



Health Risks Caused by Increased Alcoholism during Covid-19 Pandemic

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Abstract

Alcohol consumption affects the physical and social behavior of the individual who consumes it, and also the lives of people around him. Alcohol consumption has been on a rise before the pandemic situations started. But after Covid-19, alcohol sales have seen surged up tremendously, as more and more people resort to alcoholism for immediate stress relief caused due to social distancing, economic uncertainties and lockdowns. Some have just got an excuse to abuse alcohol even during work hours, because they are staying home and have access to their personal bars. Organizational and social structures have been suffering due to this irrational behavior of people. However, the health impacts of excessive alcohol consumption, especially during a global pandemic needs special attention, for ensuring safety and security of the society at large. The aim of this study is to establish that alcoholism during Covid-19 can make individuals more vulnerable to cardiovascular and respiratory diseases, by affecting their immunity. The method of study focuses on review and analysis of several case reports, available literature and empirical surveys, to determine the harmful effects that increased alcoholism can have on health, and how that can expose us to Covid virus further. During a pandemic like Covid-19, people are advised to eat well; be mindful about what goes into our body, because we have to immunize ourselves. Alcohol abuse can disrupt the immunity of our body and expose us to the virus by weakening our lungs.

Keywords: Alcoholism; Excessive Alcohol Consumption; Covid-19; Global Pandemic; Respiratory Diseases; Cardiovascular Diseases; Pulmonary infections; Drinking on the clock

Introduction

Global lockdowns have enabled many to turn the happy hour into a daily life routine for stress relief. Unwinding over a glass of wine or fruit cocktail, what they stylishly call 'quarantini' might sound like a good way to cope with the despair caused by the Covid-19 pandemic [1], because life activities are paused, jobs are at stake, income is limited and people cannot communicate with each other. Alcohol consumption is a common coping mechanism to stress and historically it has increased in the United States at catastrophic times like terrorist attacks or large-scale natural

disasters [2]. Needless to say, during a world pandemic like Covid-19, when people were forced to lock themselves up in their homes for mitigation of the virus, the first thing that profited from the situation is alcohol and liquor stores. Online alcohol sales were facilitated like never before; with the door-step delivery of liquor products, people found easy access to indulge in it, especially now, whenever they wanted, because work was shifted to home environment.

Nielsen reported a 54% rise in the national sales of alcohol by the last week of March, when compared to the previous year, and they observed a 262% increase in online

sales of alcohol from 2019 [3]. As one of the major steps to prevent the spread of virus has been the stay-at-home orders, people resorted to alcoholism and substance abuse from home [4]. Alcohol consumption has consequences for health and well-being of individuals as well as those who live around them [5]. Excessive alcoholism leads to alcohol use disorder (AUD) which is a reason of major public health concern because only 7.9% of adults in USA, dealing with AUD, receive proper screening, treatment or behavioral intervention [6]. Therefore, it would be difficult to further extend the diagnosis and treatment to a greater number of patients if AUD diseases increase after increased alcoholism during Covid.

Excessive alcohol consumption can have significant impact on the immune system of human body. Some of the health effects are susceptibility to pneumonia, respiratory diseases, liver dysfunctions and cardiovascular diseases, which lead to cancer [7]. Cardiovascular diseases are responsible for more deaths in America than any other causes. However, large research studies have also concluded that varying levels of alcohol consumption, presumably low to moderate levels, have reduced risk of death due to cardiovascular health disease [5]. Historically, large-scale catastrophic events in America have resulted in higher alcohol consumption, but Covid is somewhat different from them as huge masses of people are getting exposed to the physical impacts of the deadly virus [6]. Already millions of Americans and people from all over the world are struck by the mortality of Covid-19, additionally, alcohol consumption can further accentuate the risks of exposure to the virus [6]. Observing the growing sales of alcohol, the World Health Organization has already warned that increased alcohol usage can have impending danger to human health “and also raise the propensity of risky behaviors detrimental to overall health” [4].

Methods

The objective of the study is to assess the health risks of alcohol abuse, especially its impact on respiratory functions, because Covid virus is prone to affecting people with weak respiratory functions. Hence, in this study, I am reviewing and analyzing different case reports and empirical survey on alcoholism and its relation to health problems, or immunity of the body. Clinicians have long observed the association between alcohol consumption and adverse immunity related health diseases, however, in recent decades, this association has been extended to acute respiratory stress syndromes (ARDS), fatty liver problems and certain cancerous growths, which increase the chances of post-operative problems [7]. Current reviews from *Alcohol Research* have found that alcohol damages the immune pathways and impairs the body's ability to defend against infections, injury etc. As a

result, the body cannot easily recover from organ damage or tissue injury, if the body projects over-indulgence of alcohol [7].

A U.S. survey follow-up by the National Health and Nutrition Examination found that chances of death increased in women with excessive alcohol consumption, and the level was 28 drinks per week [5]. Additionally, the NIAAA recommends aged adults, over 65 years to limit their consumption of alcohol because more than one drink per day can lead to cerebrovascular disease. Cerebrovascular disease blocks or narrows the arteries in the brain, which can suddenly stop the flow of blood to the brain, and cause stroke [5]. During Covid pandemic when aged people are more at risk of lives, alcohol consumption can make this population even more vulnerable. The relationship between excessive alcohol consumption and brain hemorrhage has been examined in a meta-analysis, where “they detected no differences in the risk patterns for the two types of stroke, but found clear evidence that heavy drinking was associated with increased stroke risk, particularly in women” [5].

Heavy alcohol consumption disrupts the body immunity in different ways from gastrointestinal dysfunction to liver inflammation. An article by Dolganiuc reviewed in a current research, explored the effects of alcohol and “hepatitis viruses on the progression of liver diseases as well as alcohol consumption's injurious effect on liver antiviral immunity” [7]. Besides pneumonia heavy alcohol consumption has also been associated with other pulmonary diseases like tuberculosis, respiratory syncytial virus and ARDS. Alcohol meddles with the ciliary functions in the upper airways and hinders the functions of immune cells like alveolar macrophages and neutrophils. It also weakens the protective function of the epithelia in the lower airways, as suggested by Simet and Sisson in their article on alcohol's impact on respiratory functioning [7]. Often alcohol's impact on lungs cannot be detected unless a permanent damage has been incurred like a respiratory infection [7]. Therefore, we need to be cautious about our consumption of alcohol, especially because Covid virus is impacting the lungs in most hazardous cases.

Additionally, alcohol is an attribution for other health risks including “high blood pressure, stroke, liver disease, cancer, and alcohol-impaired accidents and driving fatalities” [6]. Besides physical effects, alcohol abuse can contribute to depression (which is a developing problem during the pandemic), sleep problems, domestic violence, child abuse and neglect [6]. During Covid, when family members are compelled to stay home, being mentally fit and immune to distress should also be a priority, which is why we should limit alcohol consumption. Increased alcoholism during the pandemic is not an assumption. Besides the sales report in

U.S., it has also been proven in other countries. In a study conducted in Australia 30.8% of participants reported consuming alcohol much more than regular or normal amount. Some of them, including women between ages 25-64, had pre-pandemic heavy drinking symptoms [6]. Such irrational behavior is causing not only health problems but also socio-economic problems. Employees are drinking during work, and that is costing a lot on the organizations. What cannot be neglected is the deteriorating public health, to fix which the Governments have issued stay-at-home orders.

Discussion

Covid-19 pandemic is a unique scenario which suddenly attacked our world and left us speechless. To control the spread of virus, Governments asked people to stay indoors. But as a result of paused activities and social distancing, people attended to alcoholism for stress relief. Everyone drank more than regular normalcy; some even did so throughout the day, during work hours. Historically, people have used alcoholism as a common solution to stress during terrific events. The same behavior is being observed from the sales of alcohol from 2019 to present. But Covid is different because the virus itself is costing lives. From the review of case reports, empirical studies and research on this issue, I found that excessive indulgence in alcoholism can increase the risk of Covid infection. Alcoholism not only causes liver cirrhosis, pneumonia, cardiovascular diseases and cancer, but it also weakens the immunity of the body, exposing it to viral infections which can cause other pulmonary diseases or even brain stroke. Additionally, heavy drinking can impair response to stimuli, or cause added depression, which is not recommended during these uncertain times.

Conclusion

Excessive alcoholism disrupts the immunity of the body and makes it vulnerable to viral infections that impact the respiratory functions. Since Covid is a virus that attacks the pulmonary system and causes death, increased alcoholism can expose people to Covid and increase the mortality rate. Additionally, alcoholism can affect family members, our colleagues and neighbors who are around us, causing public

health hazard. Therefore, it is essential to limit consumption of alcohol during a global pandemic like Covid-19.

Recommendations

Some doctors overtime, have suggested that consuming alcohol in moderate levels can have some health benefits as well. However, what is the level of moderation, how much is considered moderate, and to what extent or in what ways does that help us physiologically, needs to be found out with more studies. Substantial data or reports on this theory is not yet available, based on which we can assume that alcohol consumption is good for the organs or immune system in our bodies.

References

1. Christensen Thor (2020) COVID-19 pandemic brings new concerns about excessive drinking. American Heart Association News.
2. McLean Hospital (2020) "Excessive alcohol consumption during the COVID-19 pandemic: McLean Hospital experts offer insights on how to address this public health crisis." Science Daily.
3. Pollard MS, Tucker JS, Green HD (2020) Changes in Adult Alcohol Use and Consequences during the COVID-19 Pandemic in the US. JAMA Netw Open 3(9): e2022942.
4. Mandal A (2020) Binge drinking is increasing, especially in women during COVID-19. News Medical Life Sciences.
5. Alcohol research & health (2000) Health risks and benefits of alcohol consumption. The journal of the National Institute on Alcohol Abuse and Alcoholism 24(1): 5-11.
6. Sugarman DE, Greenfield SF (2021) Alcohol and COVID-19: How Do We Respond to This Growing Public Health Crisis? J Gen Intern Med 36: 214-215.
7. Sarkar D, Jung MK, Wang HJ (2015) Alcohol and the Immune System. Alcohol Research: Current Reviews 37(2): 153-155.

