this while (63) 30% had a neutral opinion and (69)33 % disagree.

(88) 42% strongly agree, (73)35% agree, (24)12% and (25)11% disagree that they distance themselves from the false rumours and news going on social media. (119)57% of the employees agree that stress management programmes are helpful in reducing the physical and mental stress. (159)76.9% attended the stress management programmes conducted in the organisation and 51 respondents didn't attend any such programmes. It was reported that (126) 60% of them believe the fact that meditation and yoga are helpful in handling the stress, for (63)30% listening to music helps in handling the stress. (21)10% agree to the fact that exercises and spending time with the family helps in reducing the stress. (168) 80% of the employees believes that it's the responsibility of the society to be considerate and respect the healthcare workers who are working during COVID times and (42) 20% believe that it's the responsibility of the society to show respect for the healthcare workers working during COVID times. (84)40% of the employees had the fear of spreading the infection to the family members and (21)10% disagree with this statement. (46)22% of employees the alcohol and the cigarette consumption has increased and (73)35% of the employees stated that only cigarette consumption had increased during this period, than before to overcome the stress

DISCUSSION: Research in the past had shown that epidemics can cause severe and variable psychological effects on people. In the general population, this can lead to the development of new psychiatric symptoms, worsening of pre-existing illnesses. Irrespective of getting exposed or being infected people can develop a fear of falling ill or dying, excessive worry/anxiety, helplessness, tendency to blame other people who are ill. The psychiatric illnesses that people develop include depression, anxiety, panic attacks, somatic symptoms, and posttraumatic stress disorder symptoms, to delirium, psychosis and even suicidality (Hall et al., 2008; Muller, 2014; Sim et al, 2010). Socio-economic factors like age, gender, marital status, work experience had a positive correlation with stress. Other factors that contributed to the stress are working conditions, job performed and the profession, fear of spreading the infection to the family members. (34)55% nurses reported that they had the fear of spreading the infection to the family members. A considerable proportion of participants reported physical symptoms headache (95)45%, (71)34% reported nervousness and (40)19% of the employees reported gastric irritation which are considered as impact of stress on healthcare workers.30% of the employees who reported headaches also experienced confusion and difficulty in thinking. (119)57% of the employees agree that stress management programmes are helpful in reducing the physical and mental stress.


AGE WISE SEGREGATION
45, 21%
117, 56%
48, 23%
BELOW 30
30-40
ABOVE 40


DEPARTEMENT WISE SEGREGATION
31, 15%
63, 30%
21, 10%
10, 5%
23, 11%
42, 20%
18, 9%
CUSTOMER CARE
PATIENT CARE SERVICES
PHARMACY
PURCAHSE


WORK EXPERIENCE
45, 21%
115, 55%
50, 24%
3+ YEARS
2 YEARS
1 YEAR

ADVICE FOR HEALTHCARE AUTHORITIES and HEALTHCARE FACILITY MANAGERS:

- Ensure that good quality communication and accurate information updates are provided to all staff. This can help alleviate worries caused by uncertainty and make them feel in control.
- Provide positive feedback to stress the value and importance of the role they play
- Promoting team work. The "buddy system", for example, involves colleagues working in pairs, so that they can ensure each other's safety and provide mutual support when dealing with challenging situations.
- Facilitate access to psychological support services, ensuring that staff are aware of where and how they can access them, including telephone or other remote support services when available.

ADVICE FOR THE HEALTHCARE WORKERS:

- Wherever possible, work a reasonable number of hours and take breaks. During the acute phase of the emergency, it is essential that you allow yourself some respite to rest and reflect on what you're experiencing. Managing stress and taking care of your mental health is important to preserve your physical health.
- Interacting with colleagues is crucial to coordinate activities, acknowledging a colleague's professional contribution can boost motivation and mitigate stress.
- To maintain a healthy lifestyle, eating and drinking well and enough, to be able to cope with the accumulated pressure. Reduce the consumption of caffeine, nicotine and alcohol. Allow yourself enough sleep and rest to restore your energies, and engage in physical activity.
- Pressure, stress and the feelings associated with it can make you feel helpless and unable to do your job. Therefore, it is important that you realize what you are really capable of doing to help others, and appreciate also the small achievements; consider the positive results and accept outcomes that don't meet your expectations, acknowledging your limitations under the exceptional circumstances.
- It is also important that you be aware of your mood and the emotional burden, learning to recognize physical and psychological symptoms linked to stress. Taking care of yourself and encouraging your colleagues to do the same is the best way to continue being of help to patients.

- **STRATEGIES TO REDUCE SPECIFIC WORKPLACE RELATED STRESSORS**:

  1.) Mindfulness practices that specifically emphasize acceptance teach us a non-judgmental attitude toward our experiences. Mindfulness interventions in the

workplace target workplace functioning: reducing stress and improving decision-making, productivity, resilience, interpersonal communication, organizational relationships, perspective-taking, and self-care. Mindfulness meditation is an attitude and a method for reducing personal suffering and developing insight, compassion, and wisdom. Mindfulness training is assumed to also have potential for other demanding work environments, as a means of improving employees' health and work engagement and, consequently, the quality of services provided to clients.

- **Improves mood** – Mindfulness training may reduce depression and anxiety. One study found that mindfulness training was as effective as antidepressant medications in preventing a depression relapse.

- **Reduces stress and its consequences** – Mindfulness can lead to less intense stress responses. This has many health benefits, such as lowering your blood pressure and strengthening your immune system.

- **Improves brain functions** – Practicing mindfulness helps build your ability to pay attention and focus. Over time, this training can sharpen memory and improve mental performance.

COMMON MINDFULNESS TECHNIQUES TO PRACTICE:

- **Mindful breathing –** One of the simplest exercises is mindful breathing. Simply spend a few minutes focusing your awareness on the movement of your thoughts and your breath in and out, without trying to change them in any way.
- **Body scan –** While seated or lying down, gradually focus your attention on one body part at a time, noticing any physical sensations without judging or reacting to them. A typical body scan might start with the soles of the feet and then progressively move awareness to the knees, hips, back, belly, chest, neck, and head.
- **Mindful eating –** This exercise involves eating very slowly and deliberately while paying attention to the sensations of holding the item, smelling, tasting, chewing, and swallowing it.
- **Loving kindness meditation –** An exercise in which you direct positive thoughts and wishes first to yourself, then to your close family and friends, then to more distant acquaintances, and finally to all humanity.
- **Mindful movement –** While walking or rolling, pay close attention to your breathing, your body movements, and your surroundings. You can also practice mindfulness while doing familiar exercises, such as yoga, focusing on the physical sensations as you enter and hold each pose.

2)Early interventions: prepare staff for job and associated challenges avoid false reassurances and give a frank account of what staff may face

3)Reflection for healthcare staff, to discuss emotional and social challenges

4)Reach out to vulnerable staff.

5)Avoid single- session psychological debriefing as this may cause additional harm.

6)Establish an alternating shift system to allow frontline medical workers periods of rest and ensure that there was rotation of workers in high pressure roles.

7)Develop online platforms to provide medical advice to the public with the goal of reducing pressure on medical workers in hospitals.

8)Provide training in terms of managing psychological problems in patients. Ensure availability of security staff to help manage patients who were aggressive or uncooperative.

9)Reduce non-critical work activities such as routine follow-ups and non-essential administrative tasks

10)Well defined and easily accessible protocols and expectations for staff.

LIMITATIONS:

The time period for carrying out the study was short as a result of which many facts have been left unexplored. Lack of time and other resources as it was not possible to conduct survey at large level. The study is limited to the employees of Rainbow Hospitals, Marathahalli, Bengaluru and therefore the findings of the study cannot be extended to other areas. During collection of the data many employees were unwilling to fill the questionnaire due to lack of time. Convenience sampling has been used in the study and it has its own limitations. Personal bias of the respondents might have crept in while answering a few questions. Results of the study may not be generalized as responses from the doctors were not recorded and the major participants were the nurses.

Ethical considerations: Consent from the Medical Director & Vice-President to conduct the study and the consent from the employees was recorded prior to answering the survey.

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