

BRIEF REPORT

The behaviour of alcohol-dependent drinkers of spirits during level 4 COVID-19 lockdown in Auckland, New Zealand

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Abstract

Introduction. Behaviour of alcohol drinkers during previous major public health or economic crises has varied, with reductions in use generally occurring during periods of reduced availability. This study aimed to discover the behaviour of a group of dependent drinkers of spirits during a 33-day period of complete closure of physical stores selling spirits during COVID-19 lockdown in Auckland, New Zealand, March 2020. **Methods.** Electronic clinical records of drinkers waitlisted to complete an alcohol detox at the in-patient service were followed from day 1 of lockdown and outcomes at the end of the period analysed. **Results.** Drinkers of spirits were statistically more successful in stopping drinking ($P = 0.002$) than those of wine or beer. Only 26% chose to switch to an alternate alcohol type initially. **Discussion and Conclusion.** A sudden reduction in availability of spirits resulted in positive behaviour change in spirits drinkers compared to those of other alcohol types, aided by the support of detox services. Internet alcohol purchasing, while not used by this group, deserves close future scrutiny due to its potential to increase alcohol availability in dependent drinkers. [Falkner C, Neave H. The behaviour of alcohol-dependent drinkers of spirits during level 4 COVID-19 lockdown in Auckland, New Zealand. *Drug Alcohol Rev* 2022;41:9–12]

Key words: alcohol, dependence, COVID-19.

Introduction

Research shows that reducing the availability of alcohol, either through increasing price or limiting the number of retail outlets, can decrease consumption across the wider population [1,2] with heavy alcohol drinkers who have physiological dependence somewhat less sensitive to reduced availability [3,4].

Social and economic restrictions imposed around the world during the COVID-19 pandemic [5] provided a natural experiment, changing the availability of alcohol across populations. Widespread closure of on-premise retailers (where alcohol is consumed on site) occurred due to social distancing requirements. Many countries considered alcohol an “essential good” or service [6] and off-premise outlets (selling liquor to consume elsewhere) continued in some locations (Australia and UK) [5]. In others (South Africa, India), complete alcohol bans were in place with

subsequent reports of increased rates of suicide and hospital presentations of people in severe alcohol withdrawal [7–11].

In Auckland, New Zealand, the government response included a 33-day level 4 lockdown [12] beginning on 25 March 2020 requiring the closure of both on- and off-premise liquor outlets. Supermarkets, which sell beer, wine and cider, but not spirits, remained open. Spirits were only able to be purchased online during this period with long delays, minimum order and delivery fees imposed.

This study aimed to utilise the natural experimental conditions of lockdown level 4 in New Zealand by following the drinking trajectory of physiologically dependent alcohol users waitlisted for detoxification at Pitman House, Waitemata District Health Board. We aimed to describe the drinking choices and behaviour of dependent drinkers of spirits over the time that spirits were effectively unavailable.

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Methods

Participants

Participants included all clients waitlisted for alcohol detoxification at the inpatient unit at Pitman House Pt Chevalier, Waitemata District Health Board, Auckland at the beginning of level 4 lockdown. All clients had been seen at one of the outpatient clinics in the weeks leading up to lockdown and their physiological dependence confirmed.

Procedure

Data collected on each client included age, sex, number of New Zealand standard drinks (containing 10 g alcohol) consumed in 24 h, date seen in clinic and assigned to the waitlist, and whether they had previously had a detox with the service as a marker of drinking severity.

Clients were categorised by alcohol type used in their waitlist assessment into beer, wine, spirits or cider. Where multiple types were used the client was assigned to the group that reflected the majority of the alcohol they used.

Electronic client notes containing regular telephone and face-to-face nursing assessments were followed through to end of level 4 lockdown on 27 April 2020. Outcomes were classified as those who were successful in stopping drinking during the lockdown period (either on their own or post detox) and those who were unsuccessful (either continuing, relapsing after a detox or switching to an alternative alcohol).

Instrument

An Excel spreadsheet of all clients waitlisted for an inpatient detox was set up on the first day of level 4 lockdown. Shapiro-Wilk testing was used to test for

normality, analysis of variance was used to compare means as both standard drink and age data was continuous, and χ^2 testing for categorical data as each of the individual counts was large enough to justify using this test. Collation of data occurred in Excel and analysis using SPSS v 26.0.

An online application was submitted to Health & Disability Ethics Committee; however as the study was conducted as an audit of available clinical notes, Committee review was not required.

Results

Sample characteristics

The total number of clients waitlisted for alcohol detox was 67. Six clients were excluded because they were no longer available for detox (died, stopped prior to lockdown, moved, in prison). Sixty-one clients remained in the study: 14 beer drinkers, 24 wine drinkers, 21 spirits drinkers and 2 cider drinkers. The cider drinkers were excluded due to the difficulty assigning them to a larger group. Only five clients used a combination of beverages (three in the beer group and two in the spirits group) and were assigned to the group reflecting the majority of the standard drinks consumed per day. The mean ages of the remaining groups, sex, numbers of standard drinks consumed and whether a client had had a previous detox (as a marker of drinking severity) was not significantly different between groups (Table 1).

Contact was lost with four further participants during the 33-day period and these were then excluded, making the totals included in the final analysis 13 beer drinkers, 19 spirits drinkers and 23 wine drinkers: 55 drinkers total.

Table 1. Demographic variables

	Beer, mean (SD)	Wine, mean (SD)	Spirits, mean (SD)	One-way ANOVA <i>P</i> -value
Age, years	49.07 (13.75)	46.88 (14.39)	50.62 (13.1)	0.66
Std drinks/24 h, <i>n</i>	16.96 (6.11)	18.02 (7.58)	21.08 (9.45)	0.271
	Beer, <i>n</i>	Wine, <i>n</i>	Spirits, <i>n</i>	χ^2 <i>P</i> -value
Female	4	15	9	0.133 ^a
Male	10	9	12	
Past detox: no	8	14	7	0.195 ^b
Past detox: yes	6	10	14	

^aEstimated value = 4.359, *df* = 2. ^bEstimated value = 3.27, *df* = 2. ANOVA, analysis of variance.

Table 2. Drinking outcomes

Outcome	Other type		Spirits	Total	Classification
	Beer	Wine			
Stopped on own	2	1	4	7	Successful
Stopped post detox	1	1	6	8	Successful
Relapsed post detox	0	4	3	7	Unsuccessful
Continued	10	17	1	28	Unsuccessful
Switched	0	0	5	5	Unsuccessful
Total unsuccessful		31	9	40	χ^2 <i>P</i> -value = 0.002 ^a
Total successfully stopped		5	10	15	
Total		36	19	55	

^aEstimated value = 9.411, df = 1.

Analysis

At the end of lockdown level 4, 15 clients had successfully stopped drinking, 8 of these following a detox at home and 7 without assistance. Dividing the groups by type of alcohol revealed considerable differences between groups.

Of the 19 spirits drinkers, 10 successfully stopped drinking (4 on their own and 6 post detox), making their successful stopping rate 52.6%. Conversely, of the 13 beer drinkers, 3 stopped, and of the 23 wine drinkers, 2 stopped, with a combined successful stopping rate of 13.9%. The difference in stopping percentages between spirit drinkers and other groups was statistically significant ($P = 0.002$).

By the end of lockdown, 9 of the spirits drinkers were still drinking, 5 had chosen to switch alcohol type, 3 following unsuccessful detoxes and 1 had stocked up on spirits prior to lockdown.

All the unsuccessful drinkers (those who relapsed or continued drinking) remained at the dependent level and stayed on the waitlist. There were no reports of difficulty accessing alcohol even though supermarkets were the only physical places selling alcohol. Only one member of the study mentioned briefly using online alcohol purchasing, however they abandoned this method as wait times were too long (Table 2).

Discussion

During level 4 lockdown when spirits became effectively unavailable, spirits drinkers were more successful in stopping drinking than beer and wine drinkers. Ten of the group of 19 spirits drinkers (52.6%) quit alcohol and remained stopped for the lockdown period. Only 5 of the 36 beer and wine drinkers successfully stopped drinking with a stopping rate of 14%: $P = 0.002$. This

result is surprising as research during non-pandemic times has shown that the most common strategy employed by heavy or dependent drinkers when alcohol becomes unaffordable is to switch to a more affordable alternative: either by buying a lower quality product or switching from on- to off-premise alcohol [4,13]. From previous research in this same population of Auckland dependent drinkers [14], we would have expected switching rather than stopping to be a more common strategy, whereas only 26% of the group chose this option initially. With no opportunity to switch to any spirit type beverages, switching may have been less appealing.

One could argue that this group of spirits drinkers were already wanting to quit alcohol; however, the beer and wine groups were also wanting to quit. The fact that so few of the beer and wine drinkers stopped despite closure of all outlets except supermarkets suggests that physical availability was minimally changed for most people and that the inconvenience involved in purchase lines was not sufficient to change behaviour. Reducing the physical availability of alcohol by factors like distance to shop have been shown in general population surveys to impact on drinking, however not to nearly the same extent as price [15].

Online alcohol purchasing is rarely used in this population group in Auckland and only one person in the sample briefly used it during level 4 lockdown. Wait times for delivery were long and a minimum purchase amount or delivery fee was required for online alcohol purchasing in New Zealand, deterring those dependent on daily use of alcohol and very price sensitive groups. Those without electronic means of communication or payment were also excluded.

Weaknesses of the study are its small size and short length: importantly though the spirits drinkers who stopped stayed stopped until the end of level 4 lockdown when spirits became available. They were not

followed after this date. Strengths are that this was a natural experiment, with monitoring of actual rather than hypothetical behaviour and that the clients were unprepared for the sudden cessation of spirits sales. Removal of an entire class of alcohol has not previously been studied.

Implications/Conclusion

The most effective strategies to reduce population alcohol intake involve reducing its physical and financial availability. The behaviour of the dependent Auckland spirits drinkers waitlisted for detox during lockdown level 4 is consistent with that seen in other times of dramatically reduced availability [11]. Although COVID-19 type restrictions on access to spirits are not feasible in usual times, this result reiterates the fact that currently physical access to wine and beer is generous and that reducing availability of alcohol is a powerful tool for reducing consumption even in dependent drinkers as long as treatment services are available. Before making any policy changes which might result in online alcohol becoming more physically and financially available, careful consideration of impacts on population consumption [16] and particularly consumption in vulnerable groups such as dependent drinkers would be prudent.

Conflict of Interest

CF was employed by Waitemata District Health Board in the position of medical officer for the duration of study. HN has no conflicts of interest to declare.

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