POST-TRAUMATIC STRESS DISORDER AMONGST SURGICAL RESIDENTS OF LAHORE

ABSTRACT:

Objectives: To regulate the occurrence of PTSD between surgical trainees also correlation of PTSD with demographic profile and well-being in Lahore and Islamabad.

Methods: A questionnaire-based study was conducted in Surgery and allied departments of Mayo Hospital, Services Hospital, Ganga Ram Hospital, Lahore General Hospital, Gulab Devi Hospital, Sheikh Zaid Hospital, Punjab Institute of Cardiology and Jinnah Hospital, Lahore, on 207 surgical trainees. It was a cross sectional descriptive study and stratified random sampling was used to collect data. Our current research was organized from April 2018 to April 2020. Non-surgical and non-Pakistan based surgeons were excluded from the study. Questionnaires were designed with PTSD Checklist for DSM-5 and WHO well-being index. SPSS v25 was used for data analysis.

Results: For 164 returned surveys average age remained 29.2 (SD 2.9) years; 100/164 respondents remained male. Average years in training remained 2.66 (SD 1.4). Average PCL-5 score remained 14. 31/164 respondents had cut off score ≥ 33. 38/164 respondents met the diagnostic criteria for PTSD. Females were more likely to have PTSD p=0.016(<0.05). Correlation between PCL-5 score and WHO well-being index was found to be significant at the 0.000 level, showing a -0.332 Pearson correlation value.

Conclusion: PTSD will be much more prevalent in surgical interns than in the general public.
Recognizing and managing this threat is critical for trainee psychological health and quality care.

Keywords: PTSD, Surgical Trainees, Well-being, PCL 5

INTRODUCTION:

The psychological state of the doctors independently is a danger that is frequently undervalued and neglected in many clinical environments. Whilst also treating patients in intense pain and existence injuries, doctors could feel afraid and acute stress in either themselves or their health care workers, as well as shame involved with their culpability for some of these treatment outcomes [1]. Trauma- and anxiety abnormalities are those in which being exposed to a stressful or traumatic event is expressly listed as a diagnostic criterion.

Separation anxiety disorder, disinhibited social Engagements disease, post-traumatic traumatic stress, Posttraumatic stress, and adjustment disorders are examples of these [2]. PTSD anxiety illness is the mental health condition that certain individuals form afterward having witnessed the potentially life-threatening occasion, just like combat, the natural tragedy, the car accident, or sexual attack. Healthcare

professionals have been referred to as the "second victims" of adverse events in the industry. In a study performed in Lahore, Pakistan, all participants admitted that surgical complications had an emotional impact on them and that such consequences could last a long time [3]. Remorse, nervousness, and anger were the most normal responses, followed by a crisis of confidence, concerns about one's reputation, and concerns the about doctor. Some doctors revealed persistent meditation and trouble concentrating. According to a survey of American trauma surgeons, 17% met the criteria for PTSD5, which would be greater than normal level in overall populace (6.7 percent lifetime occurrence). According to psychological testing, 18% of surgical inhabitants in a survey performed in Lahore, Pakistan had pathological signs dependable through ASR or PTSD. The above mental stressors can get an effect on the surgeon's health as well as his or her effectiveness [4]. A recent study of 9 of 7800 physicians discovered that those who had experienced a surgical error in the previous three months had a poorer quality of life and a higher likelihood of illnesses of emotional exhaustion. According to research, those very inhabitants largely made more clinical mistakes than their non-depressed counterparts. To determine the frequency of PTSD among surgical trainees and correlation of PTSD with demographic profile and well-being in Lahore and Islamabad [5].

METHODOLOGY:

Surgical units of Mayo Hospital, Services Hospital, Ganga Ram Hospital, Lahore General Hospital, Gulab Devi Hospital, Sheikh Zaid Hospital, Punjab Organization of Cardiology and Jinnah Hospital, Lahore (including departments of Urology, Neurosurgery, ENT, Plastic surgery, Oral and maxillofacial, Cardiac surgery, Orthopedics).

Study population: Pakistan based surgical Residents in the above departments of Allied hospitals.

Sample size

Calculated by means of WHO sample size calculator having subsequent:

CL: 95

Expected populace: 0.16

Absolute precision: 0.05

Sample size: 207

Study duration: 24 months

Inclusion criteria: All surgical Residents in the three allied hospitals of Lahore. All Pakistan based surgical Residents are eligible for inclusion. No limitation on who can finish the review, suitability remained found post hoc by means of the demographic areas of questionnaire.

Exclusion criteria: non-medical, non-Pakistan based or non-training grade surgeons remained excluded.

Data collection technique: Questionnaires were administered to the residents and were interviewed individually as well.

Data collection tool: Questionnaires

Plan for data entry and analysis:

SPSS version 25 for data entry and analysis

Descriptive analysis was done using independent sampling T-test, ANOVA test and Chi square test.

Sampling was done according to following variables: Gender, department, year of training, Mean score of PTSD, answers connecting to contact to stressful conditions associated among sub-sets.

Questionnaire answers about team answers to demanding proceedings.

Ethical considerations: The Ethical Review Committee of the relevant hospitals accepted the study plan. In addition, each patient provided informed consent.

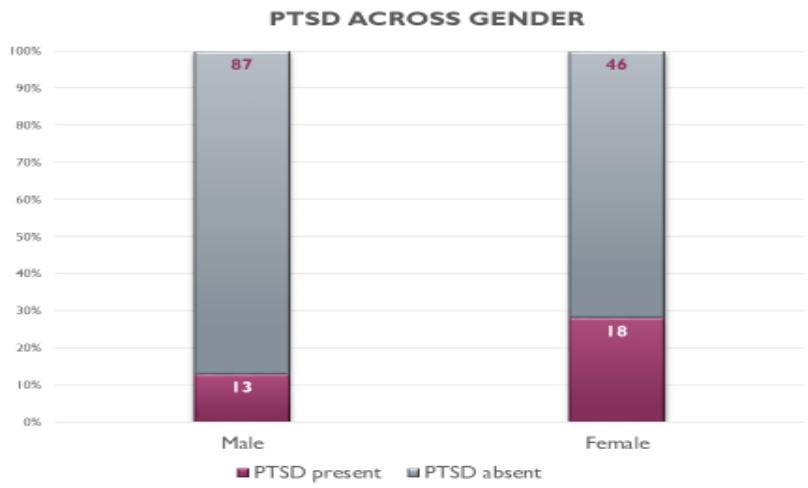
RESULTS:

For 164 give back surveys average age was 29.2 (SD 2.9) years; 100/164 respondents were male. Average years in training remained 2.66 (SD 1.4). Median PCL-5 score remained 14. 31/164 respondents had cut off score ≥ 33. 38/164 respondents met the diagnostic criteria for PTSD. Females were more likely to have PTSD p=0.016(<0.05). Correlation between PCL-5 score and WHO well-being index was found to be significant at the 0.000 level, showing a -0.332 Pearson correlation value.

Gender Distribution of PTSD:

Females were more likely to have PTSD p=0.016(<0.05)

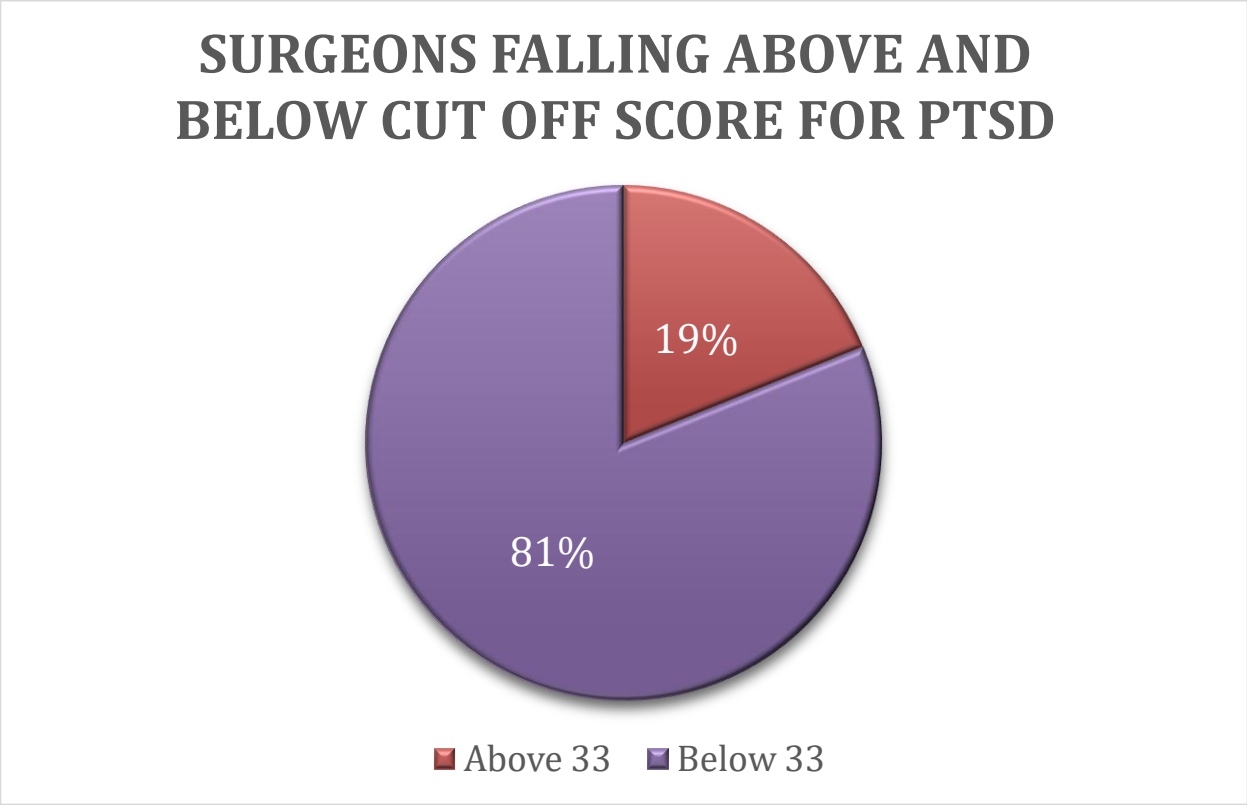
Graph 1: PTSD ACROSS GEBDER



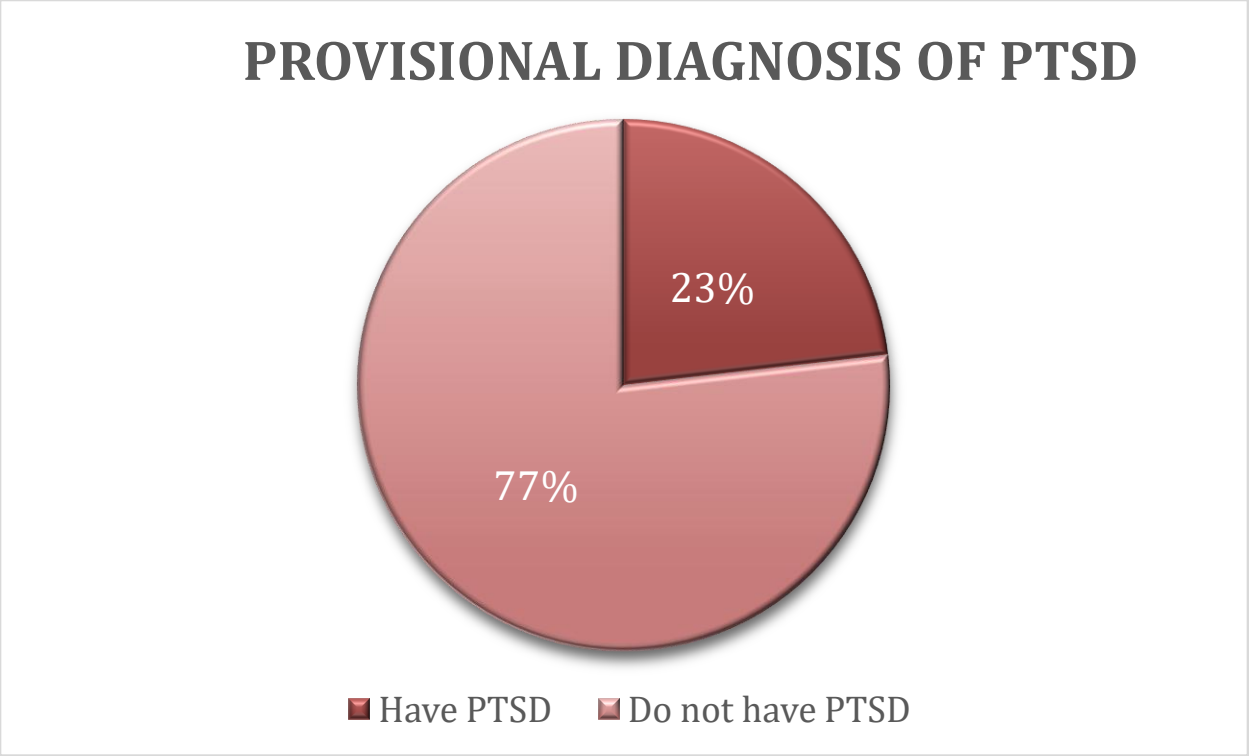
13% of the males whereas 26% of the females suffered from PTSD, which is almost, double the amount of PTSD in males. Our study reports higher rates among female Surgical Residents, which is supported

by studies. In addition, possible explanation for this is that women articulate depression symptoms more even the minor ones, they often feel helpless in such situations and blame themselves for all the wrongs they are going through. Hormonal changes also play very vital part in development of depression among females. Estrogen depletion, known as menopausal symptoms, reports high rates of depression and vasomotor instability.

Graph 2: SURGEONS FALLING ABOVE AND BELOW CUT OFF SCORE PTSD



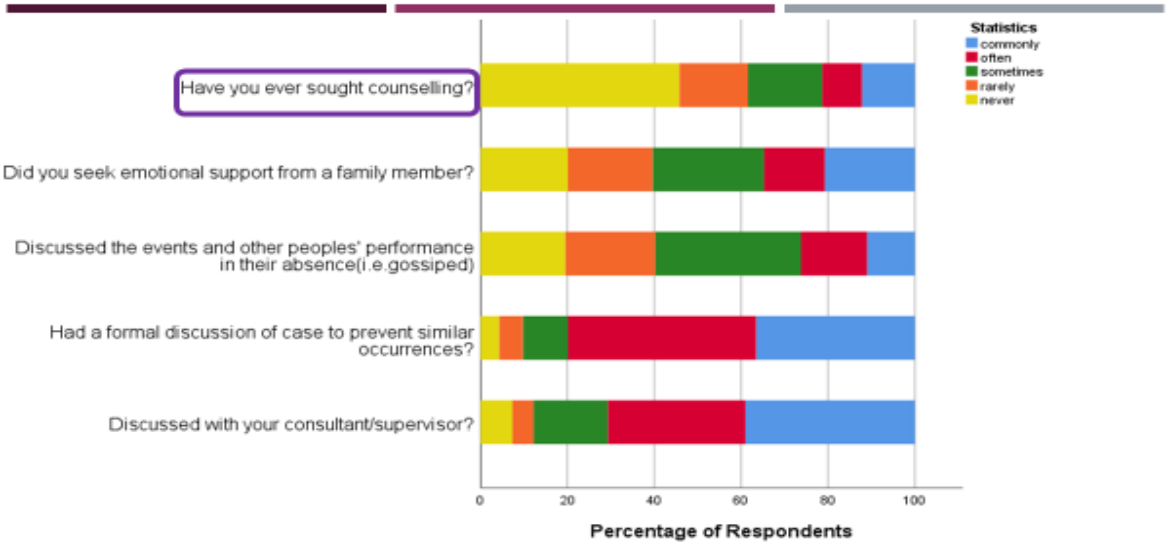
Graph 3: PROVISIONAL DIAGNOSIS OF PTSD



Those who witnessed severe acute traumatic injury were more likely to have PTSD p= 0.005

Prevalence of PTSD among those who witnessed severe acute traumatic injury was 77.0 % and those who witnessed severe acute traumatic injury but did not experience PTSC was 23.0 %. Prevalence of PTSD was found to be more in public sector Surgical Residents and more in younger age than in elder Residents**.**

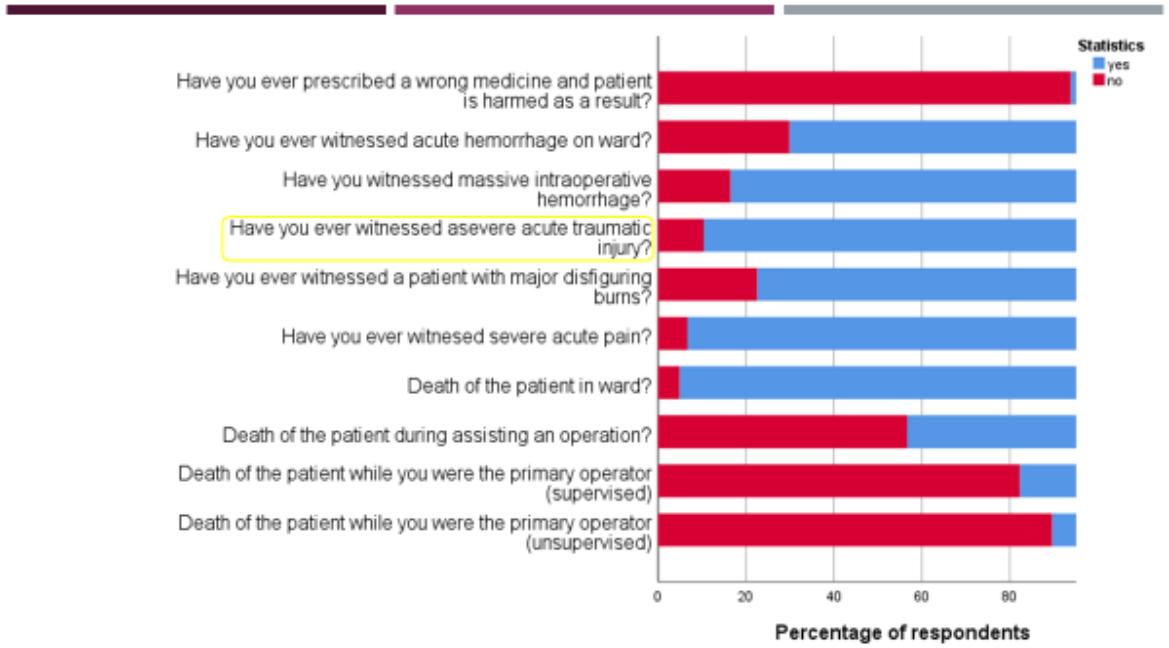
Counselling Responders:



Graph 4: Respondent statistics

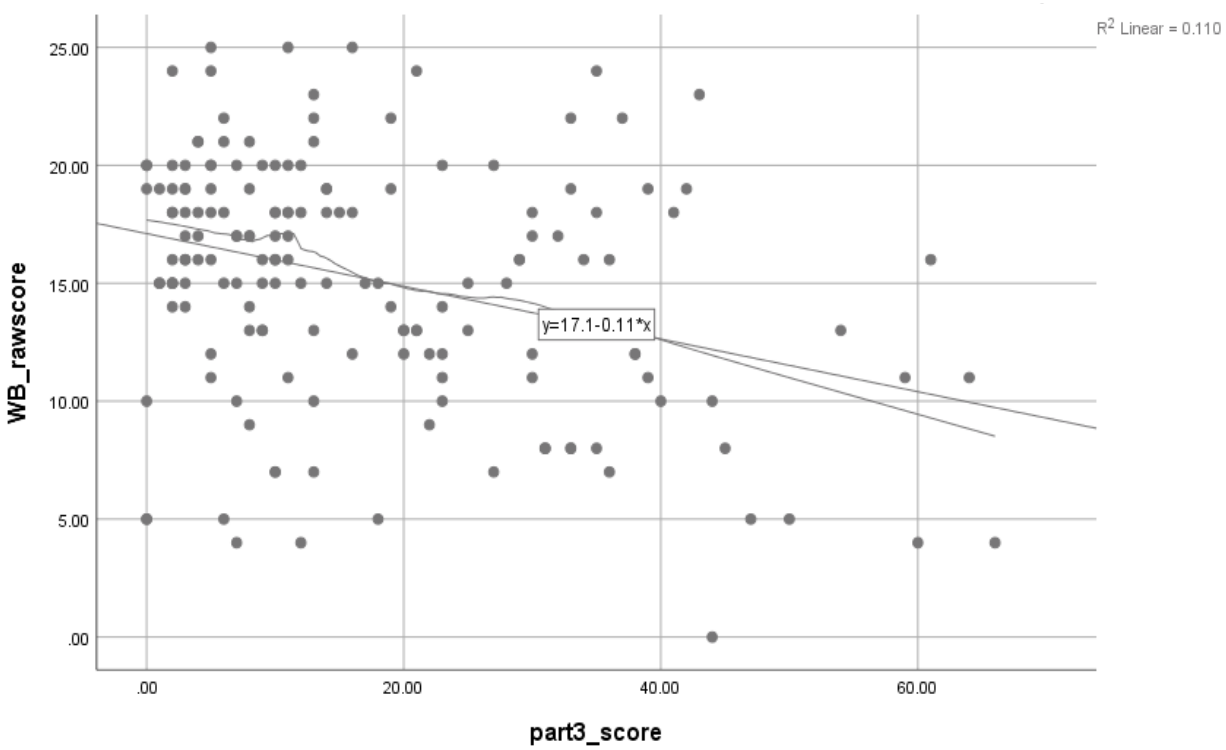
Data shows us that almost 65% of the surgeons who had PTSD had either rarely, never or sometimes received counselling.

Graph 5:Witness of Harmful Event Responders:



Prevalence of PTSD is more among those who prescribed wrong medicine, witnessed severe acute traumatic injury, death of patient during assisting or primarily operating a patient and witnessed massive acute hemorrhage in the ward than those who witnessed severe acute pain of patients or death of a critical patient in the ward.

Graph 6: Bi plot



In this study, Correlation between PCL-5 score and WHO well-being index is found to be significant at the 0.000 level, showing a -0.332 Pearson correlation value.

DISCUSSION:

The main insight of this series of questions research of surgical apprentices in Pakistan is that 25% of topics have pathological signs and symptoms associated with PTSD, while 21% of survey participants score higher than the cut off score for PTSD, thus according psychological screening. This is the first study to look into this occurrence in surgical apprentices in Pakistan [6]. The results of the study are constant to those of a Pakistan-based study trusted source found a comparable prevalence rate in trauma surgeons, as well as that others with PCL scores greater than 34 were far more probable to have reiterated years of training also have observed intense pain, major trauma, in addition severe internal bleeding [7]. The results are also consistent with a survey of American trauma doctors in which 15% of respondents fulfilled the standards for PTSD. According to the latest research, female subjects are at a heightened

hazard [8]. Nevertheless, military service was not linked to a higher or lower risk of PTSD. About 2/3rd of the medical learners in our research were found dead, severe pain, severe traumatic injury, intraoperative hemorrhage, disfiguring burns of their patients and about 1/3rd to intra-operative deaths. The subjects with high PTSD score were more likely to expose to some of these stressful events than others. These events are unfortunate but an unavoidable and anticipated element of a surgeon's career [9]. The research also shows that the subjects having high PTSD score were more likely to have a low wellbeing raw-score and this finding is noted to be statistically significant. It is also seen that more than half of the subjects never sought any professional help about their symptoms but majority had discussed it with their supervisor/consultants. The reason might be the stigma associated with mental health problems. The negative relationship between PTSD score and wellbeing of the surgeon is telltale of the importance of recognizing this risk and taking effective measures to overcome it [10].

CONCLUSION:

The incidence of occult, undiagnosed PTSD between many surgical interns could remain higher than general populace, which remains highly related to the surgeons' negative well-being. Much farther inquiry is required to determine the scale of the issue.

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