

## Assessment of the PTSD among the Patients Exposed in Highly Stressful Situations Conducted in Birendra Hospital, Chhauni, Kathmandu

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### Abstract

Traumatic experiences in life have many serious effects on the integrity of emotions and behavior of the individual. Posttraumatic stress disorder (PTSD) is a living example of such effects. It is the psychological reaction of the traumatic persons', start after one month of the traumatic events, which can seriously limit the person's life and activity. The epidemiology of PTSD ranges from 0.5-80% of person undergone traumatic experience. The major symptoms of PTSD are intrusive re-experience, avoidance and arousal.

A descriptive study was conducted in the Birendra Hospital, Chhauni to assess the Posttraumatic stress disorder (PTSD) among the 100 patients exposed in the highly stressful situations. A non-probability purposive sampling technique was adopted for the study. The data was collected through interview technique using the standardized PTSD screening checklist according to DSM-IV. The findings of the study revealed that among the 100 respondents (including army 85, civil 8 and police 7). The number of PTSD positive cases were 61%. Among the 85 army respondents, 40 of them had mild, 10 had moderate and 1 had severe PTSD. Among the 8 civil respondents 3 had mild and 4 had moderate PTSD and in 7 police respondents, 3 had mild PTSD. Among respondents with PTSD, 70% of them were in acute stage and 30% were in chronic stage. Mean age of occurrence of PTSD was 25-30 years. Among the 55 physically disabled respondents, 34 of them had PTSD.

### Introduction

There is a growing awareness among health care providers that traumatic experiences are wide spread and it is common for people who have been humanized to develop medical and psychological symptoms associated with the experience. Recent studies have shown that childhood abuse is a strong predictor of the lifetime likelihood of developing posttraumatic stress disorder (PTSD). Although many people still relate PTSD with combat trauma, the experience most likely to produce PTSD is rape. (PTSD is associated with an extremely high rate of medical and mental health service use and possibly the highest precipitate cost of any psychological condition. But "There is help and there is hope".

In the present situation of our country, many people are suffering from the Maoist conflict and reaction of the security forces. As a result, a whole spectrum of mental health problem is increasing due to insecurity and threatening psychological environment of the country. Even more are secondarily affected by watching these incidents or being directly or indirectly related to the victims. Yearly during monsoon season many people die due to floods and landslide lost their homes, community and property. Additionally there is almost daily news about motor vehicle accidents with many injured. So that highly stressful events directly affected the mental health of an individual in our country and prevalence of mental illness is increasing. Although many people suffer from the conflict situation, this is limited to finding the rate of PTSD among security forces and civilians admitted in Birendra Hospital, Chhauni after exposure to a traumatic experience.

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## Research Methodology

A study was conducted to assess the posttraumatic stress disorder (PTSD) among patients exposed in the highly stressful situations such as; automobile accident, blast injuries, gun shot injuries, assault catastrophes and physical/psychological torture. The population size of the study were 100 PTSD patients attending out and in patient department of Birendra hospital, Chhauni during the period of 2060/12/15 – 2061/1/5 which included army, police and civil patients. A non-probability purposive sampling technique was adopted for the study. I assessed the appropriate cases based on my personal judgment that met the criteria of PTSD. During the data collection period, the researcher introduced with respondents first, then explained objectives of the study; verbal permission was taken with the individual respondents considering the ethical aspects. The instrument used for this study was a standardized PTSD checklist developed on the basis of DSM- IV PTSD diagnostic criteria and it also consists of demographic information related to respondents. The collected data were classified according to the objectives of the study. Then data were analyzed and interpreted using different tables, graphs and charts appropriately by sample statistical measure.

## Results

The result indicates that among 100 respondents the number of positive PTSD cases were 61%. Most (78%) of the respondents were injured in the hilly areas and only 5% were injured in valley. Majority (55%) of the respondents was injured due to blast injury, 10% were injured from vehicle accidents and 4% were physically assaulted. Most (90%) of the respondents were severely injured. According to the duration of trauma, 43% had one month and only 5% of them were more than 1 year. 28% of the respondents brought to hospital immediately after trauma and 12% of them brought after 24 hours. 72% of the respondents were satisfied from the immediate management of the condition and 5% were not satisfied. 75% of the respondents got support from various support systems during the incident and 25% of them did not. Among the 85 army respondents 40 of them had PTSD, among 8

civil respondents 7 had PTSD and among the 7 police respondents 3 had PTSD. According to the age group, 34 respondents with PTSD were between the ages of 20-25 years. The mean age and standard deviation are 25.95 and 6.31 years respectively.

Among the 100 respondents 55% were Chhetri, followed by 30% others, 9% Newar and 6% Bramin. According to the job/post of the respondents, majority (85%) were army personnel, 8% civil and 7% were police. 65% of the respondents were married and majority (67%) were from middle class of economic status. Majority (41%) respondents' job duration was of 1-5 years, 4% of them more than 20 years and 6% of the respondents were labor/own work.

## Distribution of Respondents according to severity of PTSD

| SN. | Level of PTSD | Mean Score | Frequency | Percentage (n = 100) |
|-----|---------------|------------|-----------|----------------------|
| 1.  | Mild          | 1.5-2.5    | 46        | 46%                  |
| 2.  | Moderate      | 2.5-3.5    | 14        | 14%                  |
| 3.  | Severe        | 3.5-4.5    | 1         | 1%                   |
| 4.  | No PTSD       | 0.5-1.5    | 39        | 39%                  |
| 5.  | Total         |            | 100       | 100%                 |

Table 1 showing Distribution of Respondents according to severity of PTSD

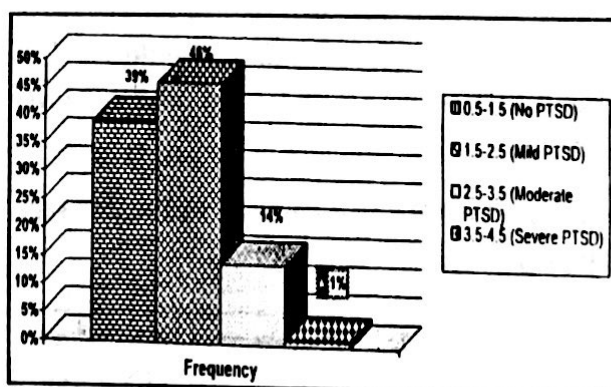


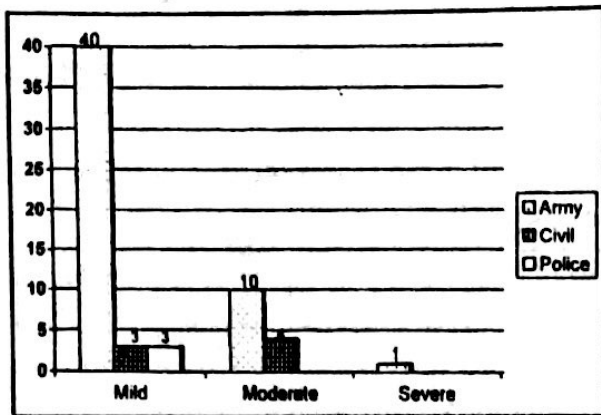
Figure 1 showing Distribution of Respondents according to severity of PTSD

Above figure shows that majority (46%) respondents had mean score 1.5 – 2.5 so that those respondents had mild PTSD, and only 1% respondents had mean score 3.5 – 4, who had severe PTSD. Its median value is 1.73.

**Distribution of Respondents with Level of PTSD According to their Job.**

| SN. | Job Status   | Mild      | Moderate  | Severe   | Total     |
|-----|--------------|-----------|-----------|----------|-----------|
| 1.  | Army         | 40        | 10        | 1        | 51        |
| 2.  | Police       | 3         | 0         | 0        | 3         |
| 3.  | Civil        | 3         | 4         | 0        | 7         |
| 4.  | <b>Total</b> | <b>46</b> | <b>14</b> | <b>1</b> | <b>61</b> |

*Table 2 showing Distribution of Respondents with Level of PTSD According to their Job*



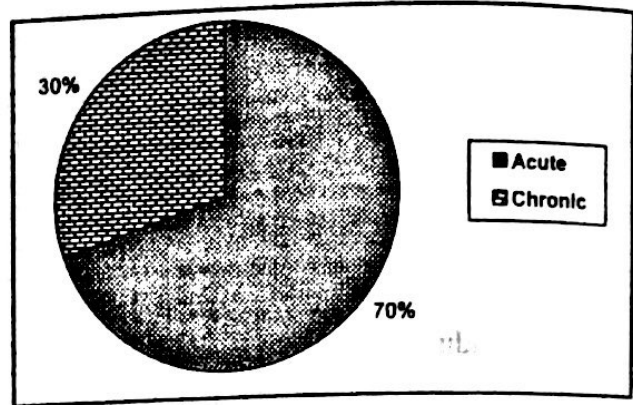
*Figure 2 showing Distribution of Respondents with Level of PTSD According to their Job*

The above figure reveals that 40 Army respondents had mild level of PTSD, 10 had moderate level of PTSD and 1 respondent had severe level of PTSD. Whereas 3 Police respondents had mild level of PTSD and 3 civil respondents had mild level of PTSD and 4 civil respondents had moderate level of PTSD.

**Distribution of Respondents According to Stage of PTSD**

| SN. | Stage of PTSD | Frequency | Percentage (N = 61) |
|-----|---------------|-----------|---------------------|
| 1.  | Acute         | 43        | 70%                 |
| 2.  | Chronic       | 18        | 30%                 |
| 3.  | <b>Total</b>  | <b>61</b> | <b>100%</b>         |

*Table 3 showing Distribution of Respondents According to Stage of PTSD*



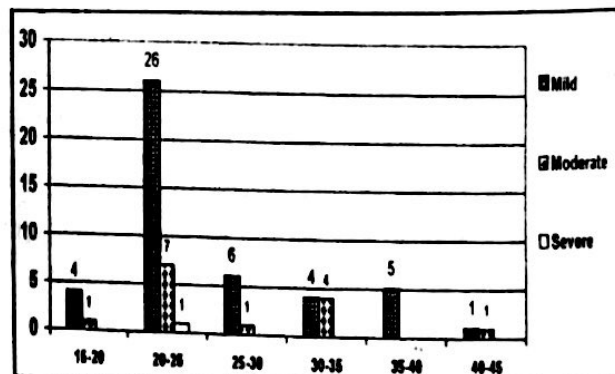
*Figure 3 showing Distribution of Respondents According to Stage of PTSD*

Above figure reveals that 70% of the respondents had acute stage of PTSD and 30% of the respondents had chronic stage of PTSD.

**Distribution of Respondents with PTSD according to Age group.**

| SN. | Age Group    | Mild      | Moderate  | Severe   | Total (N-61) |
|-----|--------------|-----------|-----------|----------|--------------|
| 1.  | 15-20        | 4         | 1         | 0        | 5            |
| 2.  | 20-25        | 26        | 7         | 1        | 34           |
| 3.  | 25-30        | 6         | 1         | 0        | 7            |
| 4.  | 30-35        | 4         | 4         | 0        | 8            |
| 5.  | 35-40        | 5         | 0         | 0        | 5            |
| 6.  | 40-45        | 1         | 1         | 0        | 2            |
| 7.  | <b>Total</b> | <b>46</b> | <b>14</b> | <b>1</b> | <b>61</b>    |

*Table 4 showing Distribution of Respondents with PTSD according to Age group.*



*Figure 4 showing Distribution of Respondents with PTSD according to Age group.*

Above figure reveals that the majority (34) of the respondents with PTSD was between the age of 20-25 years and minority (2) respondents with PTSD were between the ages of 40 – 45 years.

### Distribution of respondents with PTSD according to physical disability

| S.No. Disabilities                                     | Mild | Moderate | Severe | No PTSD | Total (N= 55) |
|--|------|----------|--------|---------|---------------|
| 1. (Head Injury) Hemiplegia                            | 2    | 1        | 1      | 0       | 4             |
| 2. Spinal Cord Injury (Paraplegia)                     | 2    | 4        | -      | 2       | 8             |
| 3. Lower Limbs (One or both limbs amputation)          | 9    | 3        | -      | 13      | 25            |
| 4. Upper limbs or fingers (one / both limb amputation) | 4    | -        | -      | 4       | 8             |
| 5. Loss of vision (one or both eyes)                   | 2    | 4        | -      | 1       | 7             |
| 6. Hearing loss  | 2    | -        | -      | 1       | 3             |
| 7. Total   | 21   | 12       | 1      | 21      | 55            |

Table 5 showing Distribution of respondents with PTSD according to physical disability

Above table reveals that among the 55 physically disabled respondents 34 of them had PTSD and 21 had no PTSD.

#### Discussion / Conclusion

In this study conducted in Shree Birendra Hospital, Chhauni, a total 100 posttraumatic in and out patients were included. The respondents were army (85%), Civil (8%) and police (7%). The present study revealed that occurrence of PTSD is higher (61%) in the posttraumatic patient exposed in the highly stressful situation. Majority (55%) of the respondents were exposed in the blast injury. Among the 85 army respondents, 60% of them had PTSD, among the 8 civil respondents 88% had PTSD and among the 7 police respondents 42% of them had PTSD. So that PTSD ratio was higher in the civil respondents in comparison to army and police due to lack of adequate support system, severely injured and uncertainty of adjustment in future life related to disability. In army respondents those who are of poor economic status, severely injured and also disabled persons had major symptoms of PTSD. Among 61 respondents with PTSD, 70% of them had acute stage of PTSD and 30% had chronic stage of PTSD.

On the basis of findings, the investigator found that, the occurrence of PTSD was higher in the posttraumatic patients exposed in the combat related stressful situations. It also presented that those patient are at a risk of developing other psychiatric

problems at any time in their future. Mental health problem (PTSD) can be prevented by the screening the risk group of patients with mental health problems, providing counseling to the risk groups, provision of essentials for survivors (food, shelter, safety, proper treatment etc) and include the mental health component in disaster planning.

#### When PTSD is diagnosed

1. Protect yourself and your patients.
2. Approach the patient calmly and slowly, remaining in his field of vision.
3. Don't startle the patient with loud noises or by touching him unexpectedly. If the patient is sleeping, awaken him verbally, not by touch.
4. Don't box a patient into an office with no easy way out; he may feel trapped and his anxiety may increase.
5. Recovery room and ICU nurses should be especially alert to the possibility of post anesthesia flashbacks. Remove sharp, loose or heavy objects and decrease noise in the area. Gently try to reorient the patient, but don't force; keep trying periodically.
6. Don't drive the patient away from treatment by telling him, get over it; the war was 60 years ago. "Remember, his symptoms may be emerging for the first time since the war".

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