Journal of University Studies for inclusive Research (USRIJ)
مجلة الدراسات الجامعية للبحوث الشاملة
ISSN: 2707-7675

**Journal of University Studies for Inclusive Research**

**Vol.8, Issue 18 (2023), 10455- 10469**

**USRIJ Pvt. Ltd.**

# Annals of Clinical and Analytical Medicine

## Prevalance of Stress among Healthcare Workers inSaudi Arabia

**Corresponding authors*

***Muhammad Mahdi Hussein Al-Rubaie***

***Nasser Ali Hassan Al Daghrir***

***Yahya Muhammad Yahya Al-Zubaidi***

***Ibrahim Rashid Mahdi Al Sadran***

***Moeed Saleh Shuail Al-Qufaili***

**Abstract**

**Introduction**: Factors leading to workers' stress include role overload, poor learner behavior, lack of resources, hospital size, diversity in individuals with whom they have to work, and lack of motivation from coworkers. This study aimed to assess stress among healthcare workers working in Saudi Arabia.

**Methods**: This is a cross-sectional observational study design conducted on

Journal of University Studies for inclusive Research (USRIJ)
مجلة الدراسات الجامعية للبحوث الشاملة
ISSN: 2707-7675

health workers using an online questionnaire in Saudi Arabia. The total number of hospital healthcare workers does not exceed 430 workers. We assumed that the confidence level is 95% and the error of estimation is 5%. Based on the equation of sample size calculation for proportion (below), we use epi-info software (Statistical package). The sample size after correction for population size (which is a small population in this study) is 203 workers.

**Results:** The majority of respondents (64.5%) were aged below 30 years, 31% were aged 31-50 years (middle), and 4.4% were aged more than 50 years (old). The majority of respondents were healthcare workers (96.1%) while 3.9% held managerial positions. More than 73% of the respondents were working in one school, 15.3% hospitals and 11.3% were working in more than 3 hospitals. A number of 97% (47.8%) sometimes were feeling that they were capable of making decisions at the hospital. Most of the respondents 58.1% sometimes were feeling that most problems they were encountering at the hospital could be surmounted. The majority of respondents were sometimes (54.2%) feeling happy at work, 33% were mostly and 12.8% often had that feeling.

**Conclusions**: There is a considerable amount of stress among healthcare workers in Saudi Arabia. Females aged below 30 years were found sometimes more significantly feel capable of making decisions at hospitals compared to males. While males aged 31-50 years were sometimes more significantly felt capable of making decisions at hospitals compared to females. However, the study showed that those aged below 30 years were significantly greater feel capable of making decisions at the hospital compared to those aged 31-50 years and those aged above 50 years.

***Keywords: Health workers, Hospitals, Stress, Burnout, Saudi***

Journal of University Studies for inclusive Research (USRIJ)
مجلة الدراسات الجامعية للبحوث الشاملة
ISSN: 2707-7675

## Introduction

There has been an enormous increase in research into stress over the last decade. Many studies have implicated stress in the etiology of a number of physical and psychiatric ailments [1], skin diseases, Ulcers, [2]. In addition, stress can hinder effectiveness at work and can lead to low performance, job dissatisfaction, poor motivation, absenteeism and turnover [3]. Concern with the effects of stress on a person's productivity, absenteeism, and health-related problems have increased dramatically during the last decade [1]. Healthcare workers are not excluded from this concern. According to Adams, high levels of stress can be harmful to healthcare workers and may negatively affect their working, personal lives, and, most importantly, their students. Some authors stated that, healthcare workers regardless of what level they teach are exposed to high levels of stress. In some extreme cases, they may suffer from burn out as well [4]. The fact that healthcare workers are exposed to high level of stress can be an international phenomenon [5]. Stress is difficult to define precisely. The concept of stress was first introduced in the life sciences by Selye Hans in 1936. It was derived from the Latin word 'stringere'; it meant the experience of physical hardship, starvation, torture and pain. Selye Hans, defined stress as "the non-specific response of the body to any demand placed upon it" [6]. McGrath defined stress as a perceived imbalance between demand and response capacity under conditions where failure to meet demand has important consequence [7].

Stress is measured in two different ways. According to him, it is dangerous potentiality, harmful/unpleasant external situation/conditions (stressors) that produce stress reaction; and secondly to the internal thought, judgment, emotional state and physiological process that are evoked by stressful stim. Robbins defines stress as a dynamic condition in which the individual is confronted with an opportunity, constraint, or demand related to what he or she desires and for which

Journal of University Studies for inclusive Research (USRIJ)
مجلة الدراسات الجامعية للبحوث الشاملة
ISSN: 2707-7675

the outcome is perceived to be both uncertain and important [7]. Working is commonly recognized as one of the most stressful occupations in our nation. Workers stress results in such consequences as early

retirement, long and excessive absences, new healthcare workers leaving during training, and an increase in healthcare workers leaving the profession within their first five years [8]. In recent years, professional satisfaction has been decreasing while job pressure has been on a steady rise for workers s. These issues have raised many questions about the growing problem of workers stress [9]. Borg, Riding and Falzon define workers stress as a physical, emotional or mental reaction resulting from one's response to certain U pressures in the environment and how well one can manage those pressures. Within special education the sources of workers 's stress are both internal and external to the individual. Kyriacou defined stress as "the experience by a workers of unpleasant, negative emotions, such as anger, anxiety, tension, frustration or depression, resulting from some aspect of [his/her] work as a workers " [10]. Working has been hospitalities as a high stress profession. Within the working profession however, healthcare workers within the context of early childhood education hospital rooms healthcare workers may face unique challenges, such as high turnover rates and long consecutive hours with students that can be additional sources of stress [10].

Some authors define stress as being a person's adaptive response to a stimulus that places excessive psychological or physical demands on the individual. This stimulus generally is called a stressor, which is any factor that causes stress. Robbins summarizes stress as being a dynamic condition in which an individual is confronted with an opportunity, constraint, or demand related to what he or she desires and for which the outcome is perceived to be both uncertain and important [11]. Jon et al. define stress as the general term applied to the pressures people feel in life. Stress is defined As any objective condition or any change in

Journal of University Studies for inclusive Research (USRIJ)
مجلة الدراسات الجامعية للبحوث الشاملة
ISSN: 2707-7675

the work environment that is perceived as potentially harmful, threatening, challenging, or frustrating, or any set of circumstances related to work that requires change in the individual s ongoing life pattern. Stress is considered as the pattern of emotional state, cognitions, and physiological reaction which is

Journal of University Studies for inclusive Research (USRIJ)
مجلة الدراسات الجامعية للبحوث الشاملة
ISSN: 2707-7675

occurring in response to stressors [12]. Factors leading to workers stress include role overload, poor learner behavior, lack of resources, hospital size, diversity in individuals with whom they have to work, and lack of motivation of coworkers. This study aimed to assess stress among healthcare workers working in Saudi Arabia.

**Methods**

The present research entitled “Stress among healthcare workers in hospitals”. This is a cross-sectional observational study design conducted in health workers using online questionnaire in Saudi Arabia. The total number of hospitals healthcare workers does not exceed 430 workers. We assumed that confidence level is 95% and error of estimation is 5%. Based on the equation of sample size calculation for proportion(below), we used epi-info software (Statistical package).

The sample size after correction for population size (which is small population in this study) is 203 workers. A systematic random sample with sampling interval of 2 (430/203) after listed of all healthcare workers recruited for the study, we were choosing the first workers randomly and then systematically till we completed the required sample size (203). The data was collected by data were collected through online- designed questionnaire to investigate the occupational health problems among healthcare workers in hospitals. The data was analyzed using SPSS program version 26. A descriptive statistic was used and chi- square also used for inferential statistics, p-value statistically significant at 0.05 level.

**Results**

The majority of respondents (64.5%) were aged below 30 years, 31% were aged 31-50 years (middle) while 4.4% aged more than 50 years (old). The majority of

Journal of University Studies for inclusive Research (USRIJ)
مجلة الدراسات الجامعية للبحوث الشاملة
ISSN: 2707-7675

respondents were healthcare workers (96.1%) while 3.9% they held managerial position. Most experience of the respondents ranged between 1-5 years (49.8%), 26.6% had 6-10 years' experience, 12.3% had less than one year experience and 11.3% had more than 10 years' experience. The majority of respondents were married (75.4%), 21.2% were single (un-married) and 3.4% were divorced. Most of respondents (62.6%) work 6-8 hours in the hospitals, 23.6% work 12 hours and 13.3% work more than 12 hours.

Regarding stress measurements items, mostly (69.5%) of respondents were feeling that they were playing a useful part in hospital life, 25.1% were very much so, 4.9% were not at all and 0.5% were not much. A number of 97% (47.8%) were sometimes were feeling that they were capable of making decisions at hospital, 31.5% were mostly, 10.8% were not much, 7.9% were very much so and 2% were not at all. The majority of respondents (75.4%) were sometimes feeling they were relaxing in their home and hospital life, 13.8% were mostly , 7.9% were very much so and 3% were not much. Most of the respondents 58.1% sometimes were feeling that most problems they were encountering at hospital could be surmounted, 25.6% were mostly, 12.3% were very much and 3.9% were not much. Most of the respondents were mostly generally managing to keep their sense of humors, 12.8% were very much so and 3.9% were not much. The majority of respondents were sometimes (54.2%) feeling happy at work, 33% were mostly and 12.8% were very much.

Regarding sleeping quality, A number of 70 (34.5%) of the respondents were very much so sleeping well, 29.6% were mostly, 21.2% were sometimes and 14.8% were not much. The majority of the respondents mostly (46.8%) were

Journal of University Studies for inclusive Research (USRIJ)
مجلة الدراسات الجامعية للبحوث الشاملة
ISSN: 2707-7675

eating well, 23.6% were sometimes, 17.8% were very much so and 11.8% not much. Most of the respondents were not much (37.9%) drinking sensibly, 28.1% were very much so, 17.7% were mostly and 16.3% were sometimes. The majority of the respondents were not much (37.9%) coping with change to their jobs, 25.6% were mostly, 20.2% were sometimes and 16.3% were very much. The majority of the respondents were mostly had a reasonable amount of energy, 29.6% were not much, 23.2% were very much so and 4.4% were sometimes. More than 46% of the respondents were very much so feeling in control their jobs, 30.5% were sometimes and 23.2% were mostly. The majority of the respondents mostly (49.8%) were feeling they were coping well in the hospital room, 26.6% were very much so, 12.3% were not much and 11.3%.

**Table (1): Demographic distribution of the healthcare workers**

| **Age** | **Frequency** | **%** |
|---|---|---|
| Below 30 | 131 | 64.5 |
| Middle 31-50 | 63 | 31.0 |
| Old above 50 | 9 | 4.4 |
| **Marital status** | | |
| Unmarried | 43 | 21.2 |
| Married | 153 | 75.4 |
| Divorcee | 7 | 3.4 |
| **Workers experience** | | |
| Less than 1 Year | 25 | 12.3 |
| One-Five years | 101 | 49.8 |
| Six-Ten years | 54 | 26.6 |
| Above 10 years | 23 | 11.3 |
| **Total** | **203** | **100.0** |

Journal of University Studies for inclusive Research (USRIJ)
مجلة الدراسات الجامعية للبحوث الشاملة
ISSN: 2707-7675

Approximately half of respondents (49.8%) were very much so getting on well with their pupils, 25.6% were mostly, 20.2% were not much and 4.4% were sometimes. Not at all (38.4%) of the respondents were feeling free from the threat of bullying/harassment at hospital, 35% were very much so, 19.7% were sometimes and 6.9% were mostly. Most of the respondents were sometimes and also mostly (27.6%) were enjoy a reasonable degree of autonomy, unaffected by excessive monitoring regimes, 26.6% were not much, 13.8% were mostly and 4.4% were not at all. Regarding work satisfaction, 43.3% of the respondents were mostly found their jobs satisfying and fulfilling, 21.7% were very much so, 18.7% were not much, 8.4% were not at all and 7.9% were sometimes. The majority of the respondents were sometimes (34.5%) had a life outside work, 25.6% were very much so, 24.6% were mostly, 8.4% were not much and 6.9% not at all. About 43.3% were mostly intending to remain in working for the foreseeable future, 29.1% were very much so, 12.3% were sometimes, 8.4% were not much and 6.9% were not at

all. A number of 136 (67%) were mostly looking forward to returning to hospital after a weekend or holiday, 20.7% were very much so, 11.3% were not at all and 1% were sometimes.

**Discussion**

Different opinions on demands were mentioned by the participants, however more than 58% were strongly disagreed that physical working conditions are acceptable while 36.4% agreed and strongly agreed that physical working conditions are acceptable. This means there was high evidence of stress. Primary

Journal of University Studies for inclusive Research (USRIJ)
مجلة الدراسات الجامعية للبحوث الشاملة
ISSN: 2707-7675

hospital workers s' (33%) agreed that their rest facilities are comfortable and welcoming compared to 24.2% did not agree (strongly disagree and disagree) [13]. This result indicated high evidence of stress. Most of respondents agreed that their total working hours are acceptable (65.5%). The finding indicates moderate evidence of stress. Respondents agreed that there are too many after hospital meetings (45.8%). This finding indicates high evidence of stress among primary hospital workers [14].

Regarding unreasonable deadlines and time pressures are too often imposed on them, primary healthcare workers agreed (agree and strongly agree) there were suffered, where a high evidence of stress were possible. More than 36% of the respondents agreed that the balance between work and home life is about right which indicated high evidence of stress [15]. Most of the respondents (32.5%) agreed that the hospital values the time they put in at home, this results showed a high evidence of stress among primary hospital workers s. A high level of stress among primary healthcare workers was observed regarding lesson planning requirements are over- burdensome (49.3%). However the overall average of respondents regarding their demand showed high evidence of stress (41.4%). Different opinions on control were mentioned by the participants, a high evidence of stress (40.4%) of them had opportunities to express their ideas and points [16]. Also a high evidence of stress among primary healthcare workers was observed regarding they had to neglect some tasks because they had too much to do. While moderate

Journal of University Studies for inclusive Research (USRIJ)
مجلة الدراسات الجامعية للبحوث الشاملة
ISSN: 2707-7675

Journal of University Studies for inclusive Research (USRIJ)
مجلة الدراسات الجامعية للبحوث الشاملة
ISSN: 2707-7675

evidence of stress (51.2%) shown about there were too much observation. But a high evidence of stress (47.8%) exist regarding encouraged to use their skills and initiative to do there. The participants overall average control showed a high evidence of stress (40.9%).

The respondent's opinion about their support in hospital life. Moderate evidence of stress was shown among primary healthcare workers regarding they receive appropriate training (54.7%). Moreover a high evidence of stress among primary healthcare workers in terms of did not have enough support in dealing with bureaucratic paperwork (47.8%). A number of 80 (39.4%) of primary healthcare workers agreed that their managers were supportive. This indicated high evidence of stress [17-20]. The majority of primary healthcare workers agreed that they were regularly receives positive feedback on their work which indicated low level of stress. While a moderate evidence of stress was observed among primary healthcare workers regarding their agreement that the hospital benefits from effective leadership (58.6%). However the overall average of primary hospital workers opinion about support in hospital life indicated moderate evidence of stress (56.7%).

**Conclusions**

There is a considerable amount of stress among healthcare workers in Saudi Arabia. Females aged below 30 years were found sometimes more significantly feel capable of making decisions at hospital compared to males. While males aged 31-50 years were sometimes more significantly feel capable of making decisions at hospital compared to females. However the study showed that those who aged below 30 years were significantly greater feel capable of making decisions at

Journal of University Studies for inclusive Research (USRIJ)
مجلة الدراسات الجامعية للبحوث الشاملة
ISSN: 2707-7675

hospital compared to those aged 31-50 years and those who aged above 50 years.

**Conflict of interests**

The authors declared no conflict of interests.

**References**

1 Dworkin, A., Haney, C. Dworkin, R. & Telscher, R. (1990). Stress and Illness Behavior among Urban Public Hospital Workers s. Educational Administration Quarterly, Vol. 26(1), 60-72.

2 Fevre, M. L., Matheny, J., & Kolt, G. S. (2003). Eustress, distress, and interpretation in occupational stress. Journal of Managerial Psychology

3 Griffith, J., Steptone, A., & Cropley, M. (1999). An Investigation of Coping Strategies Associated with Stress in Workers s. British Journal of Educational Psychology,Vol. 69, 517-531.

4 Gulwadi, G. (2006). Seeking restorative experiences: Elementary hospital workers s' choices for places that enable coping with stress. Environment and Behavior, 38, 503-520.

5 Guglielmi, R., & Tatrow, K. (1998). Occupational stress, burnout, and health in workers s: A methodological and theoretical analysis. Review of Educational Research, 68(1), 61-99.

6 Hepburn, A., & Brown, S. (2001). Workers stress and management of accountability. Human Relations, 54(6), 691-715.

7 House JS (2007) Occupational stress and coronary heart disease: a review and theoretical investigation. J. Health and Soc. Behav.

8 Herbert, J. (1997). Fortnightly review: Stress, the brain, and mental illness. BMJ

Journal of University Studies for inclusive Research (USRIJ)
مجلة الدراسات الجامعية للبحوث الشاملة
ISSN: 2707-7675

9 Hastings, R., & Bham, M. (2003). The relationship between student behaviour patterns and workers burnout. Hospital Psychology International, 24(1), 115-127.

10 Hargreaves, A. (2001). Emotional Geographies of Working. Workers 's College Record, Vol.103 (6), 1056-1080.

11 International Labour Organization [ILO] (1986) Psychosocial Factors at Work: Recognition and Control. Occupational Safety and Health Series no: 56, International Labour Office, Geneva.

12 International Labour Organization [ILO] (1992) Preventing Stress at Work. Conditions of Work Digest, 11, International Labour Office, Geneva.

13 Irene Houtman, Karin Jettinghoff and Leonor Cedillo (2007) Raising Awareness of stress at work in developing countries , a modern hazard in a traditional working environment , World Health Organization Geneva.

14 Jon MW, Randy L, De Simone J(2009) . Human Re- source Development. 5 Editions. New York: Cengage Learning.

15 Kyriacou, C. (2001). Workers stress: Directions for future research. Educational Review,

16 Kiveshni Naidoo(2011) Stress management and its impact on work performance of educators in public hospitals in KwaZulu-Natal, Educational Review, North-West University

17 Larson, L. L. (2004). Internal auditors and stress. Managerial Auditing Journal

18 Lazarus, R., & Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer.

Journal of University Studies for inclusive Research (USRIJ)
مجلة الدراسات الجامعية للبحوث الشاملة
ISSN: 2707-7675

19 McGrath, J.E., 1970, A conceptual formulation for research on stress. In: Preet kamal and Jain, U., 1988, Perceived stress as a function of family support. Indian

20 McCarthy, C., Lambert, R., O'Donnell, M., & Melendres, L. (2009). The relation of elementary workers s' experience, stress, and coping resources to burnout symptoms. The Elementary Hospital Journal, 109(3), 282-300.