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PERCEPTION OF WORK-RELATED STRESS AND DEGREE OF JOB SATISFACTION AMONG POST GRADUATE MEDICAL AND SURGICAL TRAINEES.

Community Medicine

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ABSTRACT

It is well-known that medical professionals have a higher level of work-related stress as compared to other professions. Research has shown that increased rate of psychological and physical morbidity is common among health professionals. This study is conducted to see the perception of work-related stress and to measure the degree of job satisfaction among post graduate medical and surgical trainees. A web-based survey containing 60 item questionnaires was used to collect data from post graduate trainees in various medical and surgical specialities. Perceived stress was measured using 10 item Perceived Stress Scale (PSS). Job satisfaction was measured using a 20-item short form of Minnesota Satisfaction Questionnaire (MSQ). Out of 560 surveys received, 469 surveys were included in the final study. Young trainees reported the highest level of job satisfaction for work place (p- value <0.001) ,timings (p-value <0.001) ,wages(p-value <0.02) and vacations(p-value <0.01) Reasons for not being satisfied at work were increased number of patients reported by 44.4% (n=206 ,p-value <0.001)) and increased working hours was reported by 38.9% (n= 178, p-value =0.04). Low salary was reported by 16.7% (n=75, p-value= 0.2), conflict with colleagues and administrative problems were reported by 10 % (n=46, p-value= 0.04) and 11% (n=51 p-value= 0.054) of participants respectively. 22% (n=103 p-value<0.01) respondents were satisfied with their jobs and working environment and did not report any stress.

Moderate stress was perceived by 64% (n=300, p-value < 0.001) while low and high stress was perceived by 27% (n=126 ,p-value =0.13) and 9% (n= 42 ,p-value =0.2) of participants respectively.

KEYWORDS

Medical and Surgical trainees, Job Stress, perceived stress, job satisfaction, Perceived Stress Scale, Minnesota Satisfaction Questionnaire (MSQ)

INTRODUCTION:

It is well-known that medical professionals have a higher level of work-related stress as compared to other professions. Research has shown that increased rate of psychological and physical morbidity is common among health professionals. Stress is reported to be at a higher level in medical profession irrespective of their working environment [(1)].

It has been reported in literature that stress is related to working hours, continuous exposure to risk, sleep deprivation, lack of routine, irregular meal timings, administrative pressures and threats of medicolegal issues [(2)]. The medical and surgical trainees are the most affected as they are the back bone of health care system all over the world. Their wellbeing and physical and mental health can have serious consequences affecting their working and families at the same time [(3)].

There is also lack of resources, shortage of staff and lack of peer and senior support which puts the trainees at risk of work-related stress. Trainees have to deal with death and dying patients which puts them at fore front of emotional and physical sufferings. The expectations from patients, administration and their families are very high which makes it difficult for them to keep work life balance [(4)].

They also have less time to take care of their health. Sedentary life style and lack of free time to exercise also exposes them to many medical health problems.

Physical and mental health issues are associated with burn out and affect the doctor patient relationship and their interaction with their families [(5)].

Increased perceived stress may lead to minor and major problems, tiredness, mood swings, anxiety which may lead to errors in medical practice.

There is a constant feeling of lack of self-accomplishment and inability to properly utilise their potential at work. Al these issues affect the productivity of medical professionals putting patient safety at risk [(6)].

This study is conducted to see the perception of work-related stress and to measure the degree of job satisfaction among medical and surgical trainees. It is important to identify the degree of stress that can affect work life balance and expose trainees to various mental health issues. Measures should be taken to improve productivity and reduce stress.

OBJECTIVES:

1. To determine the degree of perceived stress among medical and surgical trainees.
2. To determine the level of job satisfaction among medical and surgical trainees

Definitions

Physical symptoms: Symptoms affection the functioning of any human organ system

Psychological symptoms: Symptoms causing changes in human behaviours

MATERIALS AND METHODS

The study design was cross sectional web-based survey. Survey was sent through e mails to post graduate trainees of various specialities. Questionnaire contained questions from Perceived Stress Scale (PSS)

to measure the degree of perceived stress [7]. The level of job satisfaction was measured using the short form of Minnesota Satisfaction Questionnaire (MSQ) [8]. The study was carried out in October 2018 after approval of institutional Review Board (IRB) of a private hospital in Riyadh. Snow ball sampling technique was used. Data analysis was done using SPSS 21 software. Qualitative and quantitative data was analysed using frequency distribution, ANOVA and chi-square tests were applied. P value < 0.05 was taken as significant.

Inclusion Criteria:
Survey was sent to medical and surgical trainees working in various specialities through e mails.

Exclusion Criteria:
Surveys with in complete information and professionals having chronic medical problems were excluded from the data analysis.

RESULTS

Total 560 surveys were received. Out of these 469 were included in the final data analysis. Remaining surveys were not included because of incomplete information 7.4% (n= 34) and chronic illnesses 12.1% (n=57) mentioned by the trainees. Males were 45.8% (n= 215) and females were 54% (n=254, p value = 0.25).

The analysis of demographics revealed that mean age was 34.5 years. Majority of trainees were from Family medicine (n=217, 46%), Internal medicine (n=108, 23.1%), Gynaecology (n=27, 5.9%), Paediatrics (n=98, 21%), Surgery (n=9, 1.9%), dentistry (n= 7, 1.4%) and radiology (n=3, 0.6%).

Work place analysis showed that Majority of participants were working in government hospitals (n=347, 74%) while private medical colleges trainees were 22% (n=122). Average working hours were 52 hours a week. Gynaecology trainees were having the maximum working hours of 70 hours a week and family medicine having the least working hours of 40 hours a week. 73 % were getting one day off per week(n=342), 12%, (n=56) were getting two and remaining 14% (n=71) getting more than 3 days off in a week.

Family demographics showed that 47 % (n=220) had 2 kids, 23 % (n= 107) having 3 and 22 % (n=103) of participants had 3 kids. 58.85 % of trainees (n=272) had their spouse working and out of those working 86% (n= 403) belonged to medical profession.77.8% (n=361) were having a nuclear family system while 55.6 % (n=262) having extended family help available and 33 %(n=154) had maids or nannies available at home to take care of kids and house hold chores.

Analysis of Minnesota satisfaction questionnaire revealed that the level of job satisfaction was not significantly different among trainees of different specialities (p-value=0.51). The Family medicine trainees were satisfied the most with work place showing a significant difference from trainees of another specialities (p-value <0.001). Dissatisfaction with low wages was also similar among the participants (p-value=0.23). Post graduate opportunities were reported maximum by the internal medicine trainees (p value< 0.0003). No significant difference was reported for working conditions (p-value= 0.3) and the internal and external satisfaction factors (p-value= 0.15).

Young trainees reported the highest level of job satisfaction for work place (p-value <0.002), timings (p-value <0.0011), wages (p-value <0.01) and vacations (p-value <0.02). Reasons for not being satisfied at work were increased number of patients reported by 44.4% (n=206, p-value <0.001)) and increased working hours was reported by 38.9% (n= 178, p-value =0.04). Low salary was reported by 16.7% (n=75, p-value =0.2) conflict with colleagues and administrative problems were reported by 10 % (n=46 p-value =0.4) and 11% (n=51 p-value =0.54) of participants respectively. 22% (n=103 p-value =0.1) respondents were satisfied with their jobs and working environment and did not report any stress (Fig:1)

Thoughts of working abroad were reported by 47.1%, (n=220 p-value = 0.12) desire to change work place and moving to another city was reported by 29.4% (n=136 p-value =0.2) and 11.5% (n=51 p-value=0.2) respectively. Desire to change the nature of job was reported by 11 % (n=49 p-value =0.2) and desire to leave the medical profession was reported by 6 % (n=28 p-value =0.2). None of medical professionals reported suicidal thoughts (Fig:2).

Analysis of the perceived stress scale showed that low stress score between 0-13 was perceived by 27% (n=126, p=value= 0.17), 64% had a moderate stress score between 14-26 (n=300, p-value < 0-001). Only 9% (n=42, p-value=0.14) trainees had score ranging between 27-40 demonstrating high stress level (Fig:3).

55.65 % (n=257 p-value<0.2) reported the job to be unpleasant and 33 % (n=154, p-value =0.03) reported the job to be negatively affecting their physical and mental wellbeing. 18 % (n=84 p-value<0.2) reported difficulty to express their work-related stress to the management or supervisors. 28 % (n=131, p-value=0.01) reported that family life is affected due to the nature of job. 24% (n=112, p-value=0.24) reported that they never received any recognition for their performance and hard work.

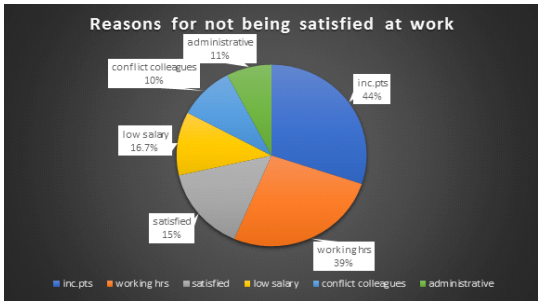

FIG 1: REASONS FOR NOT BEING SATISFIED AT WORK

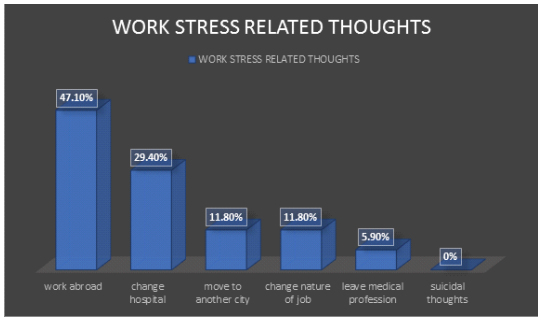

FIG 2: STRESS RELATED THOUGHTS

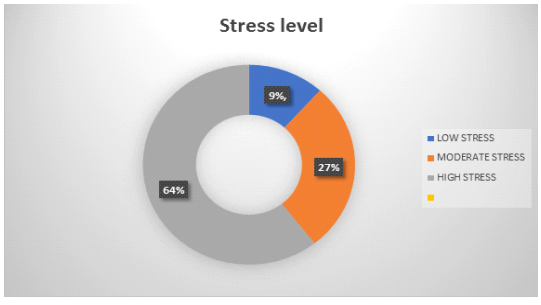

Fig: 3 PERCEIVED STRESS SCORE

DISCUSSION

Post graduate trainees are continuously exposed to a stressful environment due the nature of their job. It is physically as well as mentally challenging and demanding job. Increased expectations from the government, patients and administration, continuous long working hours, lack of appreciation and reward, disturbs the work life balance with a continuous feeling of lack of achievement among trainees. The environment and nature of job leads to many physical and mental health issues.

Our study is important as thee is limited research on the post graduate trainees in various specialities. The data is lacking on the stress level and job satisfaction of interns and post graduate trainees. We conducted a study to see the perceived stress and the level of job satisfaction among the trainees. It shows that male to female ratio of respondents was 1:1. Majority of trainees were from family medicine, internal medicine, gynaecology, paediatrics and other specialities.

Average working hours were 52 hours a week. Gynaecologists were having the maximum working hours of 70 hours a week and family medicine having the least working hours of 40 hours a week. The

average working hours were similar to a a study where the average working hours were 48 hours per week[9].

Reasons for not being satisfied at work were increased number of patients, increased working hours, low salary, conflict with colleagues and administrative problems. 22 percent of respondents were satisfied with their jobs and working environment and did not report any stress. Which contrasts with a study done on Dutch medical professionals which reports 81% job satisfaction and 55% acknowledged high stress level [10].

Analysis of the perceived stress scale showed that 27 % had low stress ,64% had moderate and 9% participants had high perceived stress level. There is a similar study that was conducted in Saudi Arabia where the level of stress was measured among trainees. The study reports that mild stress was found in 19%, moderate in 18.8% while severe stress was found in 34.9% of the participants [11].

55.65 % reported the job to be unpleasant and 33 % reported the job to be negatively affecting their physical and mental wellbeing. 18 % reported difficulty to express their work-related stress to the management or supervisors. 28 % reported that family life is affected due to the nature of their jobs. These findings are like an Italian study in which emotional stress was reported by 27.5% of participants. Depersonalization and low personal accomplishment were reported by 25.6% and 12.8 5 respectively in the same study [12].

It has been found that mild stress may not have significant effects on the performance, but major stress can affect the performance and the physical and mental wellbeing of trainees. Stress can affect their behaviour and the learning capabilities, leading to poor communication, affecting the relationships with colleagues and the decision making that is vital for the trainees.

It is therefore important to evaluate the stress level of trainees during their clinical residency and post graduate training. The trainees who need help and support should be provided consultation on time.

There is a need to make changes to the working environment and working hours to improve job satisfaction and reduce stress level.

There are few limitations of our study. This study is a web based cross sectional survey and the level of stress is perceived by individuals which cannot rule out the potential of reporting biases. There can be possible misinterpretation of the questionnaire.

It is however alarming to see the high level of stress and dissatisfaction with the job among trainees. Further longitudinal research is required to see the various causes of stress. It is therefore recommended that stress level should be measured by experts. There should be further research on trainee's stress, work life balance and factors that can help them cope with it.

CONCLUSIONS:

It is a fact that medical profession exposes the staff to various health risks and the level of stress is more as compared to other professions, but it is underscored and under reported. The work life balance is difficult to maintain in such situations. Medical professionals feel exhausted and burn out leads to lack of job satisfaction and physical and mental health problems. The results of this study may be helpful in in making arrangements for the post graduate trainees to provide psychosocial support during their training and afterwards.t may be helpful in encouraging the administrative and government authorities to work closely with the faculty in devising the comprehensive support system for the interns and post graduate trainees and residents.

It is therefore recommended that health care professionals should be supported to increase their productivity and maintain their physical and psychological wellbeing.

Conflict of interest

The authors declare that they have no conflict of interest

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