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Research Article

**AN INCREASE IN THE DRUG ASSISTED TRAVELLING &
STREET CRIMINALITIES AS A NOVEL HEALTHCARE
PROBLEM OF THE 21ST CENTURY: ONE YEAR
DESCRIPTIVE, CROSS-SECTIONAL RESEARCH
EXPERIENCE**¹Dr. Usama Razzaq, ²Dr. Mahnoor Ahsan, ³Dr. Waseem Haider¹Punjab Medical College, Faisalabad²Aziz Fatima Medical College, Faisalabad³Punjab Medical College, Faisalabad**Abstract:**

Background: Poisoning trends are changing in Pakistan, travel and street associated poisoning is novel and emerging in the healthcare as a big issue. This research is first in its kind that deals with the regional issue of the travelling and street used drugs and their poisoning mode.

Material & Methods: Research is cross-sectional descriptive in design and it was carried out at Services Hospital, Lahore in the period starting from July 2016 to June 2017 having a sample of one hundred cases, which were enrolled in the research after the fulfilling of prescribed criteria. At the end of the clinical assessment necessary urine test, stomach and blood samples were collected and tested in the laboratory to analyses then chemically and toxicologically.

Results: The sample was of one hundred cases selected from the age limit of 15 – 65 years including 84 males (84%) and 16 females (16%). Among the used drugs sixty percent was benzodiazepines, 4% phenobarbitone, 32% opium derivatives; whereas, rat killers were used by a meager 2%, mixed opium derivatives and benzodiazepines. Delivery mode in the poison intake was through soft drinks (54%), food (8%) and fruits (38%) cases. The victimized persons included 60% passengers, 8% Taxi drivers, 20% pedestrians, females 6% attending marriages and six percent others were also affected.

Conclusion: Travel and Street associated poisoning cases are emerging issue of the healthcare in Pakistan. Delivery mode is often drinks, food and fruit with a mixture of opium derivatives and benzodiazepines. This occurs because of the awareness level and educational lack, law and order in the poor state, corruption, people attitude and un-employment.

Key Words: Crime; Travel; Poisons; Street drugs; Opium; Benzodiazepines and Public Health.

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INTRODUCTION:

Poison is a substance which taken or given by any route causes disease, impairs the normal physical functioning and death in the human [1]. We find its definition in the classical times and traditionally stated as suicidal, accidental or homicidal [3]. As the sedatives are available easily such as opium and hypnotics that are used for the ill purposes such as snatching and killing by the snatchers and pick pocketers specially in streets and public places. There is various drug pattern used throughout the world [4 – 8]. Agents behind poisoning are different from the agents of the West such as lawlessness, poor socio-economic status, unemployment, educational level, drugs availability and lack of awareness. Majority of the drugs are available easily and they can be managed from any pharmaceutical store without the prescription the doctors. There availability results in the shape of high crime rates in the developed countries. Our research aimed at the investigation of the numerous drugs and their administration mode.

MATERIAL AND METHODS:

Research is cross-sectional descriptive in design and it was carried out at Services Hospital, Lahore in the period starting from July 2016 to July 2017 having a sample of one hundred cases, which were enrolled in the research after the fulfilling of prescribed criteria. At the end of the clinical assessment necessary urine test, stomach and blood samples were collected and tested in the laboratory to analyses then chemically and toxicologically. All the cases of unconsciousness, trauma, food poisoning, stroke, snake or insect bites or related metabolic disorders because of any failure

in the organ and unwilling cases were not included in the research study.

We included hundred cases as per the selection criteria, diagnostic process was completed through the attendant and police statement and final diagnosis was based on the clinical assessment. It was observed in the clinical examination that sixty percent patients had (GCS score above 10) and 40% patients had (GCS score above 8 but below 10). The vital symptoms were in the normal range in most of the cases. Pinpoint pupils was observed in 32% cases and remaining were observed in the mid-position. About the responses flexor plantar response (60%), equivocal (25%) and bilateral extensor plantar (15%). Various collected specimen was analyzed in the Forensic laboratory along with other assessments such as FBC, creatinine & urea, RBS, LFTs, arterial blood gasses, APTT/PT, chest x-ray and ECG. Outcomes are shown in tables and graphs.

RESULTS:

The sample was of one hundred cases selected from the age limit of 15 – 65 years including 84 males (84%) and 16 females (16%). Among the used drugs sixty percent was benzodiazepines, 4% phenobarbitone, 32% opium derivatives; whereas, rat killers were used by a meager 2%, mixed opium derivatives and benzodiazepines. Delivery mode in the poison intake was through soft drinks (54%), food (8%) and fruits (38%) cases. The victimized persons included 60% passengers, 8% Taxi drivers, 20% pedestrians, females 6% attending marriages and six percent others were also affected.

Table – I: Age distribution of victims

| Age range in years | Number of patients | Percentage |
|--------------------|--------------------|------------|
| 15 – 25 | 10 | 10 |
| 26 – 35 | 26 | 26 |
| 36 – 45 | 24 | 24 |
| 46 – 55 | 22 | 22 |
| 56 – 65 | 18 | 18 |

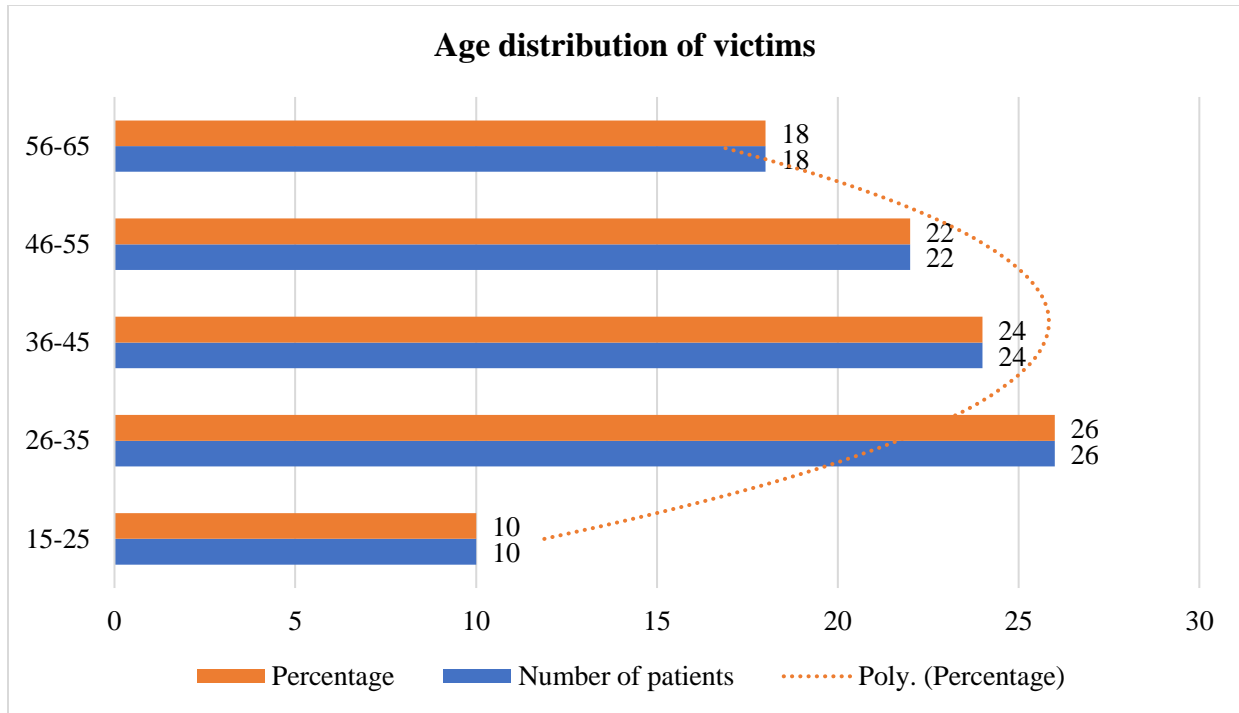


Table – II: Gender distribution of victims for street and travel poisoning (n=100)

| Gender Distribution | |
|---------------------|--------|
| Male | Female |
| 84 | 16 |

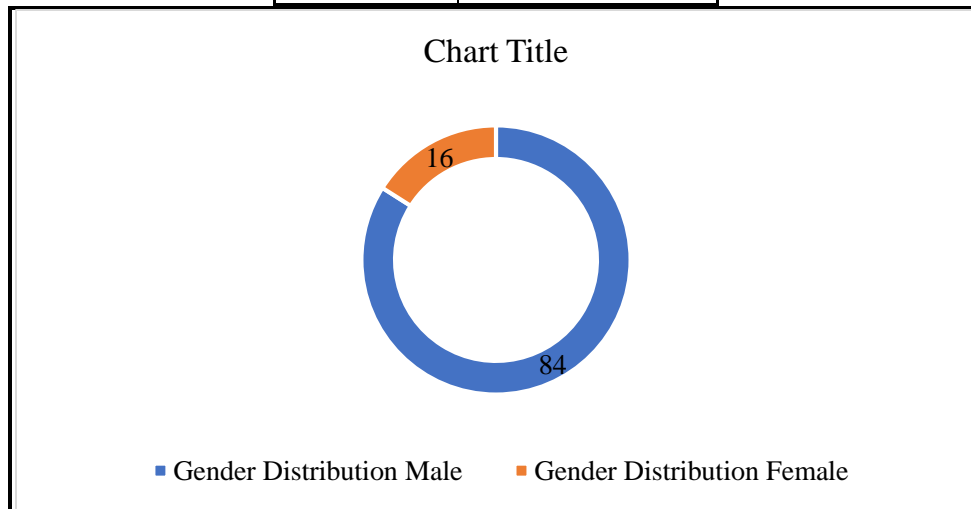


Table – III: Pattern of poisoning in male victims for street and travel poisoning (n=84)

| Type of drugs / poisons | Number of Patients | Percentage |
|--|--------------------|------------|
| Benzodiazepines | 50 | 50 |
| Opioid derivatives | 32 | 32 |
| Mixed Benzodiazepines & Opioid derivatives | 2 | 2 |

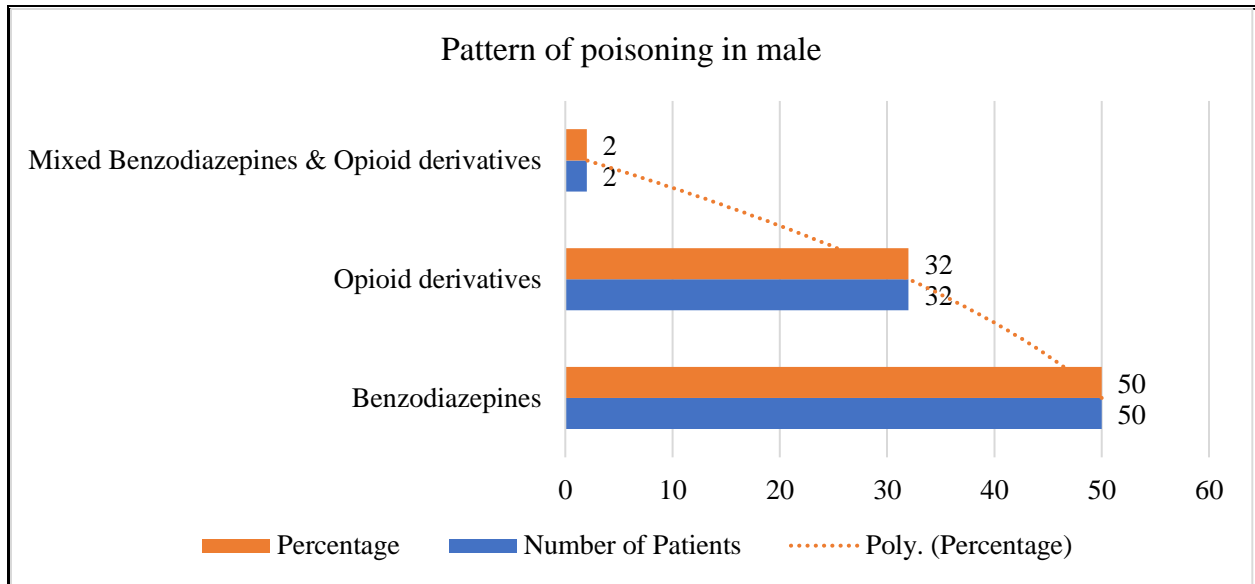
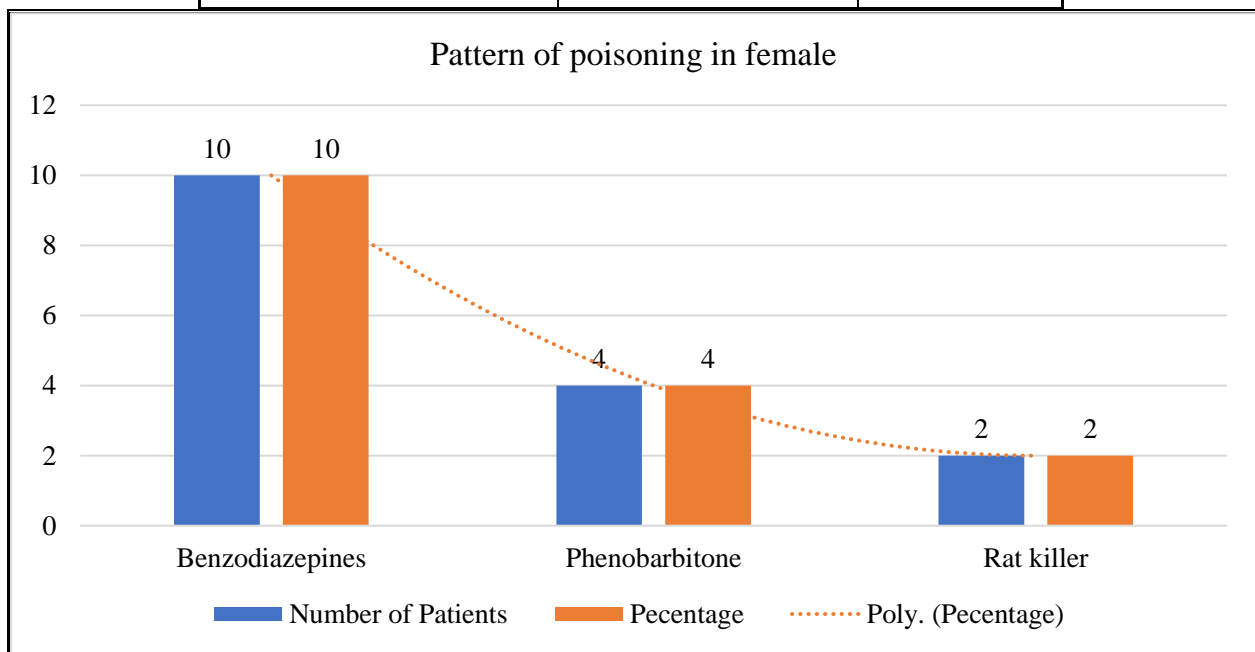


Table – IV: Pattern of poisoning in female victims for street and travel poisoning (n=16)

| Type of drugs / poisons | Number of Patients | Percentage |
|-------------------------|--------------------|------------|
| Benzodiazepines | 10 | 10 |
| Phenobarbitone | 4 | 4 |
| Rat killer | 2 | 2 |



DISCUSSION:

This research is unique in its subject in our region and studies the crime related to the traveling through an organized way with the help of drugs that is aimed at snatching and hijacking [9]. Male were dominant in this research as (84%) of the total population was male because males have a higher exposure to the

society and prone to be targeted by ill desired factors. Previously, Majumder et al, states the number of male as 98%, Howlader Mar et al. & Ahmad et al. as 64% against a proportion of the female as 36% [11, 12]. A total of seventy-two percent victims was in the age group of 26 – 55 years which was same as observed by Howlader Mar et al. & khan et al. [12,

13]. As the males frequently travel and carry money with them so they are the main target of the culprits in order to snatch and run by using drugs.

In terms of the poisoning pattern in males, benzodiazepines were used commonly (50%). Same outcomes have been observed by Majumder, Azhar & Sarkar et al. [10, 14, 15]. In the developed countries besides alcohol another commonly used drug is benzodiazepine [4 – 8, 16 – 19]. As the outcomes are rapid that is why these drugs are the priority of criminals [20 – 21]. A simple and sensitive analysis method is LC-TOF MS for the detection of benzodiazepine and related compounds [22]. Another reason behind the use of Benzodiazepine may be the familiarity of the general masses with this drug, it is also easily procurable as rules are non-existing or inactive.

Second most commonly used drugs are the derivatives of opium (32%). As the crops of poppy are in abundance and this drug is also available easily in the suburbs and target of the criminals specially in the bordering areas of Afghanistan. In other studies, the incidence of opium was not observed which is a contradiction to our outcomes [4 – 8, 10 – 15]

In the female population the poisoning pattern of benzodiazepines was highest as (10%), which is near to the outcomes of the Howlader Mar as he observed the same as (8.333%) [11]. Phenobarbitone was used about 4% and there was an incidence of two percent use of the rat killers as these poisoning agents were available over the counter.

Among the used drugs sixty percent was benzodiazepines, 4% phenobarbitone, 32% opium derivatives; whereas, rat killers were used by a meager 2%, mixed opium derivatives and benzodiazepines. Delivery mode in the poison intake was through soft drinks (54%), food (8%) and fruits (38%) cases. The victimized persons included 60% passengers, 8% Taxi drivers, 20% pedestrians, females 6% attending marriages and six percent others were also affected. These outcomes resemble with the outcomes of Majumder et al. and Howlader Mar et al. [10, 11].

It was observed in the clinical examination that sixty percent patients had (GCS score above 10) and 40% patients had (GCS score above 8 but below 10). The vital symptoms were in the normal range in most of the cases. Pinpoint pupils was observed in 32% cases and remaining were observed in the mid-position. About the responses flexor plantar response (60%), equivocal (25%) and bilateral extensor plantar (15%). Various collected specimen was analyzed in the

Forensic laboratory along with other assessments such as FBC, creatinine & urea, RBS, LFTs, arterial blood gasses, APTT/PT, chest x-ray and ECG. These outcomes are very close to the outcomes of Indian and Bangladeshi authors [10 – 11, 23]

Central nervous depression severity was observed low in the travelling victims when associated with the poisoning against the victims of organophosphorus poisoning [24]. Respiratory depression was not caused by the benzodiazepines and related drugs doses. No fatality was observed by the medical rep in the management of these cases. Safe discharge from the healthcare unit was noticed in the time of one to three days, same has been reported by Majumder et al. [10]. Contrarily, in the Bangladeshi research studies it was observed high as (17%) organophosphorus poisoning mortality [24].

As opium and benzodiazepines derivatives are repeatedly used drugs, which can best be managed through naloxone and flumazenil in unconscious victims for the etiology of unconsciousness diagnosis as opium derivative or benzodiazepine poisoning. This empirical therapy is also not very costly and it is affordable too. Other authors also recommend the same for the management of the victims [25 – 27]

CONCLUSION:

Travel and Street associated poisoning cases are emerging issue of the healthcare in Pakistan. Delivery mode is often drinks, food and fruit with a mixture of opium derivatives and benzodiazepines. This occurs because of the awareness level and educational lack, law and order in the poor state, corruption, people attitude and un-employment.

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