

MINI-REVIEW

Burden of Alcoholic Liver Disease: Bhutan Scenario

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ABSTRACT

Alcoholic liver disease (ALD) is one of the major public health problems in Bhutan. The incidence of alcohol liver diseases (per 10,000 populations) in the year 2016 was 46.

The burden of mortality associated with it is alarming, going by the size of the population of the country. It is one of the all-time top five killer diseases in the country. In 2016, the mortality attributable to alcohol liver disease was 184 corresponding to 97% of deaths due to reported liver diseases. The ALD is responsible for 15% of all deaths on an average in the last 3 years.

Keywords: Alcohol, Bhutan, Disease burden, Liver diseases.

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INTRODUCTION

Bhutan is a tiny Himalayan country located between the two Asian giants of India in the south and China in the north. Most of the health indicators have improved over the years since the country opened itself to the outside world in 1961, when it initiated its first 5-year plan. Its average life expectancy at birth has increased from 32 years in 1960 to 70 years at present.¹

Bhutan is traditionally an alcohol-consuming country. Mean household alcohol consumption was 31.72 and 22.3 L in 2003 and 2007 respectively, with per capita adult pure alcohol consumption of 8.47 L.² This is much higher than the global per capita of 6.2 L. Some attributable factors are availability of a wide variety of cheap alcoholic beverages, cultural acceptability, and extreme cold weather.

Like any country, alcohol-related problems are not different for its population. It ranges from addiction, dependency to major health problems like cirrhosis and death. It also causes social issues like family disharmony, poverty, crime, and accidents apart from economic loss.²

Alcoholic liver disease is one of the major public health problems in Bhutan. The incidence of alcohol liver diseases (per 10,000 populations) in the year 2016 was 46 (Table 1).³

Table 1: Incidence of ALD in Bhutan, 2012 to 2016⁴

Indicator	Year				
	2012	2013	2014	2015	2016
ALD incidence (per 10,000 population)	29	36	42	41	46

Table 2: Top five causes of mortality in Bhutan, 2014 to 2016

Disease	Year		
	2016	2015	2014
ALD	184	153	156
Cardiovascular disease	255	245	152
Septicemia	140	136	69
Cancer	126	106	47
Pneumonia	76	57	57

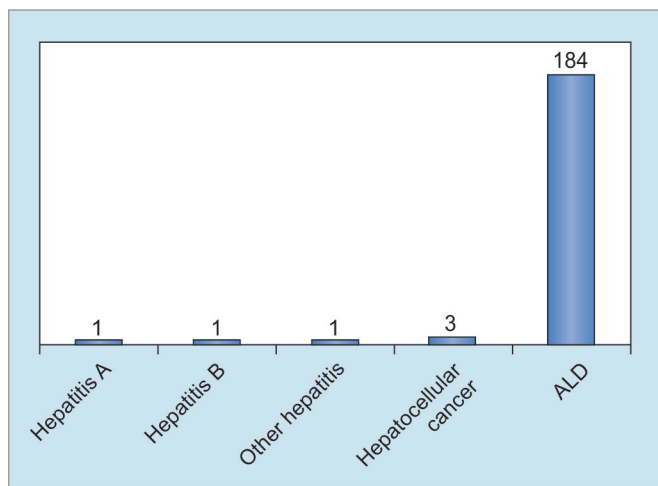
The burden of mortality associated with it is alarming, going by the size of the population of the country. It is one of the all-time top five killer diseases in the country (Table 2).⁴ In 2016, the mortality attributable to alcohol liver disease was 184 corresponding to 97% of deaths due to reported liver diseases. The ALD is responsible for 15% of all deaths on an average in last 3 years (Graph 1).

The ALD also drains the economy. The expenditure incurred was about Nu. 48.94 million during 2007. This amount was spent on outpatient, inpatient, and referral abroad (Table 3).

Looking at the pattern of alcohol use, it is almost an inseparable part of our culture and tradition. Table 4 shows different alcohol use categories and their significance.

Further, alcohol offered to a guest has a corresponding name according to his activities of the day. The alcoholic beverage offered soon after getting up in the morning is called zheng chang. Likewise, pheb chang for the beverage offered on arrival, zhuk chang for beverage offered soon after the guest sits down, toh chang for beverage offered just before a meal, and zim chang for

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Graph 1: Mortality due to liver diseases, 2016

beverage just before the bedtime. This practice is mostly prevalent in the rural eastern part of the country. This shows that alcohol use is deeply entwined with the culture and tradition of the country.

Some of the measures the Royal government has undertaken in the last decades to mitigate the problems of ALD are: Banning of household alcohol production, increased taxation on factory-produced alcohol, specified legal age of consumption of alcohol from 18 to 21 years of age, and identified and monitored dry day a week on Tuesdays, among others. In recent years, the Ministry of Health also has conducted rounds of advocacy on the ill effects of alcohol, targeting population in the rural as well as urban areas. It is an ongoing activity for most of the health assistants tied to their individual workplan.

Although the government has initiated various measures to control alcohol use by its population, much

Table 3: Proportion of deaths due to ALD, 2014 to 2016

Year	Deaths due to ALD	Deaths due to all other causes	% death due to ALD
2014	176	806	17.9
2015	158	1066	12.9
2016	184	1151	13.7

Table 4: Traditional alcohol use category²

Alcohol use category	Significance
Serkem chang	Drink offerings to local deities
Tor chang	Drinks furnished while making ritual cakes
Deutsi chang	Spiritual offertory drinks
Yang chang	Brewed for the god of wealth
Ngo chang	Drink offerings for the sake of the dead
Tsan chang	Drink offerings to local deity
Tshe chang	Drinks brewed for long life rituals
Tshog chang	Communal tradition of offering drinks to visitors (popular in east)
Duen chang	Drinks to welcome guests (pastoral societies)

more needs to be done to prevent alcohol-related problems in the future.

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