

Frequency of Alcohol Consumption Cases among people of Quetta

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ABSTRACT

Aim: To determine the frequency of alcohol consumption cases among the area and determine the different age groups and clinical criteria of persons who are accused of being under the intoxicating effect of alcohol brought to Medicolegal Department of Sandeman (Prov) Hospital Quetta.

Study design: Observational cross sectional study

Place of study: Data were collected from medico legal department of Sandeman provincial Hospital Quetta and study was conducted at Avicenna Medical College, Lahore.

Duration of the study: 01-January-2000 to 31-December 2000

Methods: A total of 64 alcohol consumption cases brought by police to medico legal department have been taken. Most of them at the time of examination were showing visible clinical evidence of alcoholic intake. Examination was conducted on the request of police. A proforma was designed to record the date, age, sex, and clinical examination of accused that were brought to department.

Results: Data were analyzed on using SPSS version 20. Alcohol consumption cases results showed, out of 64 cases majority of the victims were males 62(96.9%) and only 2(3.1%) females. The most frequent cases of alcohol consumption were found at the age of 31-40 yrs, 20(31.3%) and the most common occupation of victims were Labourers 20(31.3%).

Conclusion: Alcohol is a drug of addiction and is responsible for many socio-economic problems, crimes, morbidity and mortality.

Keywords:

INTRODUCTION

Alcohol (ethyl alcohol, ethanol) is by far the most widely used drug in the world, even in those countries where religious beliefs theoretically prevent its consumption¹. The prohibition (Enforcement of Hadd) Order (4 of 1979) extending to whole of Pakistan, imposes the total prohibition on the consumption, manufacture and selling of intoxicating liquor by the Muslims². The excitement and diversion which drinking provides in the long run produces unfortunate and sometimes disastrous results. Ingestion of alcohol is a criminal act in Pakistan³. Alcoholism is drinking alcoholic beverages at a level that interferes with physical health, mental health, and social, family, or job responsibilities⁴. The WHO estimates that around 2 billion people worldwide consume alcohol (WHO 2004) and there is clearly no single reason why they do or why different people drink to different extents. It is apparent though

that drinking is influenced by factors such as genetics, social environment, culture, age, gender, accessibility, exposure and personality⁵. Alcohol dependence – alcohol addiction – occurs gradually as drinking alcohol alters the balance of some chemicals in the brain. Alcohol also raises the levels of dopamine in the brain, which is associated with the pleasurable aspects of drinking alcohol. Excessive, long-term drinking can deplete or increase the levels of some of these chemicals, causing body to crave alcohol to restore good feelings or to avoid negative feelings⁶. It is highly soluble in water and is absorbed much less in fat. Liver metabolizes about 90% whereas 5% is breathed out through lungs. People on alcohol dependence, need increased amount of alcohol to achieve intoxication or the desired effect. Approximately 20% of ethanol is absorbed from the stomach and 80% from small intestine. Consequently the longer it remains in the stomach, the slower it will be absorbed and lower will be the peak in the blood alcohol concentration (BAC). Many drugs compete metabolically with alcohol for the microsomal oxidizing pathways of the liver^{7,8}. It is the most severe alcoholic disorder that develops over a period of years, following a consistent pattern. At first a tolerance develops, then people may lose control over drinking followed by severe drinking behaviour and then prolonged binges of drinking with associated

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physical and mental complications⁹. We carried out this study to bring forth the frequency of alcoholic patients and exclusion of alcohol intoxication on the basis of clinical examination performed by the medicolegal officers.

MATERIALS & METHODS

The study included 69 victims brought from various police stations to the medicolegal department of Sandeman (Prov) Hospital Quetta, from January 2000 to December 2000. All victims were examined by the medico legal officers. Date and time of the examination was recorded with time lapse between alcohol intake and examination, all injuries and diseases were excluded, a short history was taken. General behaviour was observed with special emphasis on the state of clothing, character of speech - slurred, thick or over precise, evidence of self-control. While during the examination of drunken patients, all the clinical signs were noted especially; alcoholic smell from the mouth, slurred speech, all signs of coordination including Unable to thread a needle, Romberg's sign (By asking the person to walk on a straight line and suddenly asked to turn back. He is then asked to stand with eyes closed and open and his ability to stand), and Muscular Coordination tests like Finger nose test, Pick up coins dropped on the floor, Lighting a cigarette, Button & un buttoning his clothes, Tremors of the hand make writing difficult were also examined. Brief systemic examination was also performed. Blood and urine samples were taken from persons exhibiting evidence of alcohol intoxication and were sent to the chemical examiner. The two tests done at the chemical examiner's office were: Sulphomolybdenic acid Test: 2 to 3 ml urine are gently poured over 2 ml of sulphomolybdenic acid taken in a test tube, a deep blue ring appears at the junction of the two liquids. If the test tube is shaken the whole mixture becomes deep blue. Dichromate Test: On heating some urine with 5 ml of a strong aqueous solution of potassium dichromate and 1 ml of strong sulphuric acid, the color changes to green and the vapour of aldehyde is detected in its odor.

RESULTS

A total of 64 subjects were received and examined at the office of head of medicolegal department (police surgeon) at Sandeman (Prov) hospital, Quetta. Data were analyzed on using SPSS version 20. Among these 64 cases, (all referred by police authority) shown in table-1, majority of the subjects were males 62(96%) and only 2(4%) were females.

Table1: Gender variation

Valid	Frequency	%	Valid%	Cumulative%
Male	62	96.9	96.9	96.9
Female	2	3.1	3.1	100.0
Total	64	100	100.0	

Table 2: Age groups of alcoholic subjects

Valid	Frequency	%	Valid%	Cumulative%
10-20 yrs	4	6.3	6.3	6.3
20-30 yrs	10	15.6	15.6	21.9
31-40 yrs	20	31.3	31.3	53.1
41-50 yrs	15	23.4	23.4	76.6
51-60 yrs	10	15.6	15.6	92.2
61-70 yrs	5	7.8	7.8	100.0

Agings of victims showed in table-2 ranged from 10 to 70 years. The most frequent cases of Alcoholics found at the age of 31-40 yrs, 20(31.3%) and 2nd most common in age group of 41-50yrs, 15(3.4%), and in 3rd most common age group were 20-30yrs and 51-60yrs containing 10(15.6%) each. A least pattern was age group of 61-70yrs contained only 5 cases (7.8%) and the very least number of cases in age group of 10-20yrs containing 4 (6.3%) was found.

Table 3: Occupation of alcoholics

Valid	Frequency	%	Valid%	Cumulative%
House Hold	5	7.8	7.8	7.8
Labourers	20	31.3	31.3	39.1
Farmers	15	23.4	23.4	62.5
Business	10	15.6	15.6	78.1
Service	5	7.8	7.8	85.9
Un-employed	5	7.8	7.8	93.8
Students	3	4.7	4.7	98.4
Un-known	1	1.6	1.6	100.0

The most common occupation were found in Alcoholics were Labourers 20(31.3%) and 2nd most common occupation was farmers containing 15 cases (23.4%), which was followed by 3rd common occupation was Businessmen 10(15.6%). A least number of occupations were House hold, service, and unemployed cases containing 5(7.8%) each were found. A very least number of cases were seen in students containing 3(4.7%) only.

DISCUSSION

The word alcohol comes from the Arabic word "AL-KOH-L", which is a fine metallic powder used in the East to stain the face & eyelids. The name was later extended to mean any powder produced for titration and sublimation & then to a fluid obtained by distillation¹⁰. All Alcoholics brought to the medico legal department (police surgeon) of Sandeman (Prov) hospital Quetta, by the police, and request of examination were received from the police. According to the Sec 5; of Pakistan prohibition (enforcement of

Hadud) rules 1979; the nearest authorized medical officer should examine the person referred to him under article 12(1) of the order with respect to the presence of an intoxicant in his breath or in his stomach or in his blood stream. If the authorized medical officer can presume the taking or influence of the intoxicant from any of the above-mentioned symptoms or other after effects he may dispense with the aforesaid examination⁸. According to the present study having Muslims culture and civilization, the incidence as compared to the West is much less and males being males 62(96%) and only two (4%) were females, the most common victims of Alcoholics found at the age of 31-40 yrs, 20(31.3%) and 2nd most common in age group of 41-50yrs, 15(3.4%), and in 3rd most common age group were 20-30yrs and 51-60yrs containing 10(15.6%) each. Another study in Pakistan showed incidence is more common in the middle age group⁸ and younger group brought for examination is because of their involvement in the evil for pleasure or company's sake in the beginning and later on became addict to it⁸.

CONCLUSION

1. Alcohol is a drug of addiction and is responsible for many socio-economic problems, crimes, morbidity and mortality.
2. It is contributory factor in many deaths.

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