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# Mental Health Status of the Professionals Working With Covid-19 at Hospital in Dhaka

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**ABSTRACT**

**Background:** The recent COVID-19 pandemic caused by the new strain of coronavirus (SARS-CoV-2) was first diagnosed in Wuhan, China in late December of 2019. Coronavirus disease (COVID-19) has a large negative psychological effect and mental health issues worldwide due to its high morbidity and mortality rates. The unexpectedly rapid spread of COVID -19 endowed HCWs with increased work burden, lack of personal protective equipment, high risk of exposure and contracting the diseases, as well as increased mortality amongst HCWs.

**Materials and Methods**: This cross-sectional study was carry out to assess the Mental Health status of the professionals working with Covid-19 at Hospital in Dhaka. Primary data were collected through field survey including the observation and interview method. This survey, were covered doctors, nurses and Medical technicians in all clinical departments of Kuwait Bangladesh Friendship Government Hospital, Uttara, Dhaka between 1st May to July 30th, 2021. Mental health variables were assessed via Somatic Symptom scale-8 (SSS-8).

**Results**: We found that the highest 36.11% age group was 25-34, 51.85% healthcare professional are female and 48.15 % are male, 86.11% of healthcare professional are married, 12.96 % are single and 0.93% are widowed, 92.59 % health professionals are full time worker, 4.63 % are hourly basis and 2.78% are part time, 20.37 % are doctor, 37.0 % are nurse, 8.33 % are laboratory technician and 24.07% are supporting staffs. The overall level on Mental Health Burden of the respondents, 40.60% respondents opinion were No to minimal as well as 34.10% respondents opinion were Low, whereas 4% respondents opinion were Medium, how over 19% respondents opinion were high and 2.30% respondents opinion were Very high on Mental Health Burden foe COVID-19 patient care. Somatic symptom burden as measured by the SSS-8 was significantly associated with only one of the factors, Headaches (p= 0.009 [95% CI, .0755571 to .5202732]). The other 7 variables were not significantly associated since none could justify a p-value less than .05 at 95% confidence interval. From the analysis we found certain prevalence of psychological symptom among the health care professional during Covid-19 situation.

**Conclusion:** Healthcare professional need adequate equipment, health protection, optimum working environment. This information or data is very essential. The data is essential in mental health department, in case of policy making, in the long run where second outbreak of Covid-19 occur.

**KEYWORDS:** Mental Health, Health Care professionals, Covid-19 and Dhaka.

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## I. INTRODUCTION

During the unique COVID disease (Coronavirus) pandemic, health care providers were confronted with extremely dreadful encounters, particularly in countries that had not previously seen similar plague flare-ups. As a

result, it's no wonder that Bangladesh's health-care employees' mental health is in grave danger. However, it has an impact on the psychological well-being of the general public, including medical attendants, doctors, nurses, lab technicians, and supportive staff. Attendants play an important role in the management of Coronavirus emergencies. The precautions that medical practitioners take to prevent contamination are determined by their knowledge [1]. In COVID-19 pandemic period, the most sufferers are the victim of it and also the medical professionals, HWs and others who are related to this. Here the Health professionals are suffering major mental problem like over mental stress due to pandemic they have to do ongoing duty in hospital and serving the COVID affected patients in the hospital all day long, they have no exact schedule duty time so maximum of them are suffering over mental stress. The recent COVID-19 pandemic caused by the new strain of coronavirus (SARS-CoV-2) was first diagnosed in Wuhan, China in late December of 2019 [2] and believed to be evolved from an animal and later spread through human-to-human transmission.

The outbreak rapidly stirred global attention with its fast transmission, and it led to a global collective battle to safeguard human civilization from its uncertain fatality. On August 26, 2020, there were 24,158,014 people affected and 825,413 people who had died by the COVID-19 infection worldwide [3]. In Bangladesh, the first COVID-19 positive case was confirmed on March 8, 2020 and the first death occurred on March 18, 2020 [3]. During this period, people were instructed to maintain spatial distancing, stay at home orders, and limit going outside, except in cases of emergency. Since May, Bangladesh has still been maintaining spatial distancing guidelines and following the World Health Organization's recommendations, such as mask wearing protocol—though for economic prosperity, lockdown measures have eased. But in this situation the major problem is that when every things under lockdown / control by Govt. initiative then the HWs/ professional are the major frontline warriors in the whole world and in Bangladesh the number of HWs are less than it's required. So in time of pandemic the HWs / professional are facing lots of pressure for treating the COVID affected patients and it's create over mental pressure on them.

This study was conducted on of Kuwait Bangladesh Friendship Government Hospital, Uttara, Dhaka which covered doctors, nurses and Medical technicians in all clinical departments. Where found that there is great risk of among the HWS and the medical professional in the hospitals or who are directly serving the COVID affected people are much more under the risk of impacted by mental trauma. But in Bangladesh most of the health policy and health minister guidelines do not allow sufficient time for them to get rid of this. For this study, other recommendations include assessing other countries' mental health statuses, such as this study has done to better understand the extent to their professional's mental well-being. This assessment can help assist governments, health care professionals, universities and employers create and facilitate ways to help those whose mental health may have been affected by the pandemic's conditions.

## II. MATERIALS AND METHOD

This study used quantitative method for getting detailed description, analysis and interpretation of the related issues and more specially to make the study more reliable and valid. For the sake of this study, only primary data were used. Primary data were collected through field survey including the observation and interview method. The examine turn into a cross-sectional, single-center survey, were covered doctors, nurses and Medical technicians in all clinical departments of Kuwait Bangladesh Friendship Government Hospital, Uttara, Dhaka between 1st May to July 30th,2021. Mental health variables were assessed via Somatic Symptom scale-8 (SSS-8).

**Study Design:** Cross sectional with quantitative study was carried out.

**Study Location:** The study area was The Kuwait Bangladesh Friendship Government Hospital, Uttara, Dhaka.

**Study Period:** The study was conducted for 3 months starting from 1st May to July 30th, 2021. Its study period.

**Study population:** The study was covered doctors, nurses and Medical technicians in all clinical departments of Kuwait Bangladesh Friendship Government Hospital, Uttara, Dhaka.

**Sampling:** This study was followed by purposive sampling for our study. For the quantitative inquiry and the structured interviews was followed around 108 respondents, collected from our study area The Kuwait Bangladesh Friendship Government Hospital, Uttara, Dhaka.

**Study Sample:** Medical professionals, doctors, nurses and Medical technicians aged 25 to 55 years, were the sample of calculation.

**Sample Size Calculation:** Mental health variables were assessed via Somatic Symptom scale-8 (SSS-8). Sample size is determined by using the formula from "A Practical Manual of Sample Size Determination in Health Statistics" by S.K. Lwanga and S. Lemeshow, W.H.O

The formula is: n = z2pq/d2

- By using this formula, here n=384
- But considering the time and resource constrain the sample size was 108.
- Purposive sampling was followed to select this study sample.

- Bivariate correlation formula was used here for testing the hypothesis.

**Eligibility criteria:** PHCs, PHs, medical professionals, doctors, nurses and Medical technicians aged 25 to 55 years, were in inclusion criteria, and above 55 & below 25 age were in exclusion criteria.

**Development of Research Instruments:** The instruments of our study are structured questionnaire.

**Plan for Data Collection:** After negotiation and gaining access, in my research area We started to collect data from my respondents and We asked them questions through structured questionnaire .

**Data Processing and Analysis:** Getting the data from my respondents through interviews, we used SPSS software version 26.00 and also did excel & then make analysis to get a quick, authentic and reliable result.

**Data Quality Management:** It is more important to ensure the reliability and validity for any research and to ensure the reliability and validity I made the questionnaire as structured and put there more options so that I could get the exact answer from my respondents. Even to keep the reliability and validity the pre-testing was done.

**Ethical issues:** The approval letter for the conduction of research on specified topic was taken from the AIUB and The Kuwait Bangladesh Friendship Government Hospital, Uttara, Dhaka. Informed consent was taken from each respondents, that would include objective of the study, time duration, privacy and confidentiality of information taken and information about participant can withdraw anytime.

**Measurement:** Respondents rate how much they were bothered by common somatic symptoms on a five-point Likert scale. Ratings are summed up to make a simple sum score (which can vary between 0 and 32 points). The SSS-8 includes the following symptoms:

1. Stomach or bowel problems
2. Back pain
3. Pain in your arms, legs, or joints
4. Headaches
5. Chest pain or shortness of breath
6. Dizziness
7. Feeling tired or having low energy
8. Trouble sleeping

Severity categories: 0-3 = No to minimal, 4-7 = Low, 8-11 = Medium, 12-15 = High and 16-32 = Very high [4].

**Limitations of the Study:**

- This is a cross sectional study.
- Data is collected from one hospital but it could be from multiple study site.
- May have the chance to bias.

## III. RESULT

This chapter discusses the results and findings of the study. The survey was conducted upon 108 healthcare professional of The Kuwait Bangladesh Friendship Government Hospital, Uttara, Dhaka who willingly participated and completed a questionnaire and gave valuable information that has been instrumental in understanding ground realities necessary for the study. The questionnaire and findings are based on the objectives and variables that are reflected in the following tables, pie charts, and statistical inferences. All respondents gave response to all questions and therefore there is no missing data.

Table 1 reveals that 6.48% respondents were within 18-24 age group, 36.11% respondents were within 25-34 age group, 28.70% respondents were within 35-44 age group, 24.07% respondents were within 45-54 age group, 4.63% respondents within 55-64 age group. HCWs 51.85% were female and 48.15 % were male. 86.11% of the respondents were married as well as 12.96% of the respondents were single and 0.93% of the respondents were widowed. HCWs 20.37 % were doctor, 37.0 % were nurse, 8.33 % were laboratory technician and 24.07% were supporting staffs. HCWs 92.59 % were full time worker, 4.63 % were hourly basis and 2.78% were part time. HCWs working at isolation word for Covid-19 infection, 2.78% working at both isolation ward and outpatient department of Covid-19 infection, 4.63% working only at outpatient department of Covid-19 infection, 0.93% working both at outpatient department and emergency unit for Covid-19 infection, 26.85% HCP working at emergency unit for Covid-19 infection, 12.96% working at ICU department and 7.41% are working at other department.

**Table 1. Distribution of the respondents according to Socio-demographic characteristics (n=108).**

| Attributes | Characteristics | n | % |
|---|---|---|---|
| **Age (in years)** | 18-24 | 7 | 6.48 |
| | 25-34 | 39 | 36.11 |
| | 35-44 | 31 | 28.70 |
| | 45-54 | 26 | 24.07 |
| | 55-64 | 5 | 4.63 |
| **Sex** | Female | 56 | 51.85 |
| | Male | 52 | 48.15 |
| Relationship Status | Married | 93 | 86.11 |
| | Single | 14 | 12.96 |

| | | | |
|---|---|---|---|
| | Widowed | 1 | 0.93 |
| Type of HCWs | Doctor | 22 | 20.37 |
| | Nurse | 40 | 37.04 |
| | Laboratory Technician | 9 | 8.33 |
| | Ward Boy (patient care attendant) | 11 | 10.19 |
| | Supporting staff (cleaner) | 26 | 24.07 |
| Working time | Full time | 100 | 92.59 |
| | Hourly basis | 5 | 4.63 |
| | Part time | 3 | 2.78 |
| Working area | Isolation Ward/Unit/Cabin for Covid-19 infection | 48 | 44.44 |
| | Isolation Ward/Unit/Cabin for Covid-19 infection And The Outpatient Department of Covid-19 Infection | 3 | 2.78 |
| | The Outpatient Department of Covid-19 Infection | 5 | 4.63 |
| | The Outpatient Department of Covid-19 Infection, And Emergency/Unit for Covid-19 Infection | 1 | 0.93 |
| | Emergency/Unit for Covid-19 Infection | 29 | 26.85 |
| | ICU /Dialysis Department | 14 | 12.96 |
| | Other Department/unit | 8 | 7.41 |

Table 2 shows the respondents opinion on Mental Health Burden. On the stomach or bowel problems, here 40.7% respondents opinion were Not at all, as well as 28.7% respondents opinion were A little bit, 7.5% respondents opinion were Somewhat, 19.5% respondents opinion were Quite a bit and 3.7% respondents opinion were Very much. On the Back pain, here 45.4% respondents opinion were Not at all, as well as 23.15% respondents opinion were A little bit, 0.92% respondents opinion were Somewhat, 29.62% respondents opinion were Quite a bit and 0.92% respondents opinion were Very much. On the pain in your arms, legs, or joints, here 55.55% respondents opinion were Not at all, as well as 28.8% respondents opinion were A little bit, 14.82% respondents opinion were Quite a bit and 0.92 respondents opinion were Very much. On the Headaches, here 51.85% respondents opinion were Not at all, as well as 30.55% respondents opinion were A little bit, 1.85% respondents opinion were Somewhat, 12.96% respondents opinion were Quite a bit and 2.77% respondents opinion were Very much. On the Chest pain or shortness of breath, here 40.75% respondents opinion were Not at all, as well as 39.82% respondents opinion were A little bit, 8% respondents opinion were Somewhat, 4% respondents opinion were Quite a bit and 3.7% respondents opinion were Very much. On the Dizziness, here 40.75% respondents opinion were Not at all, as well as 28.7% respondents opinion were A little bit, 7.4% respondents opinion were Somewhat, 19.45% respondents opinion were Quite a bit and 3.7% respondents opinion were Very much. On the Feeling tired or having low energy, here 30.55% respondents opinion were Not at all, as well as 23.15% respondents opinion were A little bit, 0.92% respondents opinion were Somewhat, 44.45% respondents opinion were Quite a bit and 0.92% respondents opinion were Very much. On the Trouble sleeping, here 19.45% respondents opinion were Not at all, as well as 70.38% respondents opinion were A little bit, 5.55% respondents opinion were Somewhat, 3.7% respondents opinion were Quite a bit and 0.92% respondents opinion were Very much.

**Table 2: Frequency and percent Distribution of the respondents according to their opinion on Mental Health Burden (SSS-8) (n-108)**

| **Attribute** | **Not at all** | | **A little bit** | | **Somewhat** | | **Quite a bit** | | **Very much** | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** |
| Stomach or bowel problems | 44 | 40.7 | 31 | 28.7 | 8 | 7.5 | 21 | 19.5 | 4 | 3.7 |
| Back pain | 49 | 45.4 | 25 | 23.15 | 1 | 0.92 | 32 | 29.62 | 1 | 0.92 |
| Pain in your arms, legs, or joints | 60 | 55.55 | 31 | 28.8 | 00 | 00 | 16 | 14.82 | 1 | 0.92 |
| Headaches | 56 | 51.85 | 33 | 30.55 | 2 | 1.85 | 14 | 12.96 | 3 | 2.77 |
| Chest pain or shortness of breath | 44 | 40.75 | 43 | 39.82 | 9 | 8.33 | 8 | 7.4 | 4 | 3.7 |
| Dizziness | 44 | 40.75 | 31 | 28.7 | 8 | 7.4 | 21 | 19.45 | 4 | 3.7 |
| Feeling tired or having low energy | 33 | 30.55 | 25 | 23.15 | 1 | 0.92 | 48 | 44.45 | 01 | 0.92 |
| Trouble sleeping | 21 | 19.45 | 76 | 70.38 | 6 | 5.55 | 4 | 3.7 | 1 | 0.92 |

Table 3 shows that the respondents five point Likert scale on Mental Health Burden. On the stomach or bowel problems, here 40.7% respondents opinion were No to minimal, as well as 28.7% respondents opinion were Low, 7.5%

respondents opinion were Medium, 19.5% respondents opinion were high and 3.7% respondents opinion were Very high. On the Back pain, here 45.4% respondents opinion were No to minimal, as well as 23.15% respondents opinion were low, 0.92% respondents opinion were medium, 29.62% respondents opinion were high and 0.92% respondents opinion were Very high. On the pain in your arms, legs, or joints, here 55.55% respondents opinion were No to minimal, as well as 28.8% respondents opinion were low, 14.82% respondents opinion were medium and 0.92 respondents opinion were Very high. On the Headaches, here 51.85% respondents opinion were No to minimal, as well as 30.55% respondents opinion were low, 1.85% respondents opinion were medium, 12.96% respondents opinion were high and 2.77% respondents opinion were Very high. On the Chest pain or shortness of breath, here 40.75% respondents opinion were No to minimal, as well as 39.82% respondents opinion were low, 8% respondents opinion were medium, 4% respondents opinion were high and 3.7% respondents opinion were Very high. On the Dizziness, here 40.75% respondents opinion were No to minimal, as well as 28.7% respondents opinion were low, 7.4% respondents opinion were medium, 19.45% respondents opinion were high and 3.7% respondents opinion were Very high. On the Feeling tired or having low energy, here 30.55% respondents opinion were No to minimal, as well as 23.15% respondents opinion were low, 0.92% respondents opinion were medium, 44.45% respondents opinion were high and 0.92% respondents opinion were Very high. On the Trouble sleeping, here 19.45% respondents opinion were No to minimal, as well as 70.38% respondents opinion were low, 5.55% respondents opinion were medium, 3.7% respondents opinion were high and 0.92% respondents opinion were Very high

**Table 3: Frequency and percent Distribution of the respondents according to five point Likert scale on Mental Health Burden (SSS-8) (n-108)**

| Attributes | No to minimal | | Low | | Medium | | High | | Very High | |
|---|---|---|---|---|---|---|---|---|---|---|
| | n | % | n | % | n | % | n | % | n | % |
| Stomach or bowel problems | 44 | 40.7 | 31 | 28.7 | 8 | 7.5 | 21 | 19.5 | 4 | 3.7 |
| Back pain | 49 | 45.4 | 25 | 23.15 | 1 | 0.92 | 32 | 29.62 | 1 | 0.92 |
| Pain in your arms, legs, or joints | 60 | 55.55 | 31 | 28.8 | 00 | 00 | 16 | 14.82 | 1 | 0.92 |
| Headaches | 56 | 51.85 | 33 | 30.55 | 2 | 1.85 | 14 | 12.96 | 3 | 2.77 |
| Chest pain or shortness of breath | 44 | 40.75 | 43 | 39.82 | 9 | 8.33 | 8 | 7.4 | 4 | 3.7 |
| Dizziness | 44 | 40.75 | 31 | 28.7 | 8 | 7.4 | 21 | 19.45 | 4 | 3.7 |
| Feeling tired or having low energy | 33 | 30.55 | 25 | 23.15 | 1 | 0.92 | 48 | 44.45 | 01 | 0.92 |
| Trouble sleeping | 21 | 19.45 | 76 | 70.38 | 6 | 5.55 | 4 | 3.7 | 1 | 0.92 |

Note: Respondents chance to carry 0-32 score on Mental Health Burden, score 0-3 no to minimal, score 4-7 low, score 8-11 Medium, score12-15 High and score16-32 Very High.

Figure 1 shows that the overall level on Mental Health Burden of the respondents. Here 40.60% respondents opinion were No to minimal as well as 34.10% respondents opinion were Low, whereas 4% respondents opinion were Medium, how over 19% respondents opinion were high and 2.30% respondents opinion were Very high on Mental Health Burden foe COVID-19 patient care.

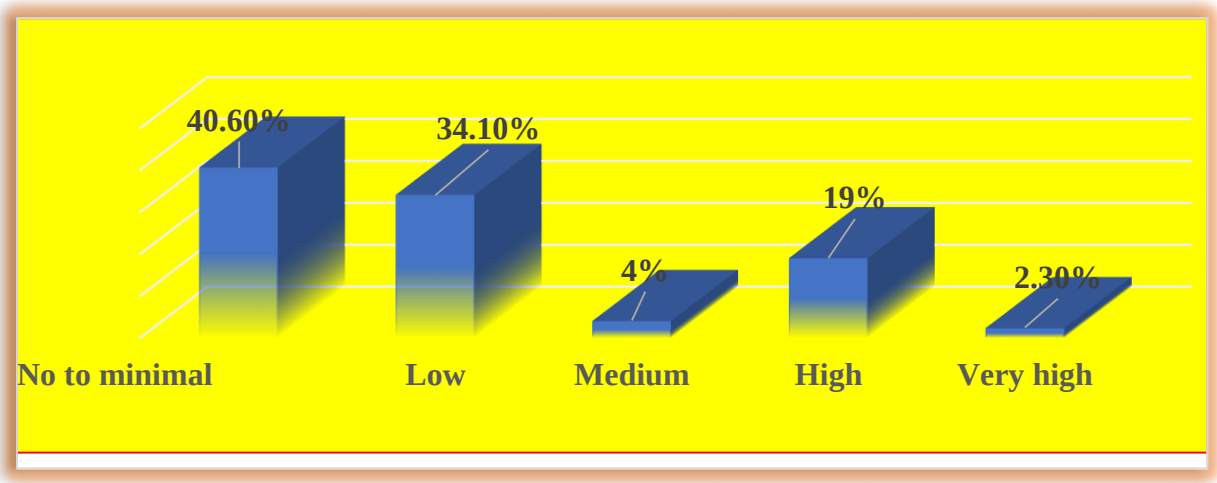


**Figure 1: Distribution of the respondents according to their overall level on Mental Health Burden (SSS-8) (n-108)**

Table 4 shows Parson Chi square association between male and female. Here, 52% of the respondents were female & 48% of the respondents were male. The ratio of male is higher in all the professions except the Nurse category. There is a significant relationship between sex & health professional since the Pr value equals to 0 (Pr < 0.05 & Pearson chi2 (5) = 52.8443).

**Table 4. Parson Chi square association between male and female of the respondents on Mental Health Burden (SSS-8) (n-108)**

| Attributes | Health care provider | | | | | Total |
|---|---|---|---|---|---|---|
| | Doctor | Nurse | Laboratory technician | Supportive staff | Ward boy | |
| Female | 8 | 29 | 1 | 16 | 2 | 56 |
| Male | 14 | 11 | 8 | 10 | 9 | 52 |
| Total | 22 | 40 | 9 | 26 | 11 | 108 |

*Parson Chi square (5) = 52.8443 pr = 0.000

Table 5 shows Somatic symptom burden as measured by the SSS-8 was significantly associated with only one of the factors, Headaches (p= 0.009 [95% CI, .0755571 to .5202732]). The other 7 variables were not significantly associated since none could justify a p- value less than .05 at 95% confidence interval.

**Table 5. Showing the Association Factor with Mental Health**

| SSS-8 | Characteristics | Frequency | ±SD | P | 95% Conf. Interval |
|---|---|---|---|---|---|
| Stomach or bowel problems | A little bit | 50 | .1388987 | 0.657 | -.3374369- .2138429 |
| | Not at all | 31 | | | |
| | Quite a bit | 8 | | | |
| | Somewhat | 12 | | | |
| | Very much | 7 | | | |
| Back pain | A little bit | 25 | .1011726 | 0.663 | -.156499 - .2450484 |
| | Not at all | 49 | | | |
| | Quite a bit | 32 | | | |
| | Somewhat | 1 | | | |
| Pain in your arms, legs, or joints | A little bit | 31 | .1177217 | 0.291 | -.3585612 -.1086684 |
| | Not at all | 60 | | | |
| | Quite a bit | 16 | | | |
| | Very much | 1 | | | |
| Headaches | A little bit | 33 | .1120492 | 0.009 | .0755571-.5202732 |
| | Not at all | 56 | | | |
| | Quite a bit | 14 | | | |
| | Somewhat | 2 | | | |
| | Very much | 3 | | | |
| Chest pain or shortness of breath | A little bit | 43 | .1403472 | 0.200 | -.4594992 - .0975296 |
| | Not at all | 44 | | | |
| | Quite a bit | 8 | | | |
| | Somewhat | 9 | | | |
| | Very much | 4 | | | |
| Dizziness | A little bit | 31 | 1.256757 | 0.898 | -.2363463- .2075232 |
| | Not at all | 44 | | | |
| | Quite a bit | 21 | | | |
| | Somewhat | 8 | | | |
| | Very much | 4 | | | |
| Feeling tired or having low energy | A little bit | 33 | .0927652 | 0.756 | -.1551741-.2130051 |
| | Not at all | 25 | | | |
| | Quite a bit | 48 | | | |
| | Somewhat | 1 | | | |

| | | | | | |
|---|---|---|---|---|---|
| Trouble sleeping | A little bit | 76 | .1766177 | 0.561 | -.247521- .453463 |
| | Not at all | 21 | | | |
| | Quite a bit | 4 | | | |
| | Somewhat | 6 | | | |
| | Very much | 1 | | | |

Significant at $p<0.05$, not significant at $p>0.05$

## IV. DISCUSSION

Although the world has experienced several epidemics and pandemics in recent years, such as SARS, MERS, Ebola and influenza A, healthcare professionals seem to be facing increased psychological pressures during the COVID-19 pandemic compared to previous epidemics. The purpose of the study was to determine mental health status of healthcare professional of The Kuwait Bangladesh Friendship Government Hospital, Uttara, Dhaka. Purposive sampling was done from the healthcare professional of that hospital. Self-administered questionnaire were given to 108 participant. The socio demographic information were taken of the respondents such as age, sex, marital status, duty hours, type of profession, working area etc.

Our study found that healthcare professional age group 18-64. Among them 36.11 % belongs to age group of 25-34 years, 28.70 % belongs to age group of 35-44 years, 24.07 % belongs to age group of 45-54 years, 6.48 % belongs to age group of 18-24 years, 4.63% belongs to age group of 55-64 years, male and female participants are 48.15% and 51.85% respectively. Findings of our study reported that women were more likely to experience Mental Health Burden compared to men during the pandemic. Previous research has found that females endure more job related stress than men [5], we assume this might be a plausible explanation of this result. The multiple additional caring roles of women (additional to the stress of being a physician) may add layered stress to female physicians, who may also have COVID-19 related stresses linked to parents, family, and children. That is not to say that male physicians have less of these concerns, but global literature is clear that women take on the majority of caring roles inside the household and family [6].

Our study found that out of 108 respondents married 86.11%, single 12.96 %, widowed 0.93 %. According to the results of multivariate logistic regression model, marital status, were found to be significant predictors for Mental Health Burden. In addition, sex, age and marital status were highly significant predictors for Mental Health Burden. By considering the magnitude of these selected factors, findings of this study demonstrated that Mental Health Burden were less likely to occur among the participants who were married compared to their counterparts. During the SARS outbreak, a study conducted among hospital employees also found similar relationships [7]. A possible explanation of this finding is that married people have been shown to have an overall better levels of mental than counterpart's people [8]. This difference between married and unmarried/widowed people may be linked to a sense of stability, social capital, and having a person to share feelings and emotions with after a stressful day working in the hospital. Another study depicted that married individuals had substantially lower risks of death than their unmarried counterparts [9]. Hence, marital status should be considered when developing practice-based interventions or attempting to identify "at risk" HCWs during COVID-19 pandemic

Our study revealed that respondents work fulltime 92.59%, hourly basis 4.63 %, and part time 2.78%. They work at isolation ward/unit/cabin for Covid-19 infection 44.44%, Isolation Ward/Unit/Cabin for Covid-19 infection and The Outpatient Department of Covid-19 Infection 2.78%, The Outpatient Department of Covid-19 Infection 4.63%, The Outpatient Department of Covid-19 Infection, And Emergency/Unit for Covid-19 Infection 0.93 %, Emergency/Unitfor Covid-19 Infection 26.85%, ICU /Dialysis Department 12.96 %, and at Other Department/unit 7.41%. Here the person chi2=52.8443. Workload was associated with the mental health of the participants. Physicians who worked ≥8 h a day had higher likelihood of experiencing anxiety compared to those who worked <8 h a day. This finding suggests that the workload of the physicians needs to be taken into account when considering "at risk" physicians with whom practice-based interventions can be implemented. Whilst this does not deal with the problem of doctors working longer hours, it at least identifies those groups who may be in need of mental health support during COVID-19 [10].

Here somatic symptom scale-8 is used to analyze mental health status of the health care professional. In this data not at all, a little bit =very high, somewhat= low, quite a bit= high, very much =minimal. Here maximum healthcare professional faces a little bit stomach or bowel problem, chest pain, headache, back pain, joint pain, dizziness, low energy and trouble sleeping. Back pain, Pain in arms, legs, or joints, low energy or feeling tired are minimal. Chest pain or shortness of breath is low. Somatic symptom burden as measured by the SSS-8 was significantly associated with only one of the factors, Headaches (p= 0.009 [95% CI, .0755571 to .5202732]). The other 7 variables were not significantly associated since none could justify a p- value less than .05 at 95% confidence interval.

We also observed that older HCWs had lower risk of experiencing Mental Health Burden than younger ones, which is supported by a previous study [11]. Our results

suggest the need to implement stress management programs (or other interventions aimed at protecting mental health) for younger HCWs in order to manage their mental health. Although a study in China showed that during COVID-19, frontline healthcare workers were more likely to experience mental health problems than other healthcare workers [12], we did not find that the working position of the HCWs had any significant effect on Mental Health Burden. Overall, the results of this study indicate that mental health of the HCWs require special attention during and after the COVID-19 pandemic, with a specific focus on the particular groups of HCWs identified in this research.

## V. CONCLUSION & RECOMMENDATION

To the best of our knowledge this is study in Bangladesh to assess the mental health status of healthcare professional of The Kuwait Bangladesh Friendship Government Hospital, Uttara, Dhaka during COVID-19 outbreak. Findings revealed that the prevalence of mental health Barden were high among the HCWs. Marital status, work per day and current job location were risk factors for mental health Barden whereas sex, age, and marital status were risk factors for mental health Barden. Governments may consider findings of this study for a better health management and an improved health outcome for both HCWs and patients. From the analysis we found certain prevalence of psychological symptom among the health care professional during Covid-19 situation. The high prevalence of mental health problems among HCWs during the current pandemic suggests that the HCW community working at hospitalized settings in Dhaka city is have been exposed to increased levels of mental stress, potentially resulting in anxiety, depression and, insomnia. Arrangement for financial assistance for HCWs and support for female care workers in facilities could help to relieve the mental stress from healthcare workers. Supportive, training, and instructional interventions, especially through information and communication channels, may be recommended to care facilities to help HCWs cope with mental health symptoms. Further, online mindfulness and relaxation Healthcare professionals need adequate equipment, health protection, optimum working environment. This information or data is very essential. The data is essential in mental health department, in case of policy making, in the long run where second outbreak of Covid-19 occur.

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