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Feasibility of Solution-focused Brief Therapy for individuals with alcohol use in primary health care

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ABSTRACT

Chile presents one of the highest rates of alcohol use in the continent. A feasibility pre-post-study was conducted to evaluate alcohol use patterns and other mental health issues in 14 patients with hazardous alcohol use, after 3.6 Solution-focused Brief Therapy sessions in primary care. Non-parametric inferential statistical analyses were conducted. Statistically significant decreases and large effect sizes were found in patterns of alcohol use, consequences of alcohol use, and depressive symptoms. Results build on prior literature. Implications for practice, policy, and research related to culturally sensitive brief interventions implemented by social workers in Chile are discussed.

KEYWORDS

Alcoholism; primary health care; Solution-focused Brief Therapy

Introduction

Alcohol is a psychoactive substance that, when used hazardously, might cause fatal consequences. Hazardous alcohol use is a problem with a significant impact on people's health worldwide. According to the World Health Organization (World Health Organization, 2024), hazardous alcohol use accounts for 4.7% of global deaths, which equals 2.6 million deaths per year. Hazardous alcohol use implies that individuals' health is exposed to a series of risks due to the amount ingested (Margozzini, 2018). This amount is measured in grams of pure alcohol, and the damage can be physical, psychological, or social; toward the consumer or others, and can cause family problems. Additionally, alcohol use can lead individuals to alcohol use disorders (AUD), intensifying the consequences of abusive alcohol use. In the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) of the American Psychiatric Association (American Psychiatric Association, 2013), AUD has been defined as: "a problematic pattern of alcohol use leading to clinically significant impairment or distress" (American Psychiatric Association, 2013).

The World Health Organization's Global Status Report on Alcohol and Health (2024) indicated that more than 200 health problems in individuals, representing 4.6% of global morbidity were attributable to alcohol use. Alcohol use can trigger increased mental health problems or non-communicable diseases like cancer, epilepsy, cardiovascular diseases, and cirrhosis (World Health Organization, 2024). All these health issues reduce the life expectancy of individuals with abusive alcohol consumption worldwide.

At the local level, the report rates Chile as one of the countries with the highest average consumption of pure alcohol in the Americas, with 6.7 l of pure alcohol per capita in adults and 9.6 l of pure alcohol per capita among drinkers, compared to the regional averages of 10.2, and 12.5. In 2018, Chile had the highest percentage of the population with AUD (8.5%) in the

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Americas (World Health Organization, 2019). In terms of mortality, around 10% of deaths in the country are attributed to alcohol consumption, that is 9,500 deaths per year and 27 daily deaths in 2018 (World Health Organization, 2019). According to the Chilean National Survey of Health (Ministerio de Salud de Chile, 2017), 11.7% of adults 18 and older had risky alcohol use. Additionally, in Chile, alcohol use is one of the main causes of the loss of healthy life years, referred to by the acronym DALYs (Margozzini, 2018).

Brief Interventions (BI) are defined as "any therapeutic or preventive activity delivered by a health worker within a short period of time" (Babor, 1994, p. 1128). As BI are implemented in reduced time, they are more appropriate to be delivered at primary health care (PHC). As such, BI might be more feasible to implement psychosocial interventions with populations with risky or harmful alcohol use in a few sessions. The use of BI in primary care to reduce alcohol use is widely supported in international literature, reporting results measured up to 12 months after the intervention (Kaner et al., 2018). Kaner et al. (2018) categorized BI among minimal brief interventions (single session of 5 to 30 minutes) and extended brief interventions (2 to 5 sessions). Regarding the severity of alcohol use, BI based on models such as motivational interviewing have been effective for individuals with risky alcohol use and binge drinking, named "heavy drinkers" (Kaner et al., 2018). Furthermore, outcome research on BI in individuals with AUD has shown no significant effects in a recent umbrella review (Botwright et al., 2023). The strategy for screening, brief intervention, and referral to treatment (SBIRT) has shown better results than only BI for individuals with hazardous and binge alcohol use; although the effectiveness of brief intervention models in more severe AUD cases is still under discussion (Botwright et al., 2023; Moyer et al., 2002). In this sense, individuals with risky, harmful alcohol consumption, or low-severity AUD might benefit from BI (Chi et al., 2022; Kaner et al., 2018). The effectiveness of BI has also been studied in alcohol-related problems, where patients who received a BI were less likely to be arrested for driving under the influence of alcohol (Schermer et al., 2006) and to report negative consequences of alcohol use (Babor et al., 2007). Likewise, a reduction in deaths and non-fatal injuries has been reported when comparing individuals who have received brief interventions and those who have not (Dinh-Zarr et al., 2004). Most systematic reviews have shown results for high-income countries and do not report outcomes from diversity of ethnic groups (Botwright et al., 2023), probably due to the lack of outcome studies in regions such as Africa or Latin America. For example, in the Latin American context, there are very few studies on the outcomes of BI, five in Mexico (Ayala et al., 1998; Cordero et al., 2009; Campillo et al., 1992; Quiroga Anaya et al., 2007; Salazar Garza et al., 2012), two in Colombia (Flórez Alarcón & Gantiva Díaz, 2009; Gantiva Díaz et al., 2003), one in Costa Rica (Montero et al., 1992), and two in Chile (González Suitt, Geraldo, et al., 2019b; Poblete et al., 2014). Most studies show encouraging results after implementation in terms of reducing alcohol consumption patterns measured in frequency and quantity. However, more outcome studies are needed to strengthen the available evidence and to expand knowledge, especially in Spanish-speaking populations in Latin America. Indeed, though the study on SFBT in Chile shows positive trends, it is a pilot study that tested the linguistic adaptation of the model to Chilean language and culture (González Suitt, Geraldo, et al., 2019b). Consequently, there is a need to conduct studies in different settings to explore the feasibility and applicability of the model across primary care developing practice-based evidence.

Particularly in Chile, around 68% of Chilean population is registered to a primary health clinic. Even though the general distribution between sex is around 50%, their distribution varies across age groups where among individuals from 25 to 49 years old, women exceed men by 7% to 11% (Fondo Nacional de Salud, 2020). Teams in Chilean primary care implement the Detection, Intervention, and Reference (DIR) Program, using the AUDIT (Alcohol Use Disorders Identification Test) or the ASSIST (Alcohol, Smoking and Substance Involvement Screening Test), as screening instruments; a brief intervention such as brief counseling; and reference to more complex interventions, when necessary, within the framework of preventive action and early detection, following the strategy proposed by Babor et al. (2007). This setting provides broad possibilities to conduct studies that incorporate evidence-based models in real-life health services.

While typical BI stands under social learning and cognitive approaches and involve feedback regarding alcohol consumption, providing information about risks associated to alcohol use and benefits of reducing alcohol use, advice for alcohol reduction, analysis of alternatives to change behavior, and empathetic attitude from the practitioner (Kaner et al., 2018); Solution-Focused Brief Therapy (SFBT) was developed from two theoretical traditions: family systems theory and social constructionism (Lipchik et al., 2012). From the family systems perspective, the influence is related to understanding that problems originate from difficulties in everyday life (Fish, 2011). Meanwhile, the influence of social constructionism is observed in the relevance attributed to the process and conversation techniques, considering them equivalent to the therapeutic process for individuals (Trepper et al., 2012). SFBT fits within the conceptualization of BI as it is brief and typically lasts between three and six sessions. SFBT was developed in Milwaukee, during the 1980 decade by Steve de Shazer and Insoo Kim Berg, who were interested in investigating what works in therapy. Main techniques include presuppositional questions to look for exceptions (eg: what do you do when you are sober?), pre-session change (what has been better since the last time you came?), coping strategies (what did you do to stop drinking and come here today?); scaling questions (on a scale from 0 to 10, where 0 is the worst time and 10 means that you don't need to come here anymore, at what level you are right now?); relationship questions (what your kids note differently in you when you are sober?). These techniques are part of a conversation about solutions, guided by a practitioner who stands from a not-knowing position, avoids judgments and advice to get better results, and seeks resources, strengths and what works for the individual. Thus, the SFBT model assumes there are current behaviors that are solutions for the individual and provides a therapeutic approach that works with the individual's desired future (Trepper et al., 2012). Moreover, SFBT has demonstrated to be efficacious with individuals with AUD from mild to severe (Hendrick et al., 2012). This feasibility study aims to report the results of the implementation of SFBT in primary health care in Chile, building on prior research on linguistic adaptation and pilot implementation (González Suitt, Franklin, et al., 2019a; González Suitt, Geraldo, et al., 2019b). The current study hypothesizes that participants will improve their alcohol consumption patterns (average consumption and maximum drinks in the last week), decrease the consequences of alcohol consumption and depressive symptoms, and improve their family health, after participating in an SFBT intervention provided by trained social workers.

Methodology

Design

This is a feasibility study based on a pre-experimental pre-post repeated-measures design, with a single group and one independent variable, in this case, an average of 3.6 sessions of SFBT. The purpose of this study was to conduct an evaluation of SFBT applied by social workers to individuals with hazardous alcohol consumption in primary care in a low-income urban county, named Renca, located in Santiago, Chile. Eight primary care social workers from four clinics were trained in the SFBT model in a 16-hour training, including the theory and practice of SFBT techniques based on the manual published by the Solution-focused Brief Therapy Association (Bavelas et al., 2013). This training was conducted by two professionals, a social worker with a PhD degree and advanced training in the model, and a clinical psychologist with a master's degree trained in the model, between September and October 2018. Screening and invitation to the study was initiated in November 2018 and finished in June 2019. Intervention sessions were conducted between November 2018 and September 2019. This study was reviewed by the Institutional Research Committee from the Pontificia Universidad Católica de Chile, ID: 180108001.

Sample and procedures

The sample was convenience-based. Since in primary care, the AUDIT is part of the health preventive exam for adults 18–65 years old implemented on a routinary basis typically by nursing technicians, the

research team agreed that when patients were detected with risky alcohol use, scoring equal to or higher than 8 on the AUDIT, they would be invited to participate in the brief treatment program with the social worker from their healthcare clinic, previously trained in SFBT. If patients agreed to participate, a research assistant obtained informed consent. Once the patient signed the informed consent document, the research assistant administered baseline instruments, and the first appointment was scheduled. The remaining appointments were scheduled by the professional, while the follow-up instruments were applied by the research assistant. Inclusion criteria were obtaining a score of 8 or more points on the AUDIT, speaking Spanish, and being over 18 years old. Exclusion criteria included unwillingness to participate, inability to communicate in Spanish, and having a severe mental illness such as schizophrenia. The research assistant reminded them of scheduled appointments to ensure attendance. Participants received a USD 5 reload on their transportation card as compensation for time and transportation costs each time they answered measurement instruments.

We expected to recruit 50 participants, calculating to reach them during five months, based on the amount of AUDIT applied historically by the clinics (2868 during 2018; Ministerio de Salud de Chile, 2018), the estimated percentage of detection of risky alcohol use (8%; Ministerio de Salud de Chile, 2021), and 60% of acceptation to participate. However, 34 patients were referred to the program during eight months (we extended the time of recruitment), 32 signed informed consent, 26 started to attend sessions, and 16 attended three or four sessions. Patients who attended one or two sessions were not included in this study because we could not apply the post and follow-up measures.

The intervention evaluated in this study consisted of 3 to 4 individual 30-to-40-minute-long sessions of SFBT, conducted by a social worker. The fidelity of the SFBT application in sessions was monitored through audiovisual recording, which was analyzed qualitatively by the psychologist who served as the model's trainer, and who provided them with written feedback to ensure adherence to the SFBT. This procedure was intended to keep track of fidelity in the implementation and to identify any divergence. Only one professional, who did not attend all training hours, did not faithfully adhere to the model in their interventions, and the 2 cases she attended were excluded from the study, thus the sample analyzed was 14 (Martin, 2008).

Instruments

The outcome measurement instruments used in this study are described below:

Timeline follow-back

This is a self-report instrument to observe the quantity and frequency of alcohol consumption, consisting of a calendar to record individuals' alcohol use during the previous week (Annis et al., 1996). In this study, the average amount of alcohol consumption during the last week and the maximum amount of alcohol consumed in one day during the last week were calculated. This instrument has been validated in Mexico, using criterion validity by comparing it with a self-report tool for quantity and frequency of alcohol consumption (Annis et al., 1996). For its interpretation, Ayala et al. (1998) established pattern categories according to the number of drinks consumed on one occasion, where low = 1 to 4 drinks; moderate = 5 to 9 drinks; excessive = 10 or more drinks. According to the National Institute on Alcohol Abuse and Alcoholism of the United States (National Institute on Alcohol Abuse and Alcoholism, n.d.), a standard drink contains 14 g of alcohol. In this study, the quantities of drinks were converted according to the type of alcoholic beverage, which is indicated in the instrument instructions.

Short inventory of problems (SIP)

The SIP consists of 15 items designed to assess the presence of consequences from alcohol use. It was developed by Forcehimes et al. (2007). This is a shortened version of the Drinker Inventory of Consequences (DrInC) by Miller et al. (1995). It comprises 5 dimensions: intrapersonal, interpersonal, physical, economic, and social responsibility. For this study, this instrument was dichotomized, where

0 = No and 1 = Yes, so that the total score obtained refers to the number of consequences reported by participants during the last three months. For example, "I have failed to do what is expected of me because of drinking alcohol or using drugs."

PHQ-9 depression scale (patient health questionnaire)

The scale consists of 9 items and aims to assess depressive symptoms during the past two weeks, based on DSM-IV criteria (Kroenke et al., 2001). It uses a Likert scale to reflect the severity of symptoms: 0 = Never, 1 = Some days, 2 = More than half the days, and 3 = Nearly every day. As the score increases, depressive symptoms become more severe, for example: "Little interest or pleasure in doing things." This scale has been validated in Chile (Baader et al., 2012).

Family health scale SALUFAM

This instrument is composed of 13 items and aims to screen for family vulnerability in primary health care. It was developed by Püschel et al. (2012). The scaling used is a 5-point Likert scale where: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always. As the item score increases, the perception of "family support and agreement" improves, for example: "We can rely on the support of others when something goes wrong."

Analysis plan

To analyze whether there were changes in the dependent variables, non-parametric inferential statistical analyses were carried out using the statistical software JASP (Version 0.16.1) and RStudio (Version 1.4). These analyses aimed to establish whether any of the following dependent variables were affected by the intervention (independent variable): "average of alcohol use in the last week," "maximum alcohol use on one occasion," "consequences of alcohol use," "depressive symptoms," and "family health vulnerability." The observations were organized into 14 blocks, each block formed by one individual and exposed to the same intervention under different conditions. The repeated measures design with a single group and an independent variable was conducted under three experimental conditions: 1) pre-intervention observation, 2) post-intervention observation, measured at the end of the intervention, and 3) follow-up observation, measured one month after the intervention ended (Goss-Sampson, 2019).

Initially, a descriptive analysis was conducted to obtain means and standard deviation, followed by an inferential analysis through the Friedman test for non-parametric repeated measures ANOVA, for each dependent variable (Conover, 1999). Variables that showed significant differences among different observations in the Friedman test were further analyzed through Conover's Post Hoc test, employed to identify significant differences when there are three or more experimental conditions; in this case between pre-intervention and post-intervention observations, and between pre-intervention and follow-up (Conover, 1999).

Effect size refers to the magnitude of the change when comparing the means between two data groups. The magnitude of the effect is verified by observing the difference between the means of the groups adjusted by their variance. In the case of this design, where the subject is their own control, the sample consists of n pairs of observations X and Y, and the effect size can be calculated using Cohen's d_z formula (Cohen, 1998). The magnitude of the effect contributes to estimating a clinical decision threshold for interpreting the data. Thus, the interpretation is as follows: if $d_z < 0.2$ the intervention is considered ineffective; if $0.2 \leq d_z \leq 0.4$ the intervention had a "small effect;" if $0.4 < d_z \leq 0.8$ the intervention had an "intermediate effect;" and if $d_z > 0.8$ the intervention has a "large effect" (Cohen, 1998).

Results

The participants were 14 individuals, 12 men (85.7%) and 2 women (14.3%). The average age of men was 38.9 years (SD = 12.8), ranging from 23 to 61 years; while women had an average age of 46.0 years

(SD = 16.9), 34 and 58 years old. Regarding income, 35.7% of participants earned less than 512 USD per month and 64.3% reported wages equal to or greater than 512 USD. In terms of education level, 7.1% of participants achieved 8 years of education, 78.6% achieved between 9 and 12 years, and 14.3% achieved 13 or more years of education. Both the education level and monthly incomes of participants have a differentiated distribution between men and women. Women had completed high school and received lower monthly wages than men, which did not exceed 512 USD. In contrast, 75% of men earned wages exceeding 512 USD per month. Nevertheless, among men, the level of education varies widely: 8.3% of them achieved primary school, 75% achieved some high school, and 16.7% of men achieved higher education.

The analyses of the intervention results are presented in Tables 1 and 2. When analyzing the dependent variable, "average of alcohol use in the last week" ($\chi^2_{obs.} = 6.000; df = 2; p \leq 0.05$), it showed significant differences in at least one of the experimental conditions. In the pre-intervention observation, the average score was 2.645 (SD = 1.977), while the post-intervention average score was 0.952 (SD = 1.288), and in the follow-up, the average score was 1.152 (SD = 1.284). Multiple comparisons analysis through Conover's Post Hoc test found statistically significant differences and a large effect size in the average number of drinks during the last week when comparing pre-intervention to post-intervention observation ($T - Stat = 2.360; df = 26; p < 0.05; d_z = 1.092$); although no significant difference was found when comparing pre-intervention and follow-up observations, the effect size remained large ($T - Stat = 1.770; df = 26, p > 0.05; d_z = 0.963$). When analyzing the dependent variable "maximum of alcohol use on one occasion," it showed statistically significant differences considering the three observation moments ($\chi^2_{obs.} = 7.569; df = 2; p < 0.05$), showing a decrease in the average number of drinks consumed in a single day, during the last week, between the pre and post-intervention observation. Likewise, the effect sizes were large in both comparisons (pre-post and pre-follow-up), as in the pre-intervention measurement, the participants reported an average maximum of 9.689 drinks (SD = 6.801) – corresponding to a high level of consumption – which decreased in the subsequent observations. While in the post-intervention observation, the average was 3.753 drinks in one day (SD = 5.768; $d_z = 0.982$), in the follow-up observation, the average was 4.316 drinks in one day (SD = 5.494; $d_z = 0.888$); both averages correspond to a medium level of alcohol use risk, according to the categorization established by Ayala et al. (1998) on the amount of alcohol consumed

Table 1. Pre-intervention, post-intervention, and follow-up results by dependent variables.

	Pre-intervention		Post-intervention		Follow-up				
Variables	Mean	SD	Mean	SD	Mean	SD	Friedman $\chi^2_{obs.}$	*p value*	*df*
Average alcohol use last week	**2.645**	**1.977**	**0.952**	**1.288**	**1.152**	**1.284**	**6.000**	**0.050**	**2**
Maximum alcohol use on one occasion	**9.689**	**6.801**	**3.753**	**5.768**	**4.316**	**5.494**	**7.569**	**0.023**	**2**
Consequences of alcohol use	**11.667**	**2.839**	**5.250**	**5.879**	**3.083**	**4.400**	**7.800**	**0.020**	**2**
Depressive symptoms	**12.167**	**5.474**	**4.000**	**4.862**	**4.250**	**6.047**	**19.244**	**<0.001**	**2**
Family health	3.692	0.570	3.867	0.854	3.790	1.156	0.605	0.739	2

Significant results appear in bold and Post-hoc analyses of these variables are shown in Table 2.

Table 2. Post-hoc comparisons result with Conover's test and Cohen's effect size.

	Pre-intervention – Post-intervention					Pre-intervention – Follow-up				
Variables	difference	*T-Stat*	*df*	*p*	d_z	difference	*T-Stat*	*df*	*p*	d_z
Average alcohol use last week	1.694	2.360	26	0.026*	1.092	1.494	1.770	26	0.088	0.963
Maximum alcohol use on one occasion	5.936	2.485	26	0.020*	0.982	5.373	2.286	26	0.031*	0.888
Consequences of alcohol use	6.417	2.031	22	0.055	1.412	8.583	2.708	22	0.013*	1.888
Depressive symptoms	8.167	3.912	22	<0.001*	1.490	7.917	3.701	22	0.001*	1.444

Conover's tests and Cohen's effect sizes were only applied to variables that showed statistically significant differences in the prior analyses. *Significant results with $p \leq .05$.

in a single occasion, which is interpreted as a clinically significant decrease that persists after one month of follow-up.

When analyzing the "consequences of alcohol use," the results showed changes in at least one of the experimental conditions $\chi^2_{obs} = 7.800; df = 2; p < 0.05$). In the pre-intervention observation, the average of consequences was 11.667 (SD = 2.839), while in the post-intervention, was 5.250 (SD = 5.879), and in the follow-up, was 3.083 (SD = 4.400). Multiple comparisons analysis through Conover's Post Hoc test found a non-significant difference between the pre and post-follow-up observations of alcohol use consequences. However, the analysis showed a large effect size $(T - Stat = 2.031; df = 22; p > 0.05; d_z = 1.412)$, and a significant difference and large effect size between the "consequences of alcohol use" pre-intervention and follow-up $(T - Stat = 2.708; df = 22; p < 0.05; d_z = 1.888)$.

The analysis of the variable "depressive symptoms" showed significant differences in at least one of the experimental conditions $(\chi^2_{obs} = 19.244; df = 2; p < 0.05)$. In the pre-intervention observation, the average score was 12.167 (SD = 5.474), while in the post-intervention observation, the average was 4.000 (SD = 4.862), and at follow-up, the average was 4.250 (SD = 6.047). To establish the moments when significant differences occur, Conover's Post Hoc test was applied, which showed a significant difference and a large effect size between "depressive symptoms" scores at pre-intervention and post-intervention $(T - Stat = 3.912; df = 22; p < 0.05; d_z = 1.490)$, and also between the pre-intervention score and the follow-up score, one month after the intervention ended $(T - Stat = 3.701; gl = 22; p < 0.05; d_z = 1.444)$. These results suggest that after an average of 3.6 sessions of SFBT intervention, participants decreased their depressive symptomatology by 8.167 points post-intervention and 7.917 points at follow-up, showing a clinically significant decrease in scores (Kroenke et al., 2001). Finally, the variable "family health vulnerability" $(\chi^2_{obs.} = 0,605; df = 2; p > 0,05)$, did not show significant differences.

Discussion

This study aimed to explore the feasibility of implementing SFBT in a group of patients with problematic alcohol use attending primary care in an urban area of Santiago. An average of 3.6 sessions was implemented with 14 patients ranging from 23 to 61 years old. Results suggest that participants who received between 3 and 4 sessions of SFBT with social workers, in this program, significantly reduced their average alcohol use during the last week, as observed in the post-intervention assessment, and reported a clinically significant decrease in maximum alcohol use on one occasion both in the post-intervention assessment and follow-up one month later. As measured in the current study, "consequences of alcohol use" decreased in both comparisons – pre-intervention to post-intervention and pre-intervention to follow-up – being statistically significant in the pre-intervention to follow-up comparison. The score of "depressive symptoms" showed a significant decrease both at the end of the intervention and at the one-month follow-up. It is noteworthy that when analyzing the effect size of the observed changes, it was large in the four mentioned variables: "average alcohol use," "maximum alcohol use on one occasion," "alcohol use consequences," and "depressive symptoms," according to Cohen's categorization (Cohen, 1988), suggesting changes in alcohol use patterns and mental health among participants.

The significant decrease in alcohol use builds on results reported in previous studies (Cordero et al., 2009; González Suitt, Geraldo, et al., 2019b) where a reduction in alcohol use patterns was observed after a solution-focused intervention. However, these results differ from a recent umbrella systematic review that showed significant but small effect sizes of BI – providing more than one session and based on other than SFBT approaches – on decreasing alcohol use patterns when applied to individuals with risky alcohol consumption (Botwright et al., 2023). The reduction in depressive symptoms following SFBT interventions for alcohol consumption has been previously reported in other studies (González Suitt, Geraldo, et al., 2019b; Smock et al., 2008). Nevertheless, outcome studies on brief treatments for patients with comorbid AUD and anxious or depressive disorders are not conclusive; even though reviews show positive trends, more research is needed to understand what type of interventions are

more effective in reducing both alcohol use patterns and symptoms of mental health conditions, considering length, settings and other factors (Baker et al., 2012; Grant et al., 2021).

The results regarding the decrease in alcohol-related consequences, are consistent with other studies (Field & Caetano, 2010; González Suitt, Geraldo, et al., 2019b; Kraemer et al., 2002) reporting that brief interventions contribute to the reduction of consequences or problems associated with problematic alcohol use. In this study, it is noteworthy that the number of consequences continues to trend downwards at the one-month follow-up assessment. Some studies have evaluated the effectiveness of brief interventions in reporting alcohol-impaired driving and non-fatal accidents (Dinh-Zarr et al., 2004). Therefore, future studies on the effectiveness of SFBT could consider assessing these types of consequences.

The family health variable, showed no significant changes between pre-intervention, post-intervention, and follow-up observations, suggesting that the intervention might have focused primarily on individual participants, with less consideration for the involvement of their families. This poses a challenge for future implementations of the model, rooted in systemic-ecological theory, where therapeutic dialogue considers the involvement of the support network, even if only the individual participates. In this sense, future interventions could involve the participation of a family member in some sessions or might include conversations about solutions through relationship questions, for example.

This study builds on a previously linguistically adapted SFBT intervention in primary care, implemented by social workers that contributes to the reduction of alcohol use as well as the improvement of mental health symptoms one month after the intervention (González Suitt, Franklin, et al., 2019a; González Suitt, Geraldo, et al., 2019b). The linguistic adaptation involved cognitive interviews and focus groups. Among findings, individuals understood most of SFBT techniques after adjusting words and phrases to idiosyncratic uses; participants suggested that a good intervention to reduce alcohol use should be focused on what is important to individuals and be inclusive to family members or significant others; participants also highlighted that, in Chilean culture, alcohol use was socially unacceptable in women rather than in men (González Suitt, Franklin, et al., 2019a). In the future, research on change process that explores in detail how SFBT is implemented in Spanish, in Latin American culture, might be useful to strengthen the understanding of what is more acceptable across age groups, different genders, socio-economic background, among others.

The current study showed that two out of 14 individuals were women, which might be explained by the huge stigma described in the prior study which could have impacted the detection of women who use alcohol. This is a challenge for practice and research. For example, primary care teams, who apply screenings such as the AUDIT or ASSIST and BI for individuals presenting risky or problematic alcohol use, need to be aware of specific relational techniques to ask women questions regarding substance use. Since SFBT invites practitioners to locate themselves from a not-knowing position, to be curious regarding what is important for clients, and to enact acceptance of values, thoughts, and strategies that work for clients, the approach is sensitive to diverse groups and to stigmatized populations. These tenets could be trained among personnel who implement screening instruments, specially with women in primary care.

This study has some limitations. Being a feasibility study, the sample size is small, there is no comparison group, and the length of time for follow-up measurement was brief. The attrition was around 50% considering all individuals who signed the informed consent. However, the results were consistent with prior studies on SFBT and alcohol use, and the effect sizes found were large. In the future, the design might include a control group, a bigger number of patients, and longer time ranges in follow-up measurements, to determine whether SFBT interventions are effective in reducing alcohol use patterns and their consequences in individuals with mild to high-risk alcohol use in primary care.

Several meaningful implications for practice emerge from this feasibility study. First, social workers were trained in the SFBT model, receiving supervision and fidelity monitoring of the intervention, which amplifies the alternatives of interventions for primary care with an evidence-based model.

Second, the results showed positive trends in mental health outcomes, which supports and validates clinical social workers' practice in health settings, an issue that is currently under discussion in Chile. Third, this group of Chilean social workers promoted healthy behaviors through a brief intervention model contributing to the efficient use of available resources and the interdisciplinary approach to health work.

This study might be informative to public health policy decision-makers in primary care and outpatient programs, in two directions. Firstly, the findings support that non-medical practitioners, given proper training in a specific model, can provide healthcare services to individuals with hazardous alcohol use. This underscores the potential for implementing more flexible interdisciplinary care modalities and needs more exploration so that evidence on non-traditional models of BI, such as SFBT, can be proven effective. Secondly, considering that SFBT has demonstrated efficacy, cultural validation, and replicability, policymakers might consider the adoption of this therapeutic approach for brief interventions with alcohol users in Latin American countries. Moreover, future research should explore the effectiveness of BI, such as SFBT, for individuals with risky alcohol and other substance use, since this model is culturally sensitive, dignity-respecting, and implementable by a diverse array of practitioners.

In conclusion, this is a feasibility study that builds on prior literature with positive results after the implementation of the SFBT model in public primary health care, specifically in reducing average consumption during the last week, maximum alcohol consumption on one occasion, depressive symptoms, and alcohol use consequences. After being trained in SFBT, Chilean social workers successfully implemented clinical skills with individuals presenting medium to high-risk alcohol use. Public health programs for alcohol use might benefit from these results and further RCT studies are needed to build stronger evidence on brief interventions for alcohol use and other substances.

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