#### **ORIGINAL ARTICLE**

# Frequency of Burnt patients in Sandeman Provincial Hospital Quetta

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#### **ABSTRACT**

Aim: To determine the frequency and manner of injuries among the burned patients.

Design: Observational descriptive study

**Duration of study:** One year

**Methods:** The study was conducted in Department of Forensic Medicine and Toxicology, in Lahore Medical& Dental College, Lahore and data of all burn victims, were collected from the Sandeman provincial hospital Quetta and data collected during the period from January 2003 to December 2003. **Results:** Most common cause of burn victims was hot liquids 30(44.1%) and the 2<sup>nd</sup> commonest cause

**Results:** Most common cause of burn victims was hot liquids 30(44.1%) and the 2<sup>nd</sup> commonest cause was due to Flame 23(33.8%) and 3<sup>rd</sup> commonest cause was due to working on electrical wires 07(10.3%). Least cause of burn was coal mines 6(8.8%) and very least cause was due to chemicals 2(2.9%).

**Conclusion:** Females & Males in the age of 21–30 years are more susceptible to burns and the Liquid burns are most common cause of burns. In males and females the most common manner is accidental.

Keywords: Burn, accident, hot liquid

## INTRODUCTION

Burns area unit injuries that area unit created by the appliance of dry heat like flame, beaming heat, and some heated solid substance like metal or glass to the surface of the body leading to tissue destruction. Injuries caused by friction, lightening, electricity, UV rays, below red light-weight, X-rays and corrosive chemical substances are classified as burns for aggregation functions<sup>1</sup>. Hearth may be a sensible means that of trying to hide (or a minimum of confuse) the injuries and alternative marks that will indicate that the deceased was a victim of kill<sup>2</sup>. Burns area unit the fourth most typical style of trauma worldwide, following traffic accidents falls, and social violence<sup>3</sup>. Burn injury may be a common style of traumatic injury, inflicting tidy morbidity and mortality. Moreover, burns are among the foremost pricey traumatic injuries, owing to long hospitalization and rehabilitation, and dear wound and scar treatment<sup>4,5</sup>. The burns area unit created at a minimum temperature of 44°C for 5-6 hours and at 65°C for 2 seconds<sup>1</sup>. Burn injuries occur universally and have adversely affected humanity since antiquity until the current day. All told societies burns represent a heavy medical and psychological drawback. it's additionally severe economic and social consequences not solely to the people, however additionally to their family and society normally<sup>6</sup>. Deaths attributable to burns area unit seen a lot of often in each kill and suicide particularly in landmass. Combined ways area unit a lot of common in kill as compared to suicide<sup>7</sup>.

## **MATERIALS & METHODS**

This is observational descriptive study .The study was conducted in Lahore Medical & Dental College, Lahore, and data of all burn patients, were collected from the Sandeman provincial hospital Quetta and knowledge collected from the amount Jan 2003 to Dec 2003. Data was analyzed on exploitation SPSS ver.20.All patients of over 10 years older, no matter sex with burns injuries were enclosed within the study. Patient's news to casualty department or admitted in burn units were evaluated fastidiously concerning cause, manner, place and circumstances of injury, extent of involvement of space burnt. Patients but 10 years older were excluded from the study as a result of medico-legal facet is least doubtless in these patients. Details of the cases were collected from the police papers, the enquiry reports and from the hospital records. the most objective is to

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assemble medical specialty data, to seek out the causes of death in several burn injury cases, the sex quantitative relation and also the varied factors of such injury. All findings were recorded on separate Performa's containing all demographic details of patient and their family, and evaluated statistically at the tip of study. There have been a spot between the trends and result that were on learned profession record, thus this study was planned to see the prevalence older and sex variation, manner of injuries among the burn patients.

#### RESULTS

A total of 68 patients were studied during the study period. Table-1 showed that out of 68 burnt patients majority of the patients were female 49 (72.1%) and males 19(27.9%). Table -2 shown that most common cause of burn victims was Hot liquids 30(44.1%) and the 2<sup>nd</sup> commonest cause was due to Flame 23(33.8%) and 3<sup>rd</sup> commonest cause was due to working on electrical wires 7(10.3%). Least cause of burn was coal mines 6(8.8%) and very least cause was due to chemicals 2(2.9%). Table 3 shown out of 68 patients, the most common age group in burned patients was 21-30yrs 20(29.4%) and 2<sup>nd</sup> common age group were 11-20yrs and 31-40yrs which includes 15(22.1%) each, 3<sup>rd</sup> common age group was 41-50yrs,10(14.7%). The least common age group was 51-60 years 8(11.8%) found. It is found that the burn cases are most common in youngsters' i-e 21-30 year; reason might be the emotional states and irresponsible behavior of this age group. Whereas there are very rare cases of burn in age group of 51-60 and more than 60 years, reason can be maturity level of the people of respective age group. Table 4 showed that the most common patients admission occurred in the month of February 29(42.6%) and the second most common admissions occurred in the month of April and November 7(10.3%) each and third most common admission occurred in the month of January, 6(8.8%) found. Least common admission occurred in the months of March, August and December, 5(7.4%) each found. And very least admissions occurred in the month of June, 3(4.4) and in May only 1 admission (1.5%) found.

Table-1: Gender variation

Valid	Frequency	%	Valid%	Cumulativ e%
Male	19	27.9	27.9	27.9
Female	49	72.1	72.1	100.0
Total	68	100.0	100.0	

Table 2: Etiology

Valid	Frequency	%	Valid%	Cumulative %
Flame	23	33.8	33.8	33.8
Hot liquids	30	44.1	44.1	77.9
Chemical	2	2.9	2.9	80.9
Electricity	7	10.3	10.3	91.2
Coal Mines	6	8.8	8.8	100.0
Total	68	100.0	100.0	

Table 3: Age variation in burnt patients

Valid	Frequency	%	Valid%	Cumulative %
11-20yrs	15	22.1	22.1	22.1
21-30yrs	20	29.4	29.4	51.5
31-40yrs	15	22.1	22.1	73.5
41-50yrs	10	14.7	14.7	88.2
51-60yrs	8	11.8	11.8	100.0
Total	68	100.0	100.0	

Table 4: Month wise

Valid Months	Frequency	%	Valid%	Cumulative %
Jan.	6	8.8	8.8	8.8
Feb.	29	42.6	42.6	51.5
March	5	7.4	7.4	58.8
April	7	10.3	10.3	69.1
May	1	1.5	1.5	70.6
June	3	4.4	4.4	75.0
Aug	5	7.4	7.4	82.4
Nov.	7	10.3	10.3	92.6
Dec.	5	7.4	7.4	100.0
Total	68	100.0	100.0	

#### DISCUSSION

Burns area unit the fourth commonest variety of trauma worldwide, following traffic accidents; falls and social violence<sup>12</sup>. The medical specialty of burns varies from one a part of the globe to a different and even within the same culture over time. it's a perform of civilization, industry, culture, and social stability<sup>8</sup>. In the present study, there is a predominance of female victims 49(72.1%) than males 19(27.9%) in burns patients it might be due to the major involvement of females in domestic activities, similar results have been reported from Egypt and India<sup>8,9</sup>. The most common manner in burned patients was accidental 50(73.5%) and the second commonest manner was suicidal 10(14.7%) each and third common manner was Homicidal 8(11.8%) found. The high age incidence was among young adults (21-30) years. this is as a result of during this cohort peoples are a lot of active and most likely a lot of aggressive, which are liable to trauma and it's additionally the foremost common age for wedding. Most of the victims were operating ladies and that they don't follow the security measures because of lack of your time or data leading to such incidents. This pattern additionally implies that burns tend to occur a lot of insure age teams reflective the actual organic process or behavioral patterns related to age, on the opposite hand and usually exposed to risky things both at home and at work.(8). Etiological the most common cause of burn patients were Hot liquids 30(44.1%) which was followed by Flame burns 23(33.8%). It is mostly commonly occurs accidentally in modern society). Similar results were also found in India<sup>8</sup>.

## **CONCLUSION**

- 1. Females &Males in the age of 21–30 years are more susceptible to burns.
- 2. Liquid burns are most common cause of burns.
- In males and females the most common manner is accidental.

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