Is Alcohol an “Essential Good” During COVID-19? Yes, but Only as a Disinfectant!

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Alcohol adversely affects people around the world on a large scale even in nonpandemic times, with about 3 million deaths attributed to alcohol use each year (Shield et al., 2020). During the current coronavirus disease (COVID-19) pandemic, a variety of government reactions related to alcohol control was seen, with some countries banning the sale of alcohol outright, and others formally declaring off-premises sales and alcohol delivery services to be “essential,” allowing for additional forms of delivery and weakened restrictions on its availability (Rehm et al., 2020; Reynolds and Wilkinson, 2020). Although sales bans, especially total bans, can be problematic, they do follow the public health rationale and the existing evidence that reducing the availability of retail alcohol will result in less consumption and, therefore, less alcohol-related harm (Chisholm et al., 2018). Declaring beverage alcohol to be an “essential good” during a pandemic, therefore, seems to run counter to this and might signal the close relationship and influence that the alcohol industry may have on policy decision-makers (Hamilton, 2020). However, there is one scenario in which alcohol could be considered essential during the COVID-19 pandemic, namely the diversion of beverage alcohol to be used as a disinfectant in response to the increased demand for such products (e.g., hand sanitizers and household cleaning agents). In the following paragraphs, this idea is further explored against the backdrop of the alcohol policy response to COVID-19, and health and safety implications are discussed.

Some outcomes caused or worsened by the consumption of alcohol, such as suicide or domestic violence, may increase due to the interaction of enforced social isolation, the disruption of usual work–life rhythms, and their associated distress (World Health Organization Regional Office for Europe, 2020a). Nevertheless, many false beliefs surround alcohol in connection with COVID-19, especially regarding the alleged health benefits of alcohol. For example, mass methanol poisonings occurred in Iran, a country severely affected by the pandemic, and in which alcohol is illegal, following rumors that alcohol would ward off the virus (at least 5,000 poisonings and more than 700 deaths reported (Farmer, 2020)). In some Iranian provinces, the death toll due to alcohol poisonings was higher than that due to COVID-19. Similar methanol poisonings occurred in Azerbaijan (Media.az., 2020) and Turkey (Regnum.ru., 2020) as consumers tried to protect themselves against the virus through ingestion of illegally sold alcohol. A recent opinion poll from Russia revealed that 90% of Russians have stockpiled alcohol at home because of the pandemic, with only 5% intending to use it as a hand sanitizer, and 69% believe that alcohol consumption helps protect against COVID-19 (Ria.ru., 2020). To counter these dangerous assumptions, the WHO published materials stating that alcohol ingestion does not destroy SARS-CoV-2, but actually facilitates infection and worsens its course, as it is immunosuppressive (World Health Organization Regional Office for Europe, 2020a; World Health Organization Regional Office for Europe, 2020b).

During the pandemic, several countries (e.g., South Africa, Thailand, and India) have introduced total bans on alcohol sales, mainly aiming to minimize the risks of alcohol-fueled domestic violence under lockdowns, reduce the burden to the healthcare system from alcohol-related health emergencies, and prevent the virus from spreading further as intoxicated individuals might not practice physical distancing and personal hygiene (Nadkarni et al., 2020; Rehm et al., 2020). Other countries have introduced partial bans for similar reasons. For instance, Georgia has closed all liquor stores as...
part of an emergency response introduced in April (Legisla-
tive Herald of Georgia, 2020), and Greenland introduced
temporary bans in some communities to protect children
from adults’ drinking (George, 2020), while Russia limited
sale hours in some regions to reduce alcohol-attributable
harm (Antonova, 2020). While the impact of these interven-
tions has yet to be evaluated, interventions in other countries
provoked some immediate reactions and consequences, high-
lighting the complexity of the issue. France, for instance, had
to revoke its local sales ban within 24 hours to avoid trigger-
ning the side effects of withdrawal in people with alcohol
dependence (The Local, 2020). In Mexico, where alcohol
sales were prohibited in several regions, hundreds of poison-
ings from the ingestion of illegal and often methanol-tainted
alcohol have occurred since May, killing almost 200 people
(Mexico News Daily, 2020).

In some, mostly high-income, countries in North America
and Europe, alcohol was declared—implicitly or explicitly—to be “essential.” For instance, alcohol retailers were
included on the lists of “essential services” in Canada, New
Zealand, the United States, and the United Kingdom, and
were allowed to remain open during lockdown (Hamilton,
2020).

Although managed access to alcohol for people with alco-
hol dependence during the ongoing pandemic can be con-
idered as an essential service as part of a harm reduction
approach (Brar et al., 2020), this should not be used as an
argument to increase availability of retail alcohol for the
general population. The reduced serving opportunities due
to the shutdown of on-premises facilities such as bars and
restaurants might have been overcompensated for by at-
home drinking occasions, especially in countries where leg-
islative changes were made to allow home delivery or online
sales as in Canada, Latvia, and the United States (Latvian
Public Broadcasting, 2020). It seems too early to evaluate the
pandemic’s impact on sales and consumption, but prelimi-
nary data indicate sales increases of 14 to 28% in high-in-
come countries such as the United Kingdom and the United
States in the first weeks of pandemic, possibly in part due to
stockpiling purchases (Nadkarni et al., 2020). In some cases,
these increases were steep—in Russia, a 30% increase in sales
was observed in the first week of April despite considerable
toughening of sales restrictions in some regions (Sergeeva
and Krylova, 2020). The described changes—the loosening
of alcohol availability regulations to allow for online sales
and delivery services, based on the argument that easy avail-
ability of beverage alcohol is “essential”—likely led to
increased consumption.

The one scenario in which alcohol could indeed be consid-
ered essential based on evidence is the diversion of beverage
alcohol to be used for disinfecting purposes. Given supply
shortages of food-grade and pharmaceutical ethanol at the
beginning of the pandemic, several countries permitted the
temporary use of fuel- and technical-grade alcohol, which
contains more impurities than beverage alcohol (Deutsche
Apothekenzeitung, 2020; Law Business Research, 2020).
Shortly thereafter, safety concerns were raised over the high
levels of carcinogens and other potentially harmful sub-
stances contained in some of these alcohols (Cable News
Network, 2020). Moreover, several methanol poisonings due
to the ingestion of hand sanitizers were observed in North
America, leading the U.S. Food and Drug Administration to
recall several products (Federal Drug Administration
(FDA), 2020).

Given these recent developments, repurposing not only
alcohol production facilities for the production of hand san-
tizers, but also turning alcoholic beverages into disinfectants,
seems to be a viable option to respond to the current needs.
For instance, a recent incident in Poland described how confis-
cated illegal vodka was used as a disinfectant rather than
being destroyed (The Brussels Times, 2020), and another
report suggested that European vineyards could turn a bil-
lion liters of wine into disinfectants in a “crisis distillation”
program (Dailymail.co.uk, 2020).

Although only solutions containing 60% alcohol are typi-
cally recommended for disinfection, recent evidence suggests
that ethanol and isopropanol efficiently inactivate SARS-
CoV-2 in 30 seconds at a concentration of >30%. Therefore,
commercial spirits (about 40% alcohol) could be suitable for
hand or surface disinfection if no other disinfectant were
available, which corresponds with anecdotal evidence that
vodka was typically used for disinfection in Soviet countries
in times of economic crisis and the resulting shortages of
medical supplies.

However, clear messages on the safe use and storage of
alcohol-based disinfectants are needed because substantial
increases in poisonings due to the ingestion of rubbing alco-
hol and household cleaning products were recorded in some
countries, including hand sanitizer exposures in children
(PR Newswire, 2020) and fatal poisonings with methanol-based
hand sanitizer (The New York Times Company, 2020). The
misuse of hand sanitizers and other alcoholic liquids not
intended for consumption is a known, but still under-re-
searched phenomenon, which is mostly observed in marginal-
ized individuals with alcohol use disorders, and factors like
affordability and physical availability of these products, es-
pecially in times of crisis, play a key role in their consumption
(Elton-Marshall et al., 2020; Lachenmeier et al., 2007; Neu-
feld et al., 2019). In the context of COVID-19, shifts to surro-
gate alcohol were observed in some countries, possibly as an
unintended consequence of alcohol sales bans (Mexico), but
also following misinformation that alcohol protects against
the virus (Azerbaijan). Due to the resulting increase in
demand for disinfectants, however, the opposite scenario
could become the norm: Cheap vodka and other spirits
(>40% alcohol) might be diverted for disinfecting purposes.

While misuse of surrogate alcohol should be avoided at all
costs, both during the COVID-19 global crisis and once it is
over, the “diversion” of alcoholic beverages to other life-sav-
ing uses is clearly warranted during the current pandemic.
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CONFLICT OF INTEREST

The authors declare that they have no conflict of interests.

DISCLAIMER

Carina Ferreira-Borges is a staff member of the World Health Organization. The authors alone are responsible for the views expressed in this publication, and they do not necessarily represent the decisions or the stated policy of the World Health Organization.

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