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Editorial

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Alcohol and COVID-19

When there is an epidemic, rumours proliferate about protective nostrums. Various tropical islands and even Manhattan changed hands due to wars and treaties involving nutmeg, which was promoted in Europe as a protection against bubonic plague. Suddenly, in 2020, the price of turmeric increased in South Asia and Indonesia because of the coronavirus pandemic (CNA News, 2020; India Times, 2020).

Now the myth has developed that drinking alcohol can prevent COVID-19. It is described in reports from Iran (below), Thailand (below), Belarus (Sunday Times, 2020) and among Christian Orthodox clergy in the Republic of Georgia and some Eastern European countries (Radio Free Europe, 2020).

The semi-official news agency ISNA reported that 180 people in Iran died after consuming unrecorded alcohol in March, after mistakenly believing that it would protect them during the COVID-19 outbreak, but Delirrad and Mohammadi (2020) suggest that the number of alcohol poisoning cases in Iran linked to the outbreak is far greater. Because religious law prohibits alcohol, many people buy alcohol illicitly, and there is considerable evidence of toxicity of such purchases (Aghababaeian *et al.*, 2019; Ghadirzadeh *et al.*, 2019).

Mungmungpuntipantip and Wiwanitkit (2020) report an outbreak of COVID-19 disease associated with a Thai farewell party where only those who drank a shared alcoholic beverage were infected. (It is well-established that the virus is shed in oral pharyngeal secretion and sputum, so it is no surprise that individuals who shared drinking all got infected.) In Thailand, as in South Africa, the government has attempted to ban alcohol sales during the crisis to reduce socializing (ABCNews, 2020).

Publicity about alcohol-containing hand sanitizing to protect the spread of the virus may have contributed to the erroneous belief that consuming alcohol might protect against COVID-19.

A curious COVID event has been reported by a Mumbai alcohol treatment centre in which excessive hand sanitizing zeal caused an alcohol–disulfiram reaction (De Sousa 2020). Although the emergency room attributed the reaction to skin absorption, Brewer and Streel (2020) show in their experiment and review that this reaction would have been due to inhalation of ethanol vapour rather than absorption through the skin.

Chronic heavy alcohol consumption reduces immunity to viral and bacterial infections (Szabo and Saha, 2015; Barr *et al.*, 2016), a finding in alcoholic liver disease too (Chan and Levitsky, 2016). Testino (2020) has reviewed the literature and concludes that during the COVID pandemic, drinkers should be advised to abstain or to limit their consumption to one drink a day. This was reflected in the advice given by the World Health Organization (WHO 2020). Nevertheless, lockdown imposed by the government resulted in burgeoning online and in-store sales of alcoholic beverages in Western countries (e.g. Office of National Statistics, 2020). Lockdown in India, however, precipitated a health crisis in heavy drinkers unable to access their daily dose—Narasimha *et al.* (2020) graphically report a sudden rise in Bangalore hospitals of attendances for severe alcohol withdrawal, peaking over just a few days.

With the lockdown in the UK, some hospitals closed their alcohol detox beds, and attendance at outpatient clinics were also curtailed due to the wish of staff and patients to reduce contact. As in many areas of life, the necessity for remote working may lead to changes in the future. A phone app that enables real-time breath alcohol levels to be shared with the therapist shows promise for this new world of therapy at a distance (Hämäläinen *et al.*, 2018, 2020).

Patterns of consumption of alcohol interact with societal, cultural and health processes in some dangerous, but also some intriguing, ways.

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