

## Workplace stress among healthcare workers in Kut city, Iraq, 2020

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#### Abstract

**Objective:** To identify workplace stress in healthcare workers.

**Method:** The cross-sectional, descriptive study was conducted at Al-Kut and Al-Karamah hospitals in Kut, Iraq, from October 2019 to March 2020, and comprised health professionals regardless of age and gender. Data was collected through a pilot-tested questionnaire which was validated by a panel of experts. Data was analysed using SPSS 25.

**Results:** Of the 266 subjects, 133(50%) were from each of the two hospitals. Overall, there were 156(58.6%) females and 110(41.4%) males. There were 195(73.3%) subjects aged <30 years, 40(15%) aged 31-40 years and 31(11.7%) aged >40 years (p=0.625). There were 19(7.1%) physicians 72(27.1%) nurses, 88(33.1%) technicians and 87(32.7%) other healthcare workers. Stress was found in 20(7.5%) subjects; 13(65%) in Al-Karamah Hospital and 7(35%) in Al-Kut Hospital (p=0.245).

**Conclusion:** The prevalence of stress was low among the health workers studied.

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### Introduction

Aspects of work design, organisation and management, including the social aspect, that have a negative impact on the physical and psychological state are known psychological hazards. In workplace, psychosocial risks include social and personal relationships among workers as well as stress-related work, exhaustion, violence, bullying, work load and lack of justice.<sup>1</sup>

In the past decade, stress-related work has become a serious and complex concern at both national and global levels. A study used the term "occupational stress" as an alternative to job stress or stress-related work.<sup>2</sup>

A highly complex yet necessary psychological reaction of individuals towards anything threatening their life or life balance is called stress<sup>3</sup> The health sector has one of the most stressful work environments as healthcare workers (HCWs) are exposed during the performance of their work to patients and their relatives from different cultures that has the potential to cause situations that negatively affect the HCWs and the patients alike<sup>4</sup>

In view of the high incidence of stress among HCWs and

the extent of its impact on service quality, the need for stress management policies in the health sector has been acknowledged<sup>5</sup>

The current study was planned to identify the stress level of HCWs in the local context.

# **Subjects and Methods**

The cross-sectional, descriptive was conducted across all departments at Al-Kut and Al-Karamah hospitals in Kut, Iraq, from October 2019 to March 2020. After approval from the institutional ethics review boards, the sample size was calculated at 95% confidence interval (CI) and 6% margin of error while assuming the prevalence of stress to be 47% by using the Glenn D. Israel formula<sup>7</sup> After permission from the Wassit Health Directorate, the sample was raised using non-probability convenience sampling technique. Those included were HCWs regardless of age and gender who had been in the current employment for >6 months at the time of the study. Support staff and auxiliary workers as well those working for <6 months were excluded.

After taking informed consent from all the participants, data was collected using a questionnaire developed and constructed by the researcher and the supervisors and modified by an expert panel and then translated from English into Arabic. It was pilot-tested for reliability and was validated by a panel of 9 experts. All 9 experts on the panel were native Arabs but could read and speak English fluently. The Arabic version was translated by English-speaking translators who were blinded to the study's objectives.

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Cronbach's  $\alpha$  was used to determine the construct validity and reliability of the Arabic version.

The first section of the questionnaire was about demographic and professional characteristics, while the second part comprised stress dimensions through 38 items That were scored on a 5-point Likert scale, ranging from "never" to "always". The total score of stresses ranged 38-190, and 114 was taken as indicative of medium stress level. Each question's medium was computed, and those scores below the medium scores (<114) were considered poor, while 114 or above was taken as acceptable and good.

Data was converted into code sheets. Data was analysed using SPSS25. Data was expressed as frequencies and percentages, while chi-square test or Fisher exact text, as appropriate, were used to determine the association between variables. P<0.05 was deemed significant.

### Results

Of the 266 subjects, 133(50%) were from each of the two hospitals. Overall, there were 156(58.6%) females and 110(41.4%) males. There were 195(73.3%) subjects aged <30 years, 40(15%) aged 31-40 years and 31(11.7%) aged

>40 years (p=0.625) (Table 1). There were 19(7.1%) physicians 72(27.1%) nurses, 88(33.1%) technicians and 87(32.7%) other healthcare workers.

Stress was found in 20(7.5%) subjects; 13(65%) in Al-Karamah Hospital and 7(35%) in Al-Kut Hospital (p=0.245) (Table 2).

#### Discussion

Socioeconomic status (SES) has been reported to affect health. It is a significant risk factor that adds to occupational hazards, especially in the health sector.<sup>8</sup>

In terms of demographics, majority of the subjects in the current study were aged <30 years, which is in line with an earlier study done in Ethiopia. However, another study had 52.8% HCWs aged 31-40 years. The data in the current study might have been due to fact that an increasing number of graduates from medical institutions in Iraq are taking up employment in the health sector more directly than was the case before.

In the current study, there were female subjects than males which is similar to the findings reported in a study from Egypt.<sup>11</sup>

**Table-1:** Distribution of health workers according to age and gender.

| Variables   |       | Al Kut Hospital for Women and Children |                 |                | Al-Karamah Teaching Hospital |                 |                | Total     |
|-------------|-------|--|-----------------|----------------|------------------------------|-----------------|----------------|-----------|
|             |       | Male<br>n (%)                          | Female<br>n (%) | Total<br>n (%) | Male<br>n (%)                | Female<br>n (%) | Total<br>n (%) | n (%)     |
|             |       |  |                 |                |                              |                 |                |           |
| Age (years) | ≤30   | 27 (61.4)                              | 74(83.1)        | 101(75.9)      | 38(57.6)                     | 56(83.6)        | 94 (70.7)      | 195(73.3) |
|             | 31-40 | 8(18.2)                                | 10(11.2)        | 18(13.5)       | 17(25.8)                     | 5(7.5)          | 22(16.5)       | 40(15.0)  |
|             | >40   | 9(20.5)                                | 5(5.6)          | 14(10.5)       | 11(16.7)                     | 6(9.0)          | 17(12.8)       | 31(11.7)  |

df=2, p-value= 0.625

Table-2: Stress level among the subjects.

| Hospitals           | Good and acceptable | Poor     | <i>p</i> -value |  |
|---------------------|---------------------|----------|-----------------|--|
| iiospitais          | n (%)               | n (%)    | p value         |  |
| Al-Kut Hospital     | 126 (94.7)          | 7 (5.3)  | 0.245*          |  |
| Al-Karamah Hospital | 120 (90.2)          | 13 (9.8) |                 |  |
| Total               | 246 (92.5)          | 20 (7.50 |                 |  |

<sup>\*</sup> Fisher's exact test

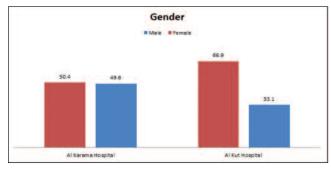


Figure: Gender distribution of the health workers.

With respect to stress among HCWs, the present study found a prevalence of 7.5%, which was much lower than the 58.2% reported by a study done in Brazil [3].

### Conclusion

The prevalence of stress was low among the HCWs studied.

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