

Alcohol Marketing and Alcohol Use Disorders: Exploring the Impact of Advertising on Recovery

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Introduction

Restrictions on alcohol marketing in the Netherlands, and worldwide, focus mostly on restricting exposure to vulnerable groups. In terms of preventing harm caused by alcohol marketing, the term 'vulnerable people' almost always implies adolescents and young people. There is increasing awareness that the definition of vulnerable groups should be expanded to include those with Alcohol Use Disorders (AUDs). Additionally, most research focuses on the impact of alcohol advertising on young people and there is very little peer reviewed research on the impact of alcohol marketing on those with AUDs.

This article explores the impact of alcohol marketing on individuals with an AUD through semi-structured interviews. Despite the limited number of studies on alcohol advertising and its effect on those with AUDs, their experiences closely mirror the findings that are available in scientific literature. Through their stories, this article intends to draw attention to the need for increased restrictions on alcohol advertising to all vulnerable groups, not just young people. Their stories are intended to inspire researchers to further explore this topic and to motivate policy makers and health experts to push for more encompassing restrictions on alcohol marketing.

How does alcohol use impact the Netherlands?

Alcohol use is extremely common in the Netherlands, with 74% of the population over 12 years of age having consumed alcohol in 2021 (CBS, 2022). In the latest figures released by the Netherlands Central Bureau of Statistics (CBS) for 2021, 7% of people in the Netherlands were classified as excessive drinkers, while 8% were classified as heavy drinkers. Excessive drinkers are defined as those over 18 years who drank more than 21 glasses a week for men, or more than 14 glasses a week for women. The CBS defines heavy drinking as adults over 18

years of age who, per week, drink more than 6 drinks in one day (men) or more than 4 drinks per day (women) (CBS, 2022). Excessive and heavy alcohol use was prevalent in all prosperity levels, with an increase in more prosperous groups (9% excessive, 10% heavy in prosperous groups versus 6% excessive and 7% heavy in groups with lower prosperity). Education level did not affect excessive and heavy alcohol use as much as prosperity, but as education and prosperity are related, higher education level was associated with an increase of alcohol use (CBS, 2022). The Dutch Health Council advises "not to drink alcohol, and if you do, no more than one glass per day". Forty-one percent of Dutch people over 18 years state they do not drink alcohol at all, or at most one glass per day (CBS, 2020).

Alcohol use is a risk factor for over 200 health conditions, including cancer, liver disease and stroke (Alcohol Health Alliance, 2021). In 2019, alcohol was partly attributable to 8,339 deaths in the Netherlands from cancer, cardiovascular problems, liver disease, pancreatitis, diabetes, accidents, and self-harm (GBD Risk Factor Collaborators, 2019). In 2021, emergency visits caused by alcohol use were recorded in every age group, with 3,200 visits due to intoxication, and 15,300 visits due to alcohol caused accidents and violence (Veiligheid.nl, 2020). Given these statistics, it is obvious that alcohol related costs are significant. A study by the National Institute for Public Health and the Environment (RIVM) estimated that alcohol cost the Netherlands between 2.3 and 4.2 billion euros in 2013, when accounting for the cost of lower labour productivity, use of police and judiciary, and traffic accidents (National Institute for Public Health, 2019).

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (American Psychiatric Association, 2013), Alcohol Use Disorders (AUDs) are "characterized by impaired control over alcohol consumption and an increasing pattern of alcohol use despite significant damage affecting global health, the lives of family members and friends, and society in general". AUDs are a leading risk factor for early death and disability among 15 to 29 year old's and are one of the most prevalent mental health issues in our society (Landreat, et al., 2020).

The NEMESIS study examined the proportion of Dutch people who ever abused alcohol and those who are alcohol dependent, as defined by the DSM-5 (see Table 1 for definitions of alcohol abuse and alcohol dependence). Using a sample of 6,646 respondents, the study found that 14.6% of Dutch people had abused alcohol in their lifetime and that 2% were considered alcohol dependent (de Graaf, ten Have, & van Dorsselaer, 2010). In 2021, the population of the Netherlands was approximately 17,606,800 people. If we use the findings from the NEMESIS study, we can estimate that there may be around 352,000 people with alcohol

dependence in the Netherlands. Of course, this number may be higher due to underreporting of alcohol addiction in society. Many individual, environmental and alcohol related risk factors influence the chance of developing an AUD (Landreat, et al., 2020). These factors can include alcohol availability, the cultural meaning of alcohol in society, and alcohol marketing strategies (Landreat, et al., 2020).

Table 1. Classification of AUDs by the DSM-5

Classification of Alcohol Use Disorders by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (American Psychiatric Association, 2013)	
Alcohol Abuse a pattern of inappropriate alcohol consumption evidenced by at least one of the following four criteria: • Repeatedly consuming alcohol so that it is no longer possible to meet obligations at work, school or at home to a significant extent. • Drinking repeatedly in dangerous situations (e.g., driving under the influence). • Contact with the justice system in connection with alcohol use. • Continuous alcohol consumption despite known related social, occupational, psychological, or	Alcohol Dependence the person meets at least three of the following criteria: An individual: Drinks larger amounts or longer than intended Wants to reduce or stop drinking or has tried without success Spends excessive time obtaining, consuming, and recovering from the use of alcoholic beverages shows an increasing tolerance for alcohol, needing to drink more to feel the same effect.
physical problems.	 Experiences withdrawal (hangover) if drinking is reduced or stopped. The person may drink to relieve or prevent withdrawal symptoms. Sacrifices social and professional activities to drink. Continues to drink even though they know it is harmful to their health and life.

Terry's Story

...I am 46 years old. I am in recovery [for alcohol addiction] for 13 years. I did my recovery by AA [Alcoholics Anonymous], not in a hospital. I have started [several AA groups] in the Netherlands.

...I was 33 when I stopped drinking. And the first 6 months I did it on my own, not with AA. Then I have doubts, so after 6 months I went to AA to speak about my fears, loneliness, doubts. [My greatest fear was] just starting again. I was scared for my life.

Randall's Story

I am a recovering addict myself. This year, in May, I am 12 years clean. Before that I was getting addicted at a young age. At 14 I was using daily. I completely lost control. I saw many prisons, clinical facilities, psychiatric facilities. In 2009 was the last time I was in a

clinical facility for drug addicts. I found my recovery by visiting self help groups. I saw people who are clean for 3 months, 3 years, 5 years and I think wow, it must be possible. I did what they suggested I should do. I went to school; I met my wife and became a father. Now I have a very civilian lifestyle, but I like it.

... I used to think when I was in a clinical facility, ... after the treatment was done, I could go back to drinking socially. One for me doesn't exist. I take one, I want the next 100 too. I come from a working class neighborhood and there it was normal to drink. Also, nobody told me you could be addicted. When I thought of addicted people, I thought of the homeless guy with cheap beers laying on a park bench.

Janna's Story

My name is Janna. I'm 59 years old. I'm a journalist. I am chief editor of two magazines. I have two children and three lovely grandchildren. I have alcoholism, all my life. For 14 years I am in recovery.

I had no motivation [to quit drinking]. My sister came to me, to my house. She said I have made an appointment in an addiction clinic, and I was drunk at the time, in the morning. I felt that I was dying. I almost drank myself to death. At that moment, I still thought I would rather die than not drink alcohol again. So that motivation, that came later, during the treatment. I had no motivation at all [in the beginning].

I went to a treatment center. A couple of times. They say to me now, because now I am working with them...they say that I was a very tough cookie to work with. I went to treatment several times, at least four or five times. Then they sent me to South Africa, and I did primary care there and then secondary care. Somewhere during secondary care, I realized that life without alcohol was better than life with alcohol. That was my turning point.

My biggest challenge was the first two years in recovery. I was very wobbly. I was still sick. I knew that I had to be sober, but I had been drinking all my life, just all my life. I had to work very hard to stay sober. And after those two years, things got easier.

What is alcohol marketing?

Alcohol marketing incorporates a broad range of strategies to promote products to new and existing consumers and may include print, billboards, TV and radio, promotional activities online, social media, sponsorship of sports as well as music and cultural events (Alcohol Health Alliance, 2021). Alcohol marketing is a management process that follows the same '4 Ps' of marketing: product, price, place, and promotional strategies. Alcohol marketing is

everywhere: on TV, billboards, product placement, promotional items, in the supermarket, sports centres, at the bus stop. Increasingly, the alcohol industry is marketing on the internet and through social media. Social media influencers are often sponsored by alcohol companies and include products in their posts.

Alcohol Marketing Regulations

The World Health Organization (WHO) champion their SAFER initiatives to combat alcohol misuse. SAFER stands for: *Strengthening* restrictions on alcohol availability, *Advancing* and enforcing drinking counter-measures, *Facilitating* access to screening, *Enforcing* bans on comprehensive restrictions on alcohol advertising, sponsorship and promotions and *Raising* prices on alcohol through excise taxes and pricing policies (World Health Organization, 2022).

There are a wide variety of statutory and non-statutory alcohol marketing regulations in the European Union. Currently, alcohol marketing in the Netherlands is controlled by a complicated set of regulations that are difficult to enforce, mainly defined by the Alcohol Act and the Media Act of 2008. Most regulations in the Netherlands are based on self-regulation, which are designed by the alcohol industry. Many studies have shown that self-regulation is not effective to protect minors from the influence of alcohol advertising (Noel, Babor, & Robaina, 2016). Much less is known on whether self-regulation protects people in recovery from the temptations of alcohol advertising. There are loopholes to alcohol marketing restrictions as well, for example, in the Netherlands, there is a legal prohibition ban on alcohol advertising on Dutch radio and television from 6am to 9pm but this rule does not apply to broadcasters outside the Netherlands, such as RTL, which is intended for Dutch audiences but is broadcast from Luxembourg (EUCAM, 2022).

Why is alcohol advertising a problem for those with AUDs?

Alcohol marketing is ubiquitous and directly influences alcohol consumption (Babor, Robaina, Noel, & Ritson, 2017). A systematic review by Bryden et.al. (2012) found a significant positive association between exposure to alcohol marketing and increased alcohol consumption, although only one study included adults instead of youth in their sample population. There is very little scientific literature on the effect of alcohol marketing on those with AUDs. Of the studies available, many are experimental or have small sample sizes, limiting their generalizability.

Conversely, the impact of alcohol marketing on young people is well documented in scientific literature and is associated with early initiation, an increase in drinking intentions, consumption, and binge drinking (Landreat, et al., 2020). Alcohol related harm is widely recognized for young people and therefore this group is commonly labelled as 'vulnerable' to alcohol advertising. Many restrictions on advertising in the Netherlands are designed to reduce exposure to young people, however, there are other groups, such as those with AUDs, that are also at increased risk from alcohol marketing.

People with AUDs are lucrative for the alcohol industry, buying and consuming more alcohol than any other drinking demographic. In France, just 10% of people 18-75 years of age consume 58% of alcohol sold (Guillou Landreat, et al., 2020). In Australia, the heaviest drinking 5% drank 36.1% of all alcohol consumed and the heaviest drinking 20% consumed 75% of all alcohol (Cook, Mojica-Perez, & Callinan, 2022). In addition, the relative risk of health damage for those with an AUD is much higher, with 90% of deaths in those who consume more than 5 standard units of alcohol per day attributable to alcohol (Guillou Landreat, et al., 2020). People with AUDs show increased susceptibility to alcohol advertising in psychophysiology, attentional bias, cognitive processing, urges to drink and cue reactivity (Babor, Robaina, Noel, & Ritson, 2017).

Attentional Bias

Attentional bias refers to when people with the goal of consuming alcohol notice alcohol related messages more readily and pay less attention to non-alcohol related content (Babor, Robaina, Noel, & Ritson, 2017). The degree of attentional bias a person exhibits is positively associated with drinking behaviour compared to light or non-drinkers. There is evidence to suggest that attentional bias may play a role in triggering alcohol use and the maintenance of addictive behaviour. It is suggested this may cause, although no actual studies have confirmed, a positive feedback loop, where alcohol marketing becomes more noticeable as cravings increase and cravings increase as greater attention is paid to alcohol related messaging (Babor, Robaina, Noel, & Ritson, 2017).

Randall

The biggest challenge is, and science says this too, your brain gets a preoccupation for alcohol and alcohol advertising. So everywhere I looked, I saw alcohol.

Terry

An alcoholic lives every second of the day with the thoughts of alcohol. Have I enough for today, for tonight, for tomorrow? It's 24/7.

Janna

Your brain is still biased towards alcohol [in the beginning of recovery]. It's the same when you're pregnant, and all you see are pregnant women. Or you buy a white car and all the sudden, all you see are white cars.

Increased Cue Reactivity

Most literature regarding the effect of alcohol marketing on people with AUDs focuses on increased cue reactivity to alcohol related messages. Cue reactivity includes a wide range of subjective, physiological, and neurochemical responses, and these changes likely contribute to the initiation and maintenance of alcohol use, although is not the sole contributor to the chronic relapsing nature of addiction (Rose, Field, Ingmar, & Munfa, 2013). Cue reactivity is the psychological and physiological reactions resulting from exposure to a cue associated with the addictive substance (e.g., alcohol advertising) and these reactions may then trigger a person to drink. The level of cue reactivity a person exhibits may be a risk factor in relapse. Interestingly, most studies found that increased cue reactivity was proportional to the severity of the AUD, meaning that the more focused an individual was on alcohol, the more they reacted to advertisements (Witteman, et al., 2015).

Randall

It was the first year I was home [after quitting], and my son was just young. It was the first time outside of the [treatment] facility, where I had to deal with real challenges. My son was 3 months old. Everywhere I looked I saw alcohol and also drugs, because I was also a drug addict. People were drinking everywhere on television. I was getting... thirsty- so then I switched [TV channels] to Comedy Central and it was the show with Charlie Sheen, it was all alcohol and drugs, and I was getting so thirsty. I was getting to want to drink, and the supermarket was 20 meters away. So, I took my son out of bed, I took him out at 9:30 instead of 11, when he was due to eat, and I took him into my arms, and he saved me that night, stopped me from going to get alcohol.

Heavy alcohol users react strongly and pay more attention to alcohol cues than non-heavy alcohol users (Cox, Pothos, & Hosier, 2007) (Field & Cox, 2008). Petersen-Williams et. al. (2019) found that a greater proportion of heavy drinkers (as opposed to non-heavy drinkers) noticed alcohol brands in advertising in sports sponsorship, music events, signs, posters, on

clothing, special promotions, on the radio and in newspapers. Interviews conducted by Treise et. al. (2008) found that recovering alcoholics, especially in the early stages of treatment, view alcohol advertising to be triggers to further drinking.

Janna

I don't remember the brand anymore, but it was Saturday evening. My son was out of the house, and I was watching a movie, and during the movie, there was an advertisement for something strong. Something like [a spirit], and I could taste it. That was in the first year of my recovery. And I could really, actually, taste it. And I was thinking to myself, there must be a way that I can drink some alcohol. But there was none in the house and it was late, so it never happened. Yeah, that makes it very hard. And I was crying, I remember that.

Randall

Another fellow I know, [when] he was quitting, he saw all the advertisements, but when he was drinking, he never saw them. Once he decided to quit, he thought they [the alcohol companies] hung them just for [him]- to get [him] to drink again.

I also see when people recover, and its not the same for everyone, but the first year is the hardest because you are 'dry'. [I say] after 4 years they are sober. First, it's a struggle to not drink. You are like a fish out of water, you want to get back in the water. After 4 years you begin to get legs and don't need the water as much.

Terry

When I was ready to stop, they [the advertisements] didn't bother me, for myself. I know other people [in AA meetings] are bothered about the commercials. They are tempted. [In my AA meetings they complain about] TV commercials, promotions in the supermarkets.

A meta-analysis and systematic review by Schacht, Anton, & Myrick (2013) examined functional neuroimaging of the brain to understand reactivity to alcohol cues. Those who used alcohol heavily showed greater neural activation in the ventral striatum and ventral anterior cingulate cortex when shown alcohol related cues. Activation in the ventral striatum area of the brain was correlated positively with alcohol addiction, amount of drinking, poor control of drinking behaviour and reported strength of craving (Schacht, Anton, & Myrick, 2013). In an experimental study by Witteman et. al.(2015), 80 male alcoholics in treatment were measured for cue reactivity in relation to craving and relapse. Participants reported a higher craving level after viewing alcohol advertisements and high psychophysiological responsiveness to alcohol cues, proportional to the severity of their AUD (Witteman, et al.,

2015). Participants reported being exposed to an average of five alcohol marketing cues per day (Witteman, et al., 2015). A small qualitative study with nine individuals in recovery by Shortt et.al.(2017) used photojournalism to describe the biggest risks to their recovery. One predominant theme was the marketing of alcohol in the retail environment as the biggest risk to their recovery.

Janna

...The advertisements on the outside of the bar. I immediately saw that when I was shopping in Amsterdam or everywhere, I saw immediately the alcohol advertisements. For Heineken and other things. Absolutely, 100% [the ads increased my cravings].

Petersen Williams et.al. (2019) conducted a cross-sectional study in South Africa with 955 heavy and non-heavy drinkers between 18 and 65 years of age. They found that exposure to advertisements in magazines and newspapers increased the odds of having alcohol problems. They also found that noticing brands being advertised increased the odds of a person being a heavy drinker. The association may be that heavy and problem drinkers are more likely to be exposed to alcohol marketing and are more likely to notice the advertisements because they are interested. The study was cross sectional and therefore it is difficult to know the direction of the relationships and to make inferences of causality. The authors suggest that these findings support further investigation into a total ban on alcohol advertising except for at point of sale.

In a preliminary study by Guillou Landreat et.al.(2020) it was found that patients with AUDs were widely exposed to alcohol marketing cues, although they failed to recognize their exposure most of the time. Most advertising and consumer choice research maintains that consumers are rational agents making conscious decisions, however, some research in psychology argues that messages can be unconsciously absorbed and lead to cueing and automaticity in behaviour (Theus, 1994) (Martin & Morich, 2011).

Taking Action- The case for expanding alcohol marketing regulations

Terry

..you cannot [avoid alcohol advertising]... Because in the supermarkets I go two, three times a week and you see it. Ban it from the supermarket. Concentrate it in special places....only in liquor stores.

Randall

No, I don't think..[you can avoid alcohol advertising]. Usually [I see alcohol advertising most] when I watch television in the evening. Social media in the morning, also in midday and in the evening. ...

Yeah, I find advertising annoying. On the bus, billboards. Why does it have to hang in the middle of the street? The first year, it was making me thirsty.

.. When I go to the supermarket I get confronted every time. Every time you pass the wine and beer.

At the billboards at the soccer games....it shouldn't be in games. Sports is hell too. I like sports and I also think at the football clubs, we have breaks, and they drink a lot there. Don't forget- 20 years ago the cigarette industry was very strong too...[the] tobacco industry used to be there, but we told them they couldn't come anymore. We can do the same with alcohol companies. It is not producing health for people.

Janna

No... I could not [avoid alcohol advertising]. Not if you go shopping or to the mall. Or if you see a movie. Go to a terrace. You can't avoid it. Or watch television. In sports. It's everywhere.

I think just like cigarettes, no alcohol [advertising] at all. We don't advertise for heroin or cocaine, but of course they are not legal, and alcohol is. That's my question as well...why do we allow it [alcohol advertising]?

It's stupid. When I was in South Africa [in treatment], we were allowed to go for a walk every day and there was a nurse with us. And every day outside the clinic there were two drug dealers in a car parked outside [waiting for customers]. It's almost the same, [the alcohol advertising], isn't it? It's like [when there is] alcohol advertising right outside the [treatment] clinic. It's so harmful.

Governments are responsible for the health and protection of their citizens from substances that cause ill health. Vulnerable populations, such as those with AUDs, have a right to be protected from the influence of the alcohol industry. The population considered vulnerable to alcohol advertisements is not insignificant, with 14.6% of Dutch people reporting ever having abused alcohol and 2% considered alcohol dependent (de Graaf, ten Have, & van Dorsselaer, 2010). In addition to young people and those with AUDs, there are many other groups that may benefit from increased regulation. These may include adult children of alcoholic parents,

women at risk of alcohol exposed pregnancies, and people with personality disorders that cause increased sensation seeking or impulsiveness, such as conduct disorder or attention deficit hyperactivity disorder (Schacht, Anton, & Myrick, 2013).

Brown et.al. (2017) call for a near total statutory ban on alcohol advertising, promotion, and sponsorship, like population level protections from tobacco marketing and breast milk substitutes. In addition, there must be adequate funding and staffing for effective enforcement of the ban. Moreover, a near total ban would create a healthier environment for all people, not just those at higher risk of alcohol related harm.

Further research is needed on the effect of alcohol advertising on vulnerable groups other than adolescents and young people, such as those with AUDs. Currently research on the effect on alcohol advertising to people with AUDs is limited. More research will help expand the definition of those vulnerable to alcohol marketing from adolescents and youth and clarify that current restrictions on advertising are not protecting vulnerable groups adequately. The cumulative physical and social health ramifications of alcohol in modern society necessitates further action to create supportive environments for healthy decision making.

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APPENDIX A

Semi-structured interview questions

Influence and perception of alcohol marketing on recovered/recovering alcoholics

Thank you for meeting with me. My name is Renee Quinn, and I am a student researcher working with the Dutch Institute for Alcohol Policy (STAP). STAP is a non-profit, non-government organization dedicated to raising awareness and increasing knowledge on the impact of alcohol advertising in the Netherlands.

Most alcohol marketing regulations and research regarding the impact of alcohol marketing focuses on children, adolescents, and young adults. There is very little scientific literature specifically on the impact of alcohol marketing on vulnerable groups such as recovered or recovering alcoholics. STAP is interested in raising awareness on how alcohol marketing impacts not just young people but also recovered alcoholics.

I wanted to ask you a few questions regarding your experience with alcohol and the impact of alcohol marketing on your recovery.

Please know, if you do not want to answer a specific question, or if you would like to stop the interview at any time that is your right.

Thank you for helping us explore this emerging topic and hopefully together we can raise awareness and encourage more research and regulations to address this issue.

- 1) Is it ok if I use some aspects of your story in my article?
- 2) For the purposes of this article, your name and any identifying details will remain anonymous
- 3) Can you tell me about your experience with alcohol? When did you know alcohol was a problem for you?
- 4) Once you decided to guit alcohol, how did you do it? What worked? What didn't work?
- 5) What were the biggest challenges when quitting?
- 6) What is the biggest contributing factor to your success(es)?
- 7) Do you think alcohol advertising impacted your recovery? If yes, how so?
 - a. What media type was the most noticeable to you? (e.g., TV, internet, social media, in-store promotions like supermarkets)
 - b. What type of ads were the most concerning to you? (e.g., promotions, ad content, seasonal ads) Did these types of ads increase craving for alcohol?
 - c. Can you share a specific example? A 'for instance'?
 - d. Was there a time of day that you noticed advertising the most?
 - e. To what extent could you avoid alcohol advertising?
 - f. In your opinion, what would be the best way to reduce exposure to alcohol advertising? What would be your advice to others?
- 8) I think we have all had the experience of searching for a product or topic online and then our social media and internet advertisements change to exactly what we were just searching for. For example, if I search for information on a new car, car advertisements then pop up everywhere online for me.
 - a. Have you ever felt targeted by algorithms on the internet or social media? If yes, please explain.
 - b. Have you ever noticed an increase in the amount of alcohol advertisements after researching alcohol groups or recovery online?
- 9) Do you have any friends in recovery who have noticed or have mentioned alcohol advertising to you?
- 10) Do you have any other comments you would like to share?

Thank you very much for your participation!



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