

# Analyzing Stress amongst Treating Physicians of Sialkot- A Cross Sectional Survey

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## ABSTRACT

**Aim:** Analysis of the causes and effects of stress in treating physicians of District ,Sialkot.

**Study Design:** Questionnaire based Prospective study.

**Place & duration of study:** Department of General Surgery, Khawaja Muhammad Safdar Medical College, Sialkot from January 2017

**Methods:** A questionnaire was devised to know about the causative factors of stress and its effects ; in working physician. Each question was given marks as 1, 2 and 3 depending upon the intensity of the factor. The questionnaire was presented to physicians working in different settings patients' care settings in public or government hospitals, private hospitals and clinics, which served as the sources for the study participants A period of 3 months was allowed to complete the questionnaire. All the questions needed to be answered. A total score of 75 was allocated. The stress was graded as mild if the score is less than 35, moderate if the score is 36-50 and it was severe if the score was more than 50.

**Results:** Total participants were 658 from which male physicians were 453(56.62%) and female physicians were 207(25.87%), Group I-Non interventional physicians/Medical and allied departments were 499(62.37%) and Group II-Interventional Physicians/Medical and allied departments were 198(24.75%). In analysis of stress factor & quality of life ; patient behavior in group I 149(30%) and in group II 17(9%), Attendants behavior was 324(65%) in group I & 138(70%) in group II, Lack of diagnostic facilities were 144(29%) in group I & 63(32%) in group II, Lack of therapeutic facilities in group I were 74(15%) & in group II were 37(19%).

**Conclusion:** Responsibility of treating patients has always been stressful. Interventional procedures having serious complications and mortality especially unexpected deaths is major cause of stress in surgeons; while this factor is mild in physicians. However the quality of life being enjoyed by surgeons is a factor that leads to not to change the job.

**Keywords:** Stress, Burnout, Surgeons, Psychiatric Morbidity, Emotional Exhaustion

## INTRODUCTION

Defining stress means stress factors i.e., stimulators and strain i.e., how an individual responds to these factors. A lot many definitions of stress have been formulated in these days. Varied definitions are because of focus on different situations which are encountered by individuals and what was the reaction<sup>1</sup>.

Occupational stress is one of the major health hazards of the modern work place. it accounts for much of the physical illness, substance abuse and family problems encountered by millions of workers. Occupational stress includes all the physiological, behavioral, emotional and cognitive responses that a worker experiences in his job. Occupational stress is commonly encountered problem in the work place setting when workers are tested over with the work that does not match their knowledge and skills. This results in dissatisfaction with work and an important cause of building anxiety amongst the workers<sup>1,2</sup>.

Burnout is a pathological syndrome in which prolonged occupational stress lead to emotional and physical depletion and ultimately the development of maladaptive behaviors (e.g., depersonalization, hostility, detachment, cynicism)<sup>3</sup>. As far as occupational stress and

medical profession is concerned, the incidence of anxiety has built up enormously over the past decades in the medical professionals. Surgeons play a central role in treatment of many medical emergencies like cancers, trauma and acute care treatments<sup>3,4</sup>.

Surgery is a profession which demands high level of commitment, precise decision making in very limited time and complete devotion to the job. It is also a field which includes stressful and extended duty hours and brings new physical and emotional challenges for the surgeons every day. All of these long duty hours, high pressure environment in which surgeries are performed ,continual sleep deprivation and every day facing of life and death situations leads to physical and emotional burn out<sup>5</sup>.

This over burdening routine not only affects a surgeon's technical abilities but can also lead to a compromised state which hinders the execution of excellence of his skills<sup>6</sup>.

In the studies conducted in the past decades there has been enormous amount of data showing increased levels of EE along with psychiatric morbidity amongst surgeons. Past studies have shown that there has been an exponential increase in burn out, substance misuse and decrease in job satisfaction<sup>7,8</sup>.

Worldwide surgeons were more prone to substance abuse, trauma, stress, burnout and muscular pain. There are studies which project that comparing to other fields; surgeons are more effective to professional stress<sup>9</sup>.

Multiple factors have been linked to increase in stress in the surgeons out of which constant back breaking duty hours and duty days per week are most significant<sup>10</sup>.

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Despite the prominent role played by surgeons in Fiji's health-care system, there are no studies that exclusively examine occupational stress and burnout levels in surgeons in Fiji or the South Pacific. We postulate that there are high levels of burnout among surgeons in a developing country like Fiji, which was tested using a cross-sectional survey.

## MATERIALS AND METHODS

A questionnaire was devised to know about the causative factors of stress and its effects; in working physician. Each question was given marks as 1, 2 and 3 depending upon the intensity of the factor. The questionnaire was presented to physicians working in different settings patients' care settings in public or government hospitals, private hospitals and clinics, which served as the sources for the study participants. A period of 3 months was allowed to complete the questionnaire. All the questions needed to be answered. A total score of 75 was allocated. The stress was graded as mild if the score is less than 35, moderate if the score is 36-50 and it was severe if the score was more than 50. The physicians not completing the questionnaire or leaving any question unanswered were excluded from the study. Data was entered and analysis done by SPSS

## RESULTS

General information is shown in Table I

Table: General statistics

Total questionnaires distributed	800	
Questionnaires collected	697	
Incomplete Questionnaires	39	
Total participants	658	
Male physicians	453	56.62%
Female physicians	207	25.87%
Group I- Non interventional Physicians/ Medical and allied departments	499	62.37%
Group II- Interventional Physicians /Surgical and allied departments	198	24.75%

Table II:

	Group I 499(100%)	Group II 198(100%)
<b>Stress factors</b>		
Patients behavior	149(30%)	17(9%)
Attendants behavior	324(65%)	138(70%)
Lack of diagnostic facilities	144(29%)	63(32%)
Lack of therapeutic facilities	74(15%)	37(19%)
Indefinite diagnosis	84(17%)	7(4%)
Complications	59(12%)	33(17%)
Repeated admissions	74(15%)	89(45%)
Death of patient	319(64%)	158(80%)
Unexpected death of patient	474(95%)	198(100%)
Low paying patients	134(27%)	77(39%)
Receiving Calls at odd timings	169(34%)	17(9%)
Lack of appreciation	104(21%)	5(3%)
Treat of litigation	449(90%)	198(100%)
<b>Quality of life</b>		
Control over planned activities	249(50%)	69(35%)
Short time for family	99(20%)	9(5%)
Short time for Personal care	24(5%)	29(15%)
Short time for Break/outing/ recreation	74(15%)	19(10%)
Vacation	149(30%)	29(15%)

Table III- showing stress and its effects

	Group I 499(100%)	Group II 198(100%)
Are you stressed?	394(79%)	176(89%)
Job Satisfaction?	329(66%)	168(85%)
Enjoying Quality of life?	374(75%)	178(90%)
Want to change Job?	74(15%)	33(17%)

Table II- Analysis causes of stress and quality of life tools, these factors as negative and leading to stress has been accepted by following no of doctors; while quality of life tools are positive factors contributing to job satisfaction.

## DISCUSSION

In our study, stress factor of patients behavior in group I was 149(30%) and in group II was 17(9%), while in study by Kaur et al<sup>11</sup>, it was 32%. Presentation of attendants behavior in study in group I was 324(65%) and group II was 138(70%), while in study by Kinzl et al<sup>12</sup>, was 68%.

Lack of diagnostic facilities in group I was 144(29%) and in group II was 63(32%) while in study by Krishnan et al<sup>13</sup> was 30%. Data presented Lack of therapeutic facilities in group I was 74(15%) and in group II was 37(19%), while in Wilson's et al<sup>14</sup> study was 20%.

**Fiazqamar study** : Job satisfaction and performance abasyn journal of social sciences et al<sup>15</sup> showed Indefinite diagnosis (15%), while in our study Indefinite diagnosis ; group I showed 84(17%) and group II showed 7(4%).

Presented data regarding Complications in group I was 59(12%) and group II was 33(17%), while Piotrkowski's study et al<sup>16</sup> showed complications (15%). Data regarding Repeated admissions in group I; 74(15%) and in group II ; 89(45%), while study of Shetty et al<sup>17</sup> was (35%).

**Un expected death of patient:** Group I showed 474(95%) and Group II showed 198(100%), while study of Marks et al<sup>17</sup> showed (96%). Stress factor of Low paying patients in group I was 134(27%) and in group II was 77(39%), as compared to Spritzer's<sup>19</sup> study was (30%). In Group I Receiving calls at odd timing was 169(34%) and In Group II 17(9%), while in Arimalsu et al<sup>20</sup> was (29%). Group I showed 104(21%) of Lack of appreciation but Group II showed 5(3%), while study of Cropanzano et al<sup>21</sup> showed (14%).

Voltmer E et al<sup>22</sup> study showed treat of litigation (94%), while in group I 449(90%) and group II 198(100%). In our study factor; Quality of life showing Control over planned activities in group I was 249(50%) & group II 69(35%), while Lemaire et al<sup>23</sup> showed (40%).

Short time for family in group I was 99(20%) & in group II was 9(5%), while according to study of Ahmed Z et al<sup>24</sup> was (16%). Golubic R et al<sup>25</sup> showed Short time for personal care was (10%) while in study regarding group I was 24(5%) & group II was 29(15%). Study presented data about Short time for break/outing/recreation in group I was 74(15%) & in group II was 19(10%), while data according to study of Swanson V et al<sup>26</sup> was (9%). Data about Vacation in group I: 149(30%) and in group II: 29(15%), while in Vasile D et al<sup>27</sup> was (27%). Study showing stress and its effects; in group I factor are you stressed? was 394(79%) and in group II 176(89%), while in study by Allibone et al<sup>28</sup> was (85%).

Job satisfaction? In group I; 329(66%) & in group II 168(85%), while in according to Swanson V et al<sup>26</sup>; (72%). Vasile D et al<sup>27</sup> showed Enjoying Quality of life? (89%), while in our study group I showed 374(75%) & group II showed 178(90%). Presented data regarding want to change job? In group I was 74(15%) & in group II was 33(17%), while in study of Golubic R et al<sup>25</sup> was (16%).

## CONCLUSION

Responsibility of treating patients has always been stressful. Interventional procedures having serious complications and mortality especially unexpected deaths is major cause of stress in surgeons; while this factor is mild in physicians. However the quality of life being enjoyed by surgeons is a factor that leads to not to change the job.

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