EDITORIAL

A physician's approach to alcohol misuse in the setting of alcohol prohibition

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Alcohol use is a pervasive globally, especially in the Western world, where four out of five people consume alcohol regularly [1]. Since alcohol use impairs judgment in the short-term and affects many body systems in the long-term, many countries and international organizations recommend low-risk drinking guidelines (1-3). However, still a significant proportion of population consumes over these limits; e.g., in the United States, about 15% of the population consumes above recommended limits[2]. These consumption patterns are not without consequences[3]. The World Health Organization (WHO) estimates that 3.3 million people die each year from alcohol use, accounting for more than 5% of the global burden of disease[1]. By some estimates, 1 in 10 deaths amongst working age adults can be attributed to alcohol[2]. In the United States alone, the annual health care and economic costs of alcohol related disability equates to $250 billion[3].

Alcohol has wide ranging health effects involving many different body systems. These include several cancers especially of the gastrointestinal tract, liver cirrhosis, pancreatitis, bone marrow suppression, and a higher risk of infections such as tuberculosis. While low levels of alcohol intake have been shown to have protective cardiovascular qualities in some studies, there is also evidence to suggest that alcohol is still associated with atrial fibrillation and hemorrhagic stroke[1]. Alcohol has also been linked to anxiety, depression, temper issues, risky behaviours, social problems, road traffic injuries, and suicide[4].

There are parts of the world where alcohol use is prohibited, for example, most Muslim majority countries in the Middle-East including Pakistan have strict regulations regarding the sale and consumption of alcohol at public venues. In Pakistan, the sixth most populous nation of the world, most of these restrictions were part of the Hudood ordinance from 1979 that banned sales of alcohol to Muslim residents[5]. The current laws recognize the rights of non-Muslims, who still have access to alcohol under special permits.

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Despite strict laws, it seems that alcohol misuse has become a significant problem in Pakistan. It is common for newspapers to show spikes in alcohol-intoxication-related deaths around festivities. There are reports of an illicit, underground alcohol manufacturing and sales market. This practice is common in countries where alcohol is prohibited and leads consumers to use homemade drinks that pose a unique poison danger [1].In response, authorities often publicize the destruction of large consignments of alcohol in the media. There are now a growing number of private medical facilities that offer services for alcohol addiction in Pakistan's larger cities including Islamabad, Karachi, and Lahore. Taken together, alcohol misuse may be more prevalent in Pakistan than currently perceived.

Around 4,000 – 5,000 physicians graduate from Pakistani medical and dental schools each year and according to Pakistan's Medical and Dental Council there are 189,157 registered members in Pakistan as of December 31, 2017[6]. While most physicians are trained in obtaining a medical history for smoking and other illicit substances, they receive little training in identifying and screening for signs of alcohol misuse. These deficiencies may make it challenging for physicians to provide the needed medical care for patients. Conversely, in Western countries, it is recommended that all adults over the age of 18, regardless of their medical presentation, be screened for unhealthy alcohol use in the primary care setting[7].

Patients with problematic alcohol use may initially present with symptoms of gastritis, such as abdominal discomfort, nausea, vomiting, bloating, or loss of appetite[4]. There may be signs of alcohol withdrawal, including tremor, agitation, anxiety, or tachycardia. The physical exam may yield no findings, to mild and non-specific symptoms such as hypertension, or even include signs of signs of liver disease such as ascites, peripheral edema, spider nevi, palmar erythema, jaundice, hair loss, digital clubbing, etc. A physician should also look for any signs of repeated trauma or injuries that may result from episodes of intoxication. Finally, the presence of certain psychiatric disorders could also be associated with unhealthy alcohol use,

including depressive symptoms, anxiety, or other substance use including opioids, cocaine, amphetamines, or cannabis[8]. While these signs and symptoms are not completely predictive of unhealthy alcohol use, these may warrant further investigation and a conversation into a patient's drinking habits.

There are many simple questionnaires available to physicians to assess alcohol related hazards in patients. For instance, the Alcohol Use Disorders Identification Test (AUDIT) is a 10 item questionnaire and is the most validated screening method for unhealthy drinking. A score above 8 on AUDIT is considered positive. A briefer, almost equally as effective version of the AUDIT can also be used, the AUDIT-C, which includes only three questions:

- How often do you have a drink containing alcohol?
- How many drinks containing alcohol do you have on a typical day when you are drinking?
- How often do you have six or more drinks on one occasion?

A score of 4 or more in men and 3 or more out of 12 in women is considered positive for unhealthy drinking[9].

Another commonly used screening tool is the CAGE questionnaire[10].

- Have you ever felt you should cut down on your drinking?
- Have people annoyed you by criticizing your drinking?
- Have you ever felt bad or guilty about your drinking?
- Have you ever taken a drink first thing in the morning (eye-opener) to steady your serves or get rid of a hangover?

A positive response to any one of these questions should raise concerns to the physicians about the potential for unhealthy alcohol use[11].

It is also always important to ascertain whether any immediate family members suffered or currently suffer from any substance abuse, as a positive history may raise a red flag for screening since people can be genetically predispositioned to substance abuse[12].

At the minimum, physicians should be asking if their patients drink any alcohol and how often they are doing so. For women and all patients over 65, risky drinking is defined as 10 or more units per week or more than 3 units in a day. For men under 65, 14 or more units per week or more than 4 units in a day. In the United States, one unit consists of 5 ounces of wine, or 12 ounces of beer, or 1.5 ounces of spirits[13]. A physician should also ask about binge drinking, defined as 3 or more drinks for women and 4 or more for men on a single occasion. This is important as binge drinking has been associated with poor health outcomes including increased risk of cardiovascular disease and traumatic injuries[14].

During the encounter, physicians must pay attention to non-verbal cues – of guilt or embarrassment, because if there are social or legal consequences for consuming alcohol, patients may be less willing to share information[15]. As such, a physician must be empathic, nonjudgemental, and encouraging while telling the patient that this must be difficult for them and commending them for agreeing to talk about the subject. Remind the patient that the conversation is confidential – a patient must not fear being reported to any legal system or authorities for drinking alcohol¬ – and that the purpose of these questions is to gain a better understanding of their health habits so that they can receive the medical care they need.

Furthmore, some societies feel it is unfair for persons who abuse alcohol to use medical resources because they are making a conscious decision to drink[16]. It is imperative for physician to reiterate to the patient that unhealthy alcohol use is associated with many factors out of their control, such as genetics. However, the burden of responsibility to change must eventually fall on the patient, which is why it is important for the physician to see whether they understand the gravity of the situation and educate accordingly. As well, how a patient interacts with their social environment can influence their health, especially in the context of unhealthy alcohol use. For example, is the patient in an occupation that involves a possibility of danger to themselves or others? This may be the case if a patient operates heavy machinery or is frequently driving a vehicle. These patients have a higher likelihood of sustaining unintentional injuries such as falls, road traffic collisions, and being involved in violent situations that can also harm other individuals[17]. Therefore, in the settings of alcohol prohibition, physicians have an important role to assess preemptively the alcohol misuse risks in their patients and to guide them to the appropriate addiction treatment services.

Competing interests: None

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