

Measurement of Stress among Doctors in Surgical Intensive Care Unit (ICU) of Lahore General Hospital, Lahore

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ABSTRACT

Background: Stress is believed universal and inevitable part of human life and its happening is not avoidable. Doctors face high degree of stress because they are directly dealing with the lives of the patients. Stress among doctors affects not just their health and personal lives but also patients' satisfaction with them, medical services they provide and patients' compliance with the treatment.

Aim: To identify stressors and major stresses and their magnitude on doctors of surgical Intensive Care Unit, as well as identification distressed working in surgical Intensive Care Unit.

Method: In our study 40 doctors from surgical intensive care unit of Lahore General Hospital, Lahore was included. This was a cross-sectional descriptive study.

Results: Out of 40 doctors, 57.5% were upto aged 35 years and 67.5% were males. 37.5% doctors were agreed somewhat about their heavy workload. 37.5% doctors said that they mostly have threats from their patient attendants. 37.5% said their working is unpleasant.

Conclusion: Most of the doctors were not satisfied with their job, incentives and had more working hours as compare to other jobs. Major stress reason is threat from patient's attendants. Working hard on patients and getting undesirable results is also an important cause.

Keywords: Stress, ICU, distress

INTRODUCTION

Stress is believed universal and inevitable part of human life and its happening is not avoidable¹. Every person can experience stress one or several times in life time². It is subjective occurrence which can be result of an incidence that generates psychological or physical pain³. The word "stress" has been described in several ways due to complex type of stress itself. During 1936, Seyle first invented this word and explained it as non-specific reaction of body to demand for any change⁴.

The working environment of ICU is challenging and demanding⁵. Doctors of ICU can experiences considerable stress associated with their work⁶. Medical personnel experience great levels of anxiety and stress as compare other populations⁷.

Several stressors are experienced in ICU, for example, difficult patients care, conflict with doctors, lack of cooperation of other hospital's departments and working during holidays and nights. In ICU, some stressors are associated with patients and patients care such as dealing with emotions, technology and daily requirements, other are associated with health care staff, for example working with inexperience medical staff, doctors, dealing with daily interpersonal tensions and patients' families while few stressors are associated with organization and environment⁸.

Doctors of ICU are normally perceived as dedicated, exigent and perfectionist health professionals⁹. They are required to provide daily critical care in technical and demanding environment where death is most common phenomena and mistakes could be hazardous. Doctors face high degree of stress because they are directly dealing with the lives of the patients. Provision of such critical care can cause doctor's psychological, emotional and physical exhaustion and finally leads to burnout¹⁰.

Stress among doctors affects not just their health and personal lives but also patients' satisfaction with them, medical services they provide and patients' compliance with the treatment¹¹.

To decrease stress and to improve doctors work life, adequate policies are required to be made. Contrary to various studies asserting doctors job stressors, there is void of potential interferences aimed at supporting hospital working condition of doctors. Though, working environments are receptive to advancement, particularly through changing work organization. Re-design of organization for health professional is recommended like a helpful technique to decrease job stressors, boost job control and support safety of patients¹².

Several studies had pointed out that different factors and stressors in some ICU hospitals may not be present in other ICU hospitals. This may be an indication of the importance of exploring the work settings in order to understand what kind of stressors health workers experience. Job stress is a leading

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problem among doctors especially who are working in intensive care unit. Present study aims to measure stress among doctors in surgical intensive care unit of LGH Lahore, as there is no much work has been on this issue. The health programmer and policy makers can utilize these results to take corrective measures to reduce stress among doctors.

MATERIAL AND METHODS

In this study 40 doctors from surgical intensive care unit of Lahore General Hospital, Lahore was included. This was a cross-sectional descriptive study. Simple convenient random sampling technique was used. All the collected data was analyzed by using SPSS 20.0. All the data was presented in the form of graphs and tables by calculating the percentages and frequencies. From all the cases proper consent was taken and all the data confidentiality was ensured before data collection. Privacy and confidentiality was ensured as per Helsinki Declaration of Bioethics.

RESULTS

Table 1 describes that 23 out of 40 doctors (57.5%) were up to 35 years old and 11(27.5%) were 36-40 years old while 6(15.0%) doctors were > 40 years old.

Table 2 exhibits that 27 were males and 13 were female, (67.5%) and (32.5%) respectively.

Table-3 indicates that 9(22.5%) out of 40 doctors were strongly disagreed with chances of the promotion which were very little, disagreed were 6(15.0%), somewhat agreed were 12(30.0%), agreed were 8(20.0%) and strongly agreed were only 5(12.5%). Regarding heavy workload 7(17.5%) were strongly agreed, 17(42.5%) were agreed, 15(37.5%) were somewhat agreed and only 1(2.5%) out of 40 was strongly disagreed. Regarding not getting the appreciation at workplace, strongly agreed were 4(10%), agreed were 14(35%), somewhat agreed were 12(30%), disagreed were 7(17.5%) while strongly disagreed were only 3(7.5%).

Doctors who strongly disagreed as they get threats from patient’s attendants were 8(20%), disagreed doctors were 4(10%), somewhat agreed were 9(22.5%) and strongly agreed were 4(10%).

Regarding unpleasant environment, strongly disagreed were 15(37.5%), disagreed were 7(17.5%), somewhat agreed were 7(17.5%), agreed were 7(17.5%) and strongly agreed were 4(10%).

Doctors who strongly disagreed regarding their job hinder the family and social commitments as well as person requirement were 2(5%), those who disagreed were 2(5%), somewhat agreed were

17(42.5%), agreed were 9(22.5%) and strongly agreed doctors were 10(25%).

Regarding doctors arguments with their superiors, colleagues and patient’s attendants, strongly disagreed were 8(20%), disagreed were 7(17.5%), somewhat agreed were 14(35%), agreed were 8(20%) and doctors strongly agreed were merely 3(7.5%).

Doctor’s job is boring, strongly disagreed were 8(20%), disagreed were 16(40%), somewhat agreed were 8(20%), agreed were 5(12.5%) and strongly agreed were 3(7.5%).

Doctor’s job is monotonous, strongly disagreed were 5(12.5%), disagreed were 12(30%), somewhat agreed were 12(30%), agreed were 5(12.5%) and strongly agreed were 6(15%).

I have sense of discomfort and un-achievement when result I worked hard on patient and getting undesirable results, strongly disagreed were 5(12.5%), disagreed were 6(15%), somewhat agreed were 12 (30%), agreed were 10(25%) and strongly agreed were 7(17.5%) Table-3.

Table-4 described that ICU doctors stress level, very high stress level was found only in 1(2.5%), high stress level was found in 10(25%), average stress level was found in majority which was 25(62.5%) and low stress level was found in 4(10%).

Table 1: Age of doctors

	Frequency	%age
< 35 years	23	57.5
36-40 years	11	27.5
> 40 years	6	15.0

Fig. 1: Age of doctors

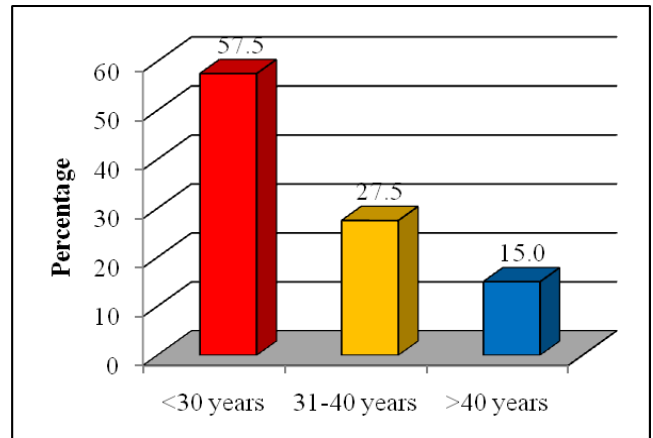


Table 2: Gender of doctors

	Frequency	%age
Male	27	67.5
Female	13	32.5
Total	40	100.0

Table-3: Measurement of stress among doctors

	SD	D	AS	A	SA	Total
My job has very little chances of promotion	9(22.5%)	6(15%)	12(30%)	8(20%)	5(12.5%)	40(100%)
I often feel that my workload is too heavy	1(2.5%)	0	15(37.5%)	17(42.5%)	7(17.5%)	40(100%)
I rarely get appreciation when I worked hard and my work was really good.	3(7.5%)	7(17.5%)	12(30%)	14(35%)	4(10%)	40(100%)
I often receive threats from patient attendant	8(20%)	4(10%)	15(37.5%)	9(22.5%)	4(10%)	40(100%)
My workplace environment is not pleasant	15(37.5%)	7(17.5%)	7(17.5%)	7(17.5%)	4(10%)	40(100%)
My job often interferes with my personal needs like, social obligations and family.	2(5%)	2(5%)	17(42.5%)	9(22.5%)	10(25%)	40(100%)
I tend to have frequent arguments with superiors, coworkers or patient/ attendants	8(20%)	7(17.5%)	14(35.0%)	8(20%)	3(7.5%)	40(100%)
I often feel my job to be boring	8(20%)	16(40%)	8(20%)	5(12.5%)	3(7.5%)	40(100%)
I often feel my job to be monotonous	5(12.5%)	12(30%)	12(30%)	5(12.5%)	6(15%)	40(100%)
I have sense of discomfort and un-achievement when result I worked hard on patient and getting undesirable results.	5(12.5%)	6(15%)	12(30%)	10(25%)	7(17.5%)	40(100%)

SD = Strongly disagree, D = Disagree, AS = Agree somewhat, A = Agree, SA = Strongly agree

Table 4: Doctors stress level

Total score	Frequency	%age
Low stress	4	10.0
Average stress	25	62.5
High stress	10	25.0
Very high stress	1	2.5

Low stress = 1-25, Average stress = 26-50, High stress = 51-75, Very high stress 76-100

DISCUSSION

Stress is a significant problem observed among intensive care unit. To obtain proper results, a group of 40 doctors working in the surgical Intensive Care Unit of Lahore General Hospital, Lahore was included in the study and found majority of doctors were young and active because 85.0 percent were upto aged 40 years and just 15% were aged above 40 years. A similar research carried out in 2012 regarding stress among doctors by Makames and colleagues showed that 48.6 percent doctors were \leq 40 years old and 51.4 percent were $>$ 40 years old¹³.

It is believed that women feel additional stress than men. Study disclosed that most (67.5%) of the doctors were males and 32.5% doctors were females. The results of the study performed in 2011 by Sungay are comparable with our study results who asserted in his study that majority of doctors were males (59.6%) and 40.4% were females¹⁴.

Promotion is a significant factor that helps in improving efficiency of doctors and decrease stress level among them. But study showed very discouraging results that major proportion of ICU doctors elucidated that there are very little opportunities of promotion in their job which can be a leading cause of stress.

For employees, pleasant working environment is essential to get better performance. Excessive load of work disrupts employees' efficiency. It was very

disturbing that majority (97.5%) of the doctors had excessive workload that could be a leading cause of stress. The results of the study undertaken by Makames and associates (2012) are much better than our results who asserted that workload was leading source of stress among 55.9% doctors¹³.

Profession of doctors is considered sacred but they face threats sometimes from the attendants of patients due to severe complications or death which are not in their control. Our results confirm that majority of the doctors had always danger and threats from patient's attendants which could disrupt their performance as well as disrupt their work.

Safe, pleasant and healthy environment at workplace is important for an employee to perform their responsibilities more efficiently. It was very encouraging that more than half (55%) of doctors elucidated that their working environment is comfortable and pleasant. The outcomes of our research demonstrate better situation than the Barros and coworkers (2008) study which showed that 73.7% doctors of ICU had complaint regarding noise and unpleasant environment¹⁵.

Stress can be increased among doctors if their job interferes with their personal or family requirements. It is significant to mention that majority (90%) of doctors stated that their job interrupt their social and family responsibilities or personal requirements, which is a main reason of stress. Røvik and his partners (2007) pointed out in their study that work-home conflicts are associated with numerous harmful outcomes, including work-related stress, psychological strain, burnout, sleep deprivation, physical complaints and depression¹⁶.

Friendly relationships with supervisors, colleagues, subordinates, patients as well as attendants are very important to reduce stress. Study

indicated that more than half (62.5%) of doctors had arguments with their supervisors, colleagues and patients or attendants which enhanced the level of stress among ICU doctors. Another study done by Barros and coworkers (2008) also confirmed that bad relationship with team was major source of stress in 36.4% doctors after that cares with terminal patient (36.1%)¹⁵.

Tedious/boring job is considered major cause of stress, however, it is important to mention that major proportion of doctors working in ICU replied their job is not boring and they feel pleasure all the times while carrying out their duties even when challenges are faced. However, they feel apprehension if patient dies in spite of their big efforts and such types of incidences are generally take place in ICUs

Having sense of non-accomplishment in spite of hardworking is much dangerous for a person and believed a leading cause of stress. It was found during study that large number of doctors working in ICU had sense of non-accomplishment when treatment outcome is not good despite working on the patient's management and treatment.

Little stress at workplace is a natural and normal phenomena, while extreme stress at workplace decreases the organization productivity as well as the performance of the employees. Our results showed that 2.5% ICU duty doctors had very high stress rate while overall an average stress rate was 62.5%, moreover low stress rate was 10% and high stress rate is 25%. In current scenario our results are more realistic as compare to Khuwaja et al (2004) demonstrated 48% doctors had stress of very high level¹⁷. Another research conducted by Govender and associates (2012) indicated that 27% doctors had high stress¹⁸.

CONCLUSION

Most of the doctors were dissatisfied with their promotion chance. Mainstream had dissatisfaction owing to workload. Few doctors were satisfied with their work because their hard work and performance was admired at some level. Almost all doctors felt unsecured at their work place due to attitude of the patient's attendants. Work place environment was upto the mark and satisfactory. Most of the ICU doctors felt that sometimes stress was due to their social and family obligations and personal requirements. Majority of the doctors faced the harsh arguments from their superiors, senior colleagues as well as from attendants. Working hard on patients and getting undesirable results was also an important cause. All hospitals should organize health educational programs for doctors to decrease the stress level and to enhance their spirits towards better work performance.

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