ORIGINAL ARTICLE

Effect of Alcohol Prevention Program on Subject Well-being Scale, Alcohol Abstinence Self-Efficacy Scale and Alcohol Decisional Balance Scale of Alcohol Related Prisoners in Correctional Institutions in Korea

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ABSTRACT

Introduction: This research intends to determine the intervening effect of alcohol prevention education programs on subjective well-being, alcohol abstinence self-efficacy, and alcohol decisional balance of alcohol-related prisoners. **Methods:** The subjects of the research were 25 alcohol-related prisoners who were detained in S district prisons in South Korea. The program was organized into less than 10 subjects for each session and carried out in three rounds from June 1 to July 2, 2019. A total of eight sessions programs were provided for four weeks, two times a week for each session. The collected data were analyzed with frequency, percentage, and paired t-test using the SPSS/WIN 21.0 program. **Results:** After the alcohol prevention training program, there was significant difference in subjective well-being scores (t=3.05, p= .005) and alcohol decisional balance score (t=2.16, p=.041). However, there was no significant difference in the abstinence self-efficacy score (t=-1.17, p=.254). **Conclusion:** Implementing the program will not only enriches the quality of life of alcohol-related prisoners by improving inherent positive emotions but also contribute to re-socialization and reduction of recidivism by making them aware of shortcomings rather than the benefits of alcohol.
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Keywords: Alcohol drinking, Motivation, Inmate, Subjective well-being, Alcohol prevention program

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INTRODUCTION

According to the 2019 crime analysis result by the Supreme Prosecutors' Office in Korea, 8.2% of criminals committed crimes while intoxicated. In particular, 41.1% of murderers, 47.6% of arsonists, 15.3% of men who committed a sexual offense with a child aged less than 13 years, 8.0% of violent crimes, and 6.6% of violent offenders were intoxicated with alcohol (1). In Korean society, drinking is established as a social norm that increases the solidarity of the organization and strengthens ties beyond means of communication and stress relief. Currently, in Korea, drinking accessibility has been increased due to development of a new drinking-alone culture with the increase in single-person households (2). The crimes caused by people under the influence of alcohol cannot be easily solved by any single effort, because they cause a combination of the physical, social, direct, indirect, domestic, workplace, gender, and economic problems across generations. In Korea, many efforts have been made to promote administrative and legal changes by revising alcohol-related laws. However, Korean society tends to not regard criminals with alcohol problems as holistic beings, or to consider that alcohol dependence and addiction are problems that require professional treatment and continuous management to prevent further development of an individual's alcohol problems (3). The introduction of institutionalized alcohol-prevention programs may reduce social and economic expenses caused by prison inmates who had been interned for alcohol-related infractions ("alcohol-related inmates"). Doyle et al (4) argue that institutionalized alcohol prevention programs need to be introduced in prisons to prevent the recurrence of crimes by alcohol-related inmates, and could reduce the socio-economic costs that they incur.

Subjective well-being is a self-assessment of an individual's overall life (5), and is strongly related to abuse of substances such as alcohol (6-8). An alcohol-related inmate is a problematic drinker who failed to

abstain from drinking alcohol, whose self-esteem is low due to negative emotions such as depression, anger, and anxiety, and who may blame others and the environment rather than himself, for his problem (8,9). Alcohol-related inmates have low self-esteem due to their devaluation and low self-efficiency (10) in the process of using alcohol to relieve anxiety or tension. A low self-esteem is a factor that hinders the formation of interpersonal relationships and can erode life goals and thereby inhibit individual personal growth (11). These changes induce continued problematic drinking behavior. Alcohol abstinence self-efficacy is a useful coping technique by which one can resist high-risk situations by judging one's ability to organize and perform the actions necessary to quit drinking alcohol (12). After recurrence of abstaining from, then resuming drinking, alcohol-related inmates lose faith in their ability to maintain their alcohol abstinence in high-risk drinking situations (9). Subjects with a low alcohol abstinence self-efficacy have a strong tendency to resort to alcohol when faced with stress (10). Increase in alcohol abstinence self-efficacy yields increase in the motive change problem drinking behavior (13,14). The low alcohol abstinence self-efficacy of alcohol-related inmates is a major factor in the recurrence of drinking behavior (9). Alcohol decisional balance evaluates an alcohol-related inmate's positive and negative reasons to change his or her problematic behavior around alcohol (15). The alcohol decisional balance emphasizes the loss of drinking behavior to reduce the cognitive compensation, emphasizes the benefit of change, and identifies the potential obstacles such as loss of change, promoting motivation of change for problem drinking behavior. The balance reinforces the goal of change, by helping the person to weigh and recognize negative situations (16). The alcohol decisional balance scale of alcohol-related inmates provides a motive to eliminate problem drinking behavior, and is therefore is an important factor in deciding whether or not to drink alcohol in the future (17). Therefore, subjective well-being, alcohol abstinence self-efficacy, and alcohol decisional balance combine to provide a motive to change the problem drinking behavior of alcohol-related inmates, and are important factors that affect recovery from problem drinking behavior, and can prevent recurrence (7,14,18-19).

Cognitive behavioral therapy (20,21) and the Alcoholics Anonymous 12-step program (22,23) were conducted for alcohol-dependent inmates. Most studies applied single variables such as alcohol abstinence self-efficacy or alcohol decisional balance, but no alcohol prevention education program integrated subject well-being, alcohol abstinence self-efficacy, and alcohol decisional balance. To prevent problem drinking behavior in advance, the subject's motivation for change must be increased, and they must be helped to plan and implement change voluntarily (4,18). The motivational enhancement technique is an effective intervention for changes in alcoholic behaviors by searching for emotions, values, and life goals that are already inherent in the subject (24). Therefore, the alcohol prevention education program with its technique could be useful for alcohol-related inmates who are not sufficiently prepared to change their drinking behavior. If the program is institutionalized and systematically implemented, alcohol-related inmates could contribute to preventing recidivism by maintaining and practicing abstention after they return to society. This research aims to investigate the intervention effect of alcohol prevention education program using motivational enhancement techniques focusing on subjective well-being, alcohol abstinence self-efficacy, and alcohol decisional balance of alcohol-related inmates in the correctional institutions. The research hypothesizes as follows: Hypothesis 1. Subjective well-being of alcohol-related inmates who participated in the alcohol prevention education program will be higher than before their participation. Hypothesis 2. Alcohol-abstinence self-efficacy of alcohol-related inmates who participated in the alcohol prevention education program will be higher than before their participation. Hypothesis 3. Alcohol decisional balance of alcohol-related inmates who participated in the alcohol prevention education program will be higher than before their participation.

MATERIALS AND METHODS

Study design

This research applied a one-group pretest-posttest design as quasi-experiment to test the effects of alcohol prevention education programs on subject well-being, alcohol abstinence self-efficacy, and alcohol decisional balance.

Study setting and sample

The participants of this research were selected among alcohol-related inmates who are detained in correctional institutions in Korea. The specific criteria for selection are as follows: (1) males aged from 20 to 75 who have been sentenced and detained in prison for alcohol-related incidences such as drunk driving and refusal of a sobriety test, (2) who are not taking medications due to mental illnesses such as depression, anxiety and insomnia other than alcohol, (3) who score > 10 points in The Korean Version of Alcohol Use Disorder Identification (AUDIT-K), (4) who understood the purpose of this study and agreed to participate voluntarily, and (5) who can communicate to interpret Korean and understand the alcohol prevention education and questions. We excluded inmates who: (1) had less than two months before the expiration of their sentence, (2) were to be transferred to a different correctional institution within two months, and (3) desired to terminate participation during the program.

The G*Power 3.1.2 program was used for the size of the

study sample. To conduct repeated measured ANOVA on the group, a minimum size of the sample required was 24 when setting significance level $\alpha = 0.05$, power $(= 1 - \beta) = 0.80$, and effect size = 0.60. Considering this required size, we selected at least 30 participants, anticipating a 20% dropout rate. Those who to the explanation about the study purpose and program contents, and applied before participating in the 1st, 2nd, and 3rd programs were a total of 36, 12 in each program. Six subjects were excluded according to the criteria described earlier, so a total of 30 subjects participated. Two were released on parole during the program and three subjects with responses were excluded, so the total final total number of subjects was 25.

Ethical consideration

This study was conducted after obtaining approval from the Institutional Review Board of K University in Korea (Approval No. 20190114001). The purpose of the study was explained to the education director in charge of the psychotherapy team of correctional institutions in S area of Korea, and received approval from the head of the institution. The suitability of the program contents was also verified with the education director after reviewing the contents. The alcohol prevention education program currently being conducted in Korean prisons is not mandatory for inmate detained under alcohol related offenses, so the education director met and provided information on the purpose of this study, anonymity and confidentiality, program content, and application period to inmates who had been sentenced for alcohol-related infractions. Subsequently, applications for participation in the program were received from those whom wished to voluntarily participate in this study. To the subjects who applied, the education director re-explained the purpose, anonymity, and confidentiality of this study, and collected a written consent for voluntary participation from only those who met the selection criteria.

Study instruments

Subjective well-being scale: The scale developed by Hahn and Pyo (5) was used. This tool measures the quality of life and level of happiness experienced by the individual in terms of cognitive and emotional perspectives. It consists of a total of 17 items with a scale to assess the subject's cognitive well-being and a scale to assess the subject's emotional well-being. The scale of cognitive well-being consists of seven questions that measure the cognitive evaluation of one's current quality of life. The scale of emotional well-being scale consists of ten questions to measure the emotional evaluation of one's level of happiness. Both are evaluated using a seven-point Likert scale, ranging from -3 (low) to 3 (high). The scale had Cronbach's $\alpha = 0.93$ in Han and Pyo (5) and Cronbach's $\alpha = 0.77$ in this study.

Alcohol abstinence self-efficacy scale: A scale developed by Prochaska and Diclemente (25) and adopted by Kim (26) and modified and supplemented by Chun (27) was used. This tool measures the self-efficacy of individuals who abstain from drinking. It consists of 20 items, which assess two aspects: the degree of temptation to drink (alcohol temptation) and confidence not to drink (confidence on abstinence). The temptation to drink consists of four subscales; i.e., five items of negative emotion situation, five items of social and positive situation, five items of physical and other worries, and five items of longing and impulse. It is evaluated on a five-point Likert scale, from 1 ("never") to 5 ("very much"); a high score indicates a high alcohol abstinence self-efficacy. The scale had Cronbach's $\alpha = 0.75$ in Chun (27) and Cronbach's $\alpha = 0.88$ in this study.

Alcohol decisional balance scale: The scale developed by Diclemente (15) and adopted by Park (28) was used. This tool measures the positive and negative aspects (benefits and loss) of alcohol consumption behavior. It assesses how contents for each item are important in determining to change alcohol problematic behavior. It consists of a total of 20 items including 10 for benefits of drinking and 10 for loss of drinking. It is evaluated on a five-point Likert scale, ranging from 1 ("not important at all") to 5 ("very important"). The item scores in each ('benefit' and 'loss') category are averaged. A high score indicate high benefits or loss from drinking. In the preliminary study of Park (28), the scale had Cronbach's $\alpha = 0.85$ in the positive aspects and Cronbach's $\alpha = 0.80$ in the negative aspects; in this study it had Cronbach's $\alpha = 0.83$ in the positive aspects and Cronbach's $\alpha = 0.86$ in the negative aspects, and a total Cronbach's $\alpha = 0.80$.

Data collection

The data were collected from June 1 to July 2, 2019. We fully explained the purpose, method, and procedures of the study to the subjects, who accepted the participation after considering the ethical aspects. We also received the additional written consent after explaining that all the data will be handled and kept confidential and that the subjects could withdraw from the study at any time. The information given to the subjects was unified and protocols on data collection methods, procedures and tools were created and shared with the education director of the psychotherapy team to minimize the measurement errors. In this study, fewer than 10 subjects met each time, in consideration of group dynamics. They met with the researcher and the education director twice a week (100 min) on Tuesday and Friday in the program room. Pre-tests were performed on the first day of the program, and the post-test was performed on its last day. Alcohol prevention education program: This program recognizes the meaning of subjective well-being, alcohol abstinence self-efficacy, and alcohol decisional balance, which have been identified as major variables in the recovery and prevention of recurrence. The program uses a motivational enhancement technique to increase the desire to change problematic drinking behavior in alcohol-related inmates. To make the program suitable for alcohol-related inmates, the

program used in this study was verified for its content validity by a professor of mental nursing and a nurse of level-1 addiction psychiatry after modifying and supplementing the contents of a counseling program (29) from a basic course for alcohol-related inmates that was initially developed by the correctional headquarters of the Ministry of Justice. The program was conducted for four weeks, twice a week for a total of eight sessions; they were led by the researcher and by the education director in the psychotherapy team. For specific details, during the first session, 'Nice to meet you', we promoted understanding of the overall progress and contents of the program and formed a sense of intimacy and trust among group members. We then proceeded with the program in order: 'what is alcoholism?', 'finding my image', 'setting goals for a happy life', 'supporting self-efficacy', 'practicing coping with high-risk drinking situations', and 'realizing a happy life by abstinence' (Table I).

Data analysis

SPSS/WIN 21.0 software was used to analyze the collected data. The distributions of demographic characteristics, health behavior factors, and drinking behavior factors of subjects were presented as frequency and percentage. Skewness of the data had an absolute value < 1.0, which confirms that the distribution was normal; the significance level in Kolmogorov-Smirnow normality test was > 0.05, and data in Q-Q tables had an almost straight line, which are also confirmations that the distribution is normal. To test the effect of the program, the difference of scores on the pretest and posttest was evaluated using a paired t-test, and the reliability of the tools was evaluated using Cronbach's α.

RESULTS

Participants' characteristics

The most common age group was the 40s (32.0%). Of the subjects, 68.0% of subjects had religion; the most common educational level was 'graduated high school' (48.0%); 60% were married; 76% had jobs, and the most common monthly income was 2 to 3M KRW. Additionally, 40% had good family relations, which means they had no worries with their families (Table II).

Health behavior factors of subjects

Of the subjects, 48% felt their perceived health condition was normal, whereas only 32% felt it was good; 84% said they didn't have depression; 84% had no liver diseases and 96% were smokers; 52% did not have alcoholic traits and 52% felt a little stress (Table III).

Drinking behavior factors of subjects

A higher proportion of subjects (84%) had been drinking for more than 10 years and 40% drank two or three times a week; 52% could drink two bottles of Soju and 72% had experienced a black-out. 96% drank with their friends, and 80% were motivated to drink as part of socialization with friends, whereas 16% drank because of depression, and 4% drank when attending special parties. After drinking, 60% of subjects were involved in fights and 72% experienced loss of personal belongings. Most (88%) had not experienced withdrawal symptoms, but 52% had once tried to stop or reduce drinking (Table IV).

Hypothesis testing

Hypothesis 1. It was proposed that the subjective well-being of alcohol-related inmates who participated in alcohol prevention education program will be higher than before their participation. The results showed that subjective well-being score increased significantly ($t = 3.05$, $p = 0.005$) from 3.6 ± (SD=20.21) in the pre-test to 13.3 ± (SD=16.32) in the post-test. Therefore, hypothesis 1 was accepted. Hypothesis 2. The study intended to test if alcohol abstinence self-efficacy of alcohol-related inmates who participated in alcohol prevention education program will be higher than before the participation. The alcohol abstinence self-efficacy score did not change significantly ($t = -1.17$, $p = 0.254$) from 107.4 ± (16.10) in the pre-test to 112.1 ± (16.72) in the post-test. Therefore, hypothesis 2 was rejected. Hypothesis 3. It was suggested that alcohol decisional balance of alcohol-related inmates who participated in alcohol prevention education program will be higher than before their participation. The results demonstrated that alcohol decisional balance score decreased significantly ($t = 2.16$, $p = 0.041$) from 54.50 ± (17.22) in the pre-test to 50.4 ± (16.14) in the post-test. Therefore, hypothesis 3 was accepted (Table V).

DISCUSSION

The goal of this study was to examine the effect of an alcohol prevention education program on subjective well-being, alcohol abstinence self-efficacy and alcohol decisional balance of alcohol-related inmates. The alcohol prevention education program had a significant effect on the subjective well-being of alcohol-related inmates. This result is consistent with an earlier study (30) that showed that subjective well-being increased significantly after an alcohol prevention program to patients who were diagnosed and treated for alcohol dependence, and with another research (8) that showed higher subjective well-being in inmates who had been given psychological, psychiatric, and psychosomatic care than in than those without. In a prior study (31), excessive alcohol can increase an individual's psychological distress, and thereby reduce the subjective well-being related to the individual's inherent positive emotions. Other studies (6,7,19) have shown that dangerous behaviors such as alcohol abuse significantly reduce subjective well-being. In this program, education such as understanding alcohol addiction and finding positive ways to relieve stress by role-playing may help the participants to recognize inherent positive emotions and to self-regulate negative emotions such as anger.

Table I: Contents of alcohol prevention program

Session	Subjects	Activities	Time (min)
1	Nice to meet you	· Pre-test · Introduction of program purpose and overall contents · Self introduction and making byname · Setting the program rules · Thinking about drinking - Reason to drink - What I gain and lose by drinking - Physical changes due to the drinking	50
2	What is alcoholism?	· Knowing harmful effect of drinking - Physical and psychological changes by drinking - Family and social changes by drinking · Understanding on alcoholism - What is addiction? - Progress and symptoms of alcoholism - Stages of psychological changes of alcoholism - Can addiction be treated? · Understanding alcoholism level of themselves - Conducting self-diagnosis test (AUCIT-K) for alcoholism · Sharing advantages and disadvantages of alcohol - Understanding ambivalence of alcohol use · Sharing cases of alcoholism recovery	50
3	Find myself	· Finding changed appearance - Three words that come to mind the first when thinking of me, Writing and sharing three changed things by drinking · I'm angry when I…… - Finding the connection between stress and alcohol · Understanding on current ways to relieve the stress · Finding positive ways to relieve stress - Watching videos about successful design of anger, fury and stress · Practicing positive ways to relieve stress - Practicing through role play	50
4	Set the goal for happy life	· Strengthening the motivation for changes by exploring **values** - Sharing the thoughts on changes and experiences of such efforts - Understanding the stage of change - Making a list of values for happy life · What was my dream of school days? - Looking back on what you valued and your life goals · Setting the goal for happy life - Expressing happy life in the future (collage) - Materializing goals for happy life	50
5	Support self-efficacy	· Understanding the difference from others · Finding resources for my life - Finding success stories that overcame difficulties through life graphs - Finding support resources of life through life tree · Finding strengths - Finding strengths of others by using emotion cards - Sharing strengths you think you have	50
6	Cope with high-risk situation for drinking	· Identifying the high-risk situation for drinking through **experience** - Reason for feeling want to drink or you drink, Sharing about the situation where you drink · Exploring solutions by each high-risk situation for drinking - Finding solutions for common high-risk situation for drinking with group members	50
7	Practice to cope with high-risk situation for drinking	· Change the thoughts about drinking - Sharing about irrational thoughts on alcohol · Practicing to refuse - Practicing to refuse through role play	50
8	Realize happy life through the practice of alcohol abstinence	· Making plans for alcohol abstinence · Making declaration for alcohol abstinence · Sharing impressions on participation of program · Post test	50

Table II: Characteristics of participants (N=25)

Characteristics	Categories	N	%
Age	20-29	2	8.0
	30-39	3	12.0
	40-49	8	32.0
	50-59	6	24.0
	60-69	6	24.0
Religion	Yes	17	68.0
	No	8	32.0
Education	Elementary	2	8.0
	Middle school	4	16.0
	High school	12	48.0
	University	6	24.0
	Graduate school	1	4.0
Marriage	Married	15	60.0
	Single	5	20.0
	Divorced	3	12.0
	Separated by death	2	8.0
Job	Yes	19	76.0
	No	6	24.0
Monthly income	Less than KRW 1 million	5	20.0
	KRW 1-2 million	2	8.0
	KRW 2-3 million	8	32.0
	KRW 4-5 million	5	20.0
	More than KRW 5 million	5	20.0
Family relation-ship	Bad	1	4.0
	Normal	8	32.0
	Good	10	40.0
	Very good	6	24.0
Total		25	100.0

Table III: Health behavior factors (N=25)

Characteristics	Categories	N	%
Subjective health condition	Very good	4	16.0
	Good	8	32.0
	Normal	12	48.0
	Bad	1	4.0
Depression	Yes	4	16.0
	No	21	84.0
Liver diseases	No liver diseases	21	84.0
	Had fatty liver and hepatitis	3	12.0
	Had liver cancer and hepatocirrhosis	1	4.0
Smoking	Had experience	24	96.0
	No experience	1	4.0
Family history for alcohol	Yes	12	48.0
	Now	13	52.0
Stress	Feel a lot	1	4.0
	Feel quite a lot	7	28.0
	Feel little bit	13	52.0
	Not feel at all	4	16.0
Total		25	100.0

Subjective well-being includes not only the frequency and intensity of joy, anxiety, sadness, anger, and love that make life enjoyable or unpleasant but also satisfaction with personal life and cognitive reflection on personal events (19). By reflecting on past incidents, setting goals for a happy life, and reinforcing motivation for change by exploration of opportunities provided by this program, it contributes to helping the inmates practice changed behavior, and promotes positive emotions by realization of new life goals. Therefore, correctional nurses will need to develop various cognitive and rehabilitation prevention programs beyond the scope of treatment of inmates, by forming alcohol self-help groups and active alcohol prevention networks to promote comfortable and smooth rehabilitation. However, this study found that the alcohol prevention education program did not affect the alcohol abstinence self-efficacy of alcohol-related inmates. The result was opposite to previous studies which found increased alcohol abstinence self-efficacy after cognitive-behavioral therapy in alcohol-dependent patients (12,14), also in the result of a 1-year follow-up study of the subjects, the abstinence rate increased with increase in the alcohol abstinence self-efficacy (13). Alcohol abstinence self-efficacy is a major protective factor in successful alcohol abstinence by using effective coping strategies in high-risk drinking situations (12). People who have low alcohol abstinence self-efficacy are easily affected by environmental factors, so their self-alcohol-control ability decreases, and use of alcohol increases (14). People with low alcohol abstinence self-efficacy have a poor ability to cope with and resist alcohol, due to their ability to solve problems with alcohol use (12). If alcohol abstinence self-efficacy is high, the ability to solve drinking problems is high and motivation is strong, so the subject strives for specific behavioral changes (14). Therefore, alcohol abstinence self-efficacy has an important influence on individuals' decisions and choices on abstinence, and could be regarded as an important factor in determining recovery status.

This study detected no significant effect on alcohol abstinence self-efficacy. The reason for this result is that the alcohol-related inmate was detained for committing

Table IV: Drinking behavior factors (N=25)

Characteristics	Categories	N	%
Drinking duration	Less than 1 year	1	4.0
	5-10 years	3	12.0
	More than 10 year	21	84.0
Frequency	Less than 3~4 times/year	2	8.0
	1 time/month	2	8.0
	2-4 times / month	7	28.0
	2-3 times /week	10	40.0
	More than 4 times / week	4	16.0
Drinking quantity	Half of bottle of Soju (1-2 bottles of beer)	2	8.0
	1 bottle of Soju (3-4 bottles of beer)	5	20.0
	2 bottles of Soju	13	52.0
	More than 3 bottles of Soju	5	20.0
Experience of black out	Yes	18	72.0
	No	7	28.0
Drinking with fellows	Alone	1	4.0
	Friends	24	96.0
Motivation for drinking	When feeling depressed and sad	4	16.0
	When getting along with friends	20	80.0
	When having special meetings	1	4.0
Fight after drinking	Yes	10	40.0
	No	15	60.0
Loss after drinking	Yes	18	72.0
	No	7	28.0
Economic difficulties after drinking	Experienced	5	20.0
	Not experienced	20	80.0
Withdrawal symptoms	Yes	3	12.0
	Now	22	88.0
Attempt to stop (reduce)	Yes	13	52.0
	No	12	48.0
Total		25	100.0

a crime while losing control over alcohol use, but had no other alcohol-related problems. They also had strong unreasonable thought regarding imprisonment after a single mistake. In addition, the program was only 8 sessions long, so it provided limited support resources for life, and for recalling successful stories of abstaining from alcohol. The alcohol abstinence self-efficacy felt by inmates may differ according to the length of the prison term. We argue that the effectiveness of treatment drugs and psychological programs that have progressed as external factors will increase as the inmates approach the end of their sentence, and thereby improve confidence in their ability to abstain. In other words, it is considered that the alcohol abstinence self-efficacy can be increased because the treatment period is longer as the inmate's discharge is imminent.

Table V: Comparison of independent variables before and after experiment (N=25)

Variables	Pre test		Post test		t	*p*
	M	SD	M	SD		
Subjective well-being	3.6	20.21	13.3	16.32	3.05	.005
Alcohol abstinence self-efficacy	107.4	16.10	112.1	16.72	-1.17	.254
Alcohol decisional balance	54.5	17.22	50.4	16.14	2.16	.041

When developing and applying various programs to improve alcohol abstinence self-efficacy, correctional nurses will need to design and proceed with a long-term program that includes repetitive education rather than a short, one-time program. Use of demographic characteristics including physical and mental factors of the inmates and environmental factors according to the period of imprisonment may improve development of self-efficacy.

Lastly, the alcohol prevention education program had a significant effect on the alcohol decisional balance of alcohol-related inmates. This result is consistent with the preliminary research results (18) that argued the alcohol intervention program for heavy alcohol drinkers had a significant effect on alcohol decisional balance. The alcohol decisional balance is an important motivation factor that urges a change in problematic drinking behavior and determines further drinking behaviors by identifying the advantages and disadvantages of alcohol (17,28). In the present study, the program promoted the benefits of changing thoughts on drinking, and sharing irrational thoughts on alcohol induced changes in behaviors by minimizing the loss and maximizing the benefits (16). This trade-off has a significant effect on alcohol decisional balance. This behavior change will prevent the recurrence of alcohol crimes among alcohol-related inmates and have a positive effect on their successful rehabilitation. In the future, correctional nurses should develop various intervention programs that can strengthen inner motivation to distinguish advantages and drawbacks of drinking which are factors that may determine abstinence and could promote changes in cognitive process and value of life by controlling the advantages of it. Such changes in behaviors may prevent the recurrence of alcohol crimes and help alcohol inmates to return successfully to society.

The purpose of this study was to test the effects of alcohol prevention education programs on subjective well-being, alcohol abstinence self-efficacy, and alcohol decisional balance of inmates. This program will help to promote the physical and psychological health of alcoholic patients by being applied in self-help groups of alcoholics, rehabilitation institutions, or mental-health promotion centers. The results have provided basic data that can be used to develop treatment programs and interventions of correctional nursing that could change the alcoholic's problems in a positive and desirable direction. The significances to nursing are as follows. Correctional nurses will have important functions in promoting physical and psychological well-being and in helping to therapeutic the rehabilitation of inmates by emphasizing the importance of counseling and a psychological approach beyond the duty of physical and diseases-centered treatment and conducting professional training in an alcohol-prevention program.

This study has some limitations. First, it was a single-group pretest-posttest study, so future studies should use a more-comprehensive and multilateral approach by setting a control group. Second, the study was conducted only on male inmates, but should be extended to both male and female inmates. Finally, the duration of the intervention effect should be measured. So, there should be a follow-up post-intervention. The intervention effect could be extended by retraining continuously and repetitively.

CONCLUSION

This study was conducted to assess whether an alcohol prevention education program affected subjective well-being, alcohol abstinence self-efficacy, and alcohol decisional balance of alcohol inmates. The program led to significant changes in subjective well-being and alcohol decisional balance of alcohol-related inmates. If nurses in correctional institutions use this program for alcohol-related inmates, it may increase their quality of life by improving their positive emotions, and may also contribute to the resocialization of the inmates. Ultimately, it could help reduce repeated alcohol-related crimes by making them recognize drawbacks of drinking.

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