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**INDO AMERICAN JOURNAL OF  
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.1495137>Available online at: <http://www.iajps.com>**Research Article****A STUDY ON THE ASSESSMENT OF MAXILLOFACIAL  
INJURIES IN SHIEKH ZAYED HOSPITAL RAHIM YAR KHAN****Dr. Zartashia Khan, Dr. Saman Maqbool, Dr. Aberah Azhar**  
Sheikh Zayed Medical College and Hospital, Rahim Yar Khan**Abstract:**

**Objective:** The purpose of this research work is to consider & compare the rate and causes of the upper jaw and face injuries in patients of Sheikh Zayed Hospital Rahim Yar Khan in the year of 2017.

**Methodology:** This research work is a retrograde review of the records of the patient of Sheikh Zayed Hospital Rahim Yar Khan, in the year of 2017. The analysis of gender, age of the patient, cause of the injury, injury type and physical location of the injuries carried out in this research work. The rate and the resources calculations carried out with the help of SPSS software & method of Chi square test.

**Results:** Two hundred and seventy-two patients were the participants of this research work in which two hundred and twenty were the male patients and fifty-two were the female patients. Violent assaults were the cause of the a large numbers of the fractures about sixty one percent, followed by accidents on roads with about thirty percent & accidents at the work places occurred in more than eight percent patients. Maximum patients were in the age group of twenty one years to thirty years of age.

**Conclusions:** The findings of this research work show that the most common factor of the fractures was assaults. The comparatively great occurrence of the injuries was the outcome of the assault, displayed the requirement to the enforcement of the law to prevent this types of cause which can decrease the maxillofacial injuries.

**Keywords:** Maxillofacial Injuries, Mentally Distressing, Skeletal, Upper Jaw, Face.

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**INTRODUCTION:**

Maxillofacial injuries are very common and these injuries can be mentally distressing for patients & their close relatives because of their operational and aesthetic life. Research works in the control and transmission of the diseases about these injuries are very cooperative in the assessment of the worth of the care of patients and in the administration of the preventive methods. These research works are very precious in diagnosis of the recent rates and the designs of these types of injuries [1]. The injuries of the skeletal and soft tissue of the face area make an important portion of the working of the oral & maxillofacial specialists in Pakistan [2].

Face is the most uncovered part of human body. So, it is defenceless to these types of injuries, twenty to sixty percent of all those concerned in the accidents of automobiles have the high amount of the maxillofacial fractures [3, 4]. The studies in the field of face injuries have proved that the cause of this injury varies from one region to the other region & even within similar region mostly depending upon the current social, economic, cultural & environmental fractures [5-7]. The earlier research works from Europe & USA showed that RTC (road traffic crashes) were the most frequent reason for the injuries on faces in the modern developed countries [8, 9]. The road accidents are also the most common reason of the injuries in the countries which are under development [10, 11]. The main purpose of this research work is to assess the traits and cause of the facial injuries in Rahim Yar Khan, Pakistan.

**METHODOLOGY:**

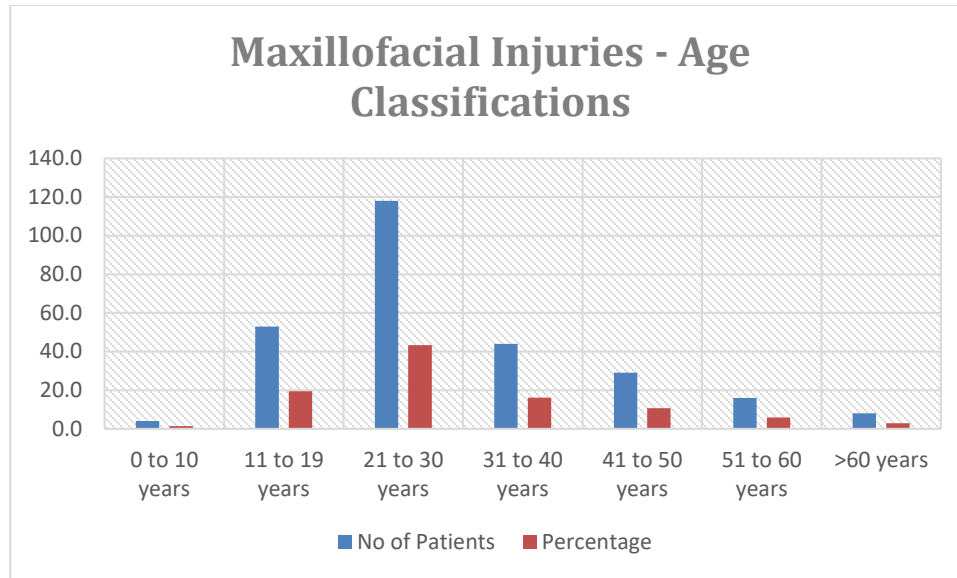
This is a retrograde are consideration of the records of hospital of all the patients who had suffered from facial, oral lower jaw or maxillofacial damages. A special organized questionnaire was in use for the collection of the data as age of the patient, gender, injury type, cause of occurrence & the region of the damage on body. The evaluation of this data carried out with the help of the SPSS software version fourteen. Chi square method was in use for the analysis of the occurrences of the injuries. P value greater than 0/05 was set as the level of critical significance.

**RESULTS:**

During one year of year of 2017, two hundred and seventy-two patients with maxillofacial painful injuries were treated in the Sheikh Zayed Hospital Rahim Yar Khan. About eighty-one percent were the male participants and nineteen percent the female participants of this research work and ratio between them was 4.23: 1 as described in Table-1. The range of the age of the patients was from one year to seventy three years. The average age of the patients was thirty eight years. A large quantity of the patients was in the age group of twenty one to thirty year of age, they were 118 in quantity. Only 8 patients were of the age of more than sixty one years as sown in Table-1. The quantity of the males was greater than females in every group of age.

**Table-I: Age Distribution of Patients with Maxillofacial Injuries.**

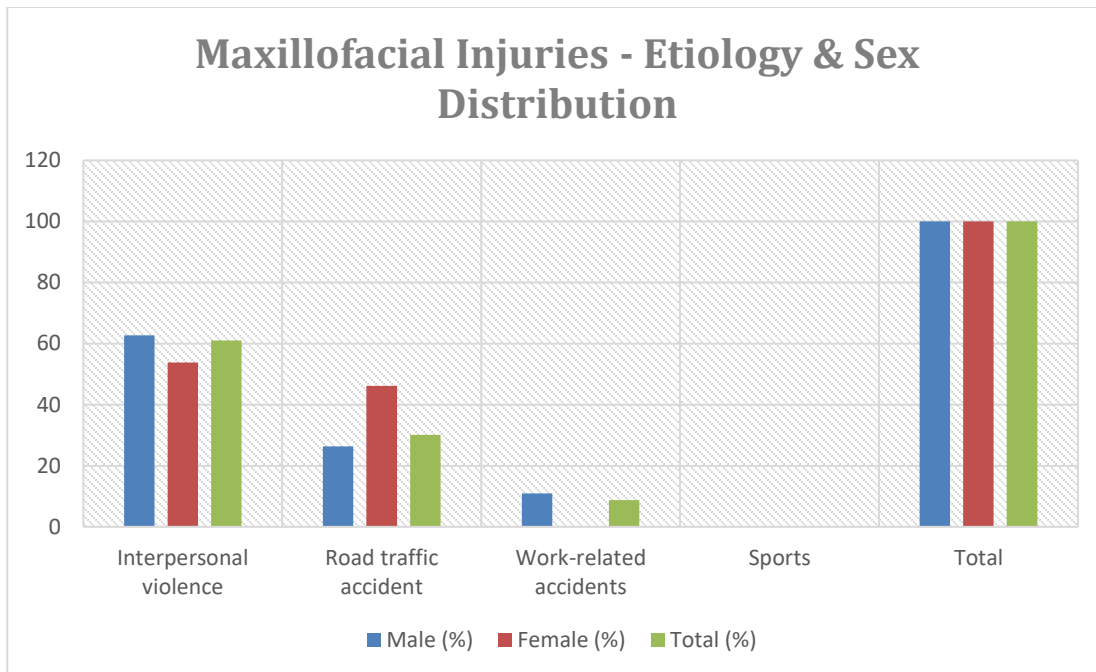
Age Classifications	No of Patients	Percentage
0 to 10 years	4.0	1.470
11 to 19 years	53.0	19.480
21 to 30 years	118.0	43.380
31 to 40 years	44.0	16.170
41 to 50 years	29.0	10.660
51 to 60 years	16.0	5.880
>60 years	8.0	2.940



Violent assaults were the reason of most of the fractures (sixty one percent), followed by traffic accidents (about thirty percent) & accidents at the place of work (about nine percent). So, the most frequent reason of the injuries is violent assaults as described in Table-2. The second most common reason of the injuries was road traffic accidents.

**Table-II: Etiology And Sex Distribution of Patient's With Maxillofacial Traumatic Injuries**

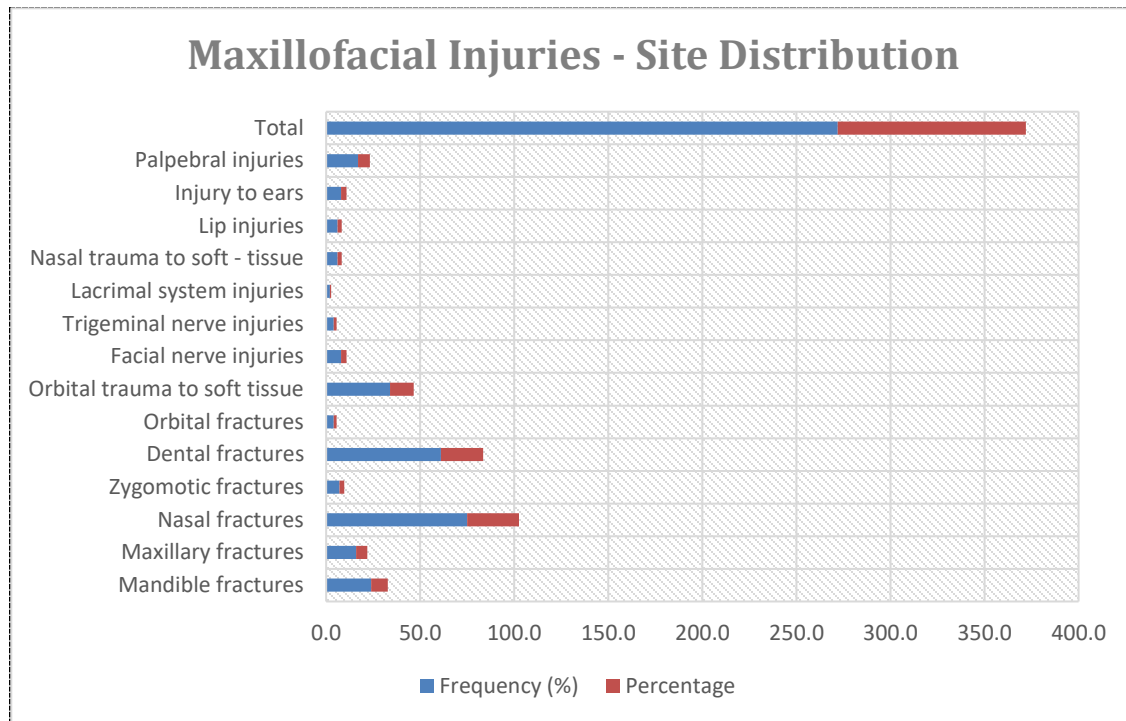
Category	Men (%)	Women (%)	Total (%)
Interpersonal violence	138.0 (62.700)	28.0 (53.800)	166.0 (61.000)
Road accident	58.0 (26.400)	24.0 (46.200)	82.0 (30.100)
Work-related accidents	24.0 (10.900)	0(0)	24.0 (8.800)
Games	0(0)	0(0)	0(0)
Total	220.0 (100.000)	52.0 (100.000)	272.0 (100.000)



The most common anatomic areas of maxillofacial physical painful damages were fracture of the nasal bone in seventy five patients, dental disturbance in sixty one patients, Orbital injuries in thirty four patients & mandible in twenty four patients. The fracture of the nasal bone was the most common area as mentioned in Table-3.

**Table-III: Site Distribution of Patients with Maxillofacial Injuries**

Injuries site	Frequency (%)	Percentage
Mandible fractures	24.0	8.80
Maxillary fractures	16.0	5.90
Nasal fractures	75.0	27.50
Zygomatic fractures	7.0	2.60
Dental fractures	61.0	22.40
Orbital fractures	4.0	1.50
Orbital trauma to soft tissue	34.0	12.50
Facial nerve injuries	8.0	2.90
Trigeminal nerve injuries	4.0	1.50
Lacrimal system injuries	2.0	0.70
Nasal trauma to soft - tissue	6.0	2.20
Lip injuries	6.0	2.20
Injury to ears	8.0	2.90
Palpebral injuries	17.0	6.30
Total	272.0	100.00



#### DISCUSSION:

Maxillofacial injuries are very frequent & have a mental impact on patients as well as their close relatives because of operational and aesthetic nature. In this research work, males were largely the victims of maxillofacial damages as compared to Female which is also similar with research works carried out in the past [12-16]. An availability of equal male to female ratio was found in some recent and past research works in most of the health centres of the country. The change of the work place can be reason of this issue. Females mostly remain at houses are less exposed to the damages than the females who live in outdoor and work in high risky occupation [16, 17]. The persons of twenty-one to thirty year of age were mostly the victims of maxillofacial damages in Rahim Yar Khan which is not much different from the conclusions of the research works conducted in various areas of the world [12, 13, 18]. The probable elaboration of this factor is that the persons of this age group mostly participate in the unsafe exercises and unsafe sports, drive the automobiles sloppily & involved in the interpersonal aggressions [19].

The most common reason of these injuries in Rahim Yar Khan is violent assaults. Other most frequent reasons are traffic road accidents & accident at the place of work. Poor social economic condition and inclinations to crimes can be a reason for the

enhancement in the quantity of assaults resulting in maxillofacial injuries. Road traffic crashes are steadily decreasing in the countries which are under development but their rates are increasing continuously with a terrible speed in the countries of low income located in Africa and Asia [20]. WHO (World Health Organization) approximated that about twenty five percent deaths due to injuries in the whole world are the outcome of RTC with ninety percent deaths are occurring in the low and middle level income countries of the world [20].

The decrease in the road traffic crashes in the modern countries are attributed mainly to the safety and preventive measures on roads as use of the seat belt, following the traffic signs & enforcement of the traffic law. Therefore, there is requirement to follow the path of the developed countries to decrease the RTC in less developed and poor countries of the world. The outcomes of this research with other case studies in the same field conclude that the reasons of the maxillofacial damages vary from country to country based on the economic, social & environmental reasons [5, 6]. The findings of this study describes that most common factor of these injuries are assaults. This is very similar to the information of various undeveloped countries. The enhancement in the quantity related to the maxillofacial damages could be attributed to bad economic & social condition of the city of Rahim

Yar Khan which is leading to depression and inclination to perform crimes.

### CONCLUSIONS:

The enforcement of the law has the ability to decrease the quantity of assaults as well as the enforcement of the traffic laws can reduce the traffic accidents. The outcome of this work also is alerting the authorities, especially government & the commission of the road safety to the requirement for the provisions of the best roads, enforcement of laws of traffic & betterment of the economic condition.

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