PURPOSED ALCOHOL USE BEHAVIOR MODIFICATION PROGRAM AMONG POST-DISCHARGED PSYCHIATRIC PATIENTS AT ONE PSYCHIATRIC HOSPITAL IN THAILAND

[1]TIRAPADA KIATSANGORN, [2]BENJAYAMAS PILAYON, [3]NITIKORN PHOOSUWAN

[1,3]Faculty of Public Health, Kasetsart University Chalermphrakiat Sakonnakhon Province Campus, Thailand
[2]Boromarajonani College of Nursing Nakhon Phanom, Nakhonphanom University, Thailand
E-mail: [1]tirapada.k@ku.th, [2]benjayamas@npu.ac.th, [3]nitikorn.ph@ku.th

Abstract - In fiscal year 2021, 87 alcoholic patients diagnosed with schizophrenia according to ICD-10 criteria were admitted to a psychiatric hospital in Thailand. Of these, 31 patients, representing 35.6 percent, returned for repeat treatment. In the fiscal year 2022, there were 109 admissions, and 47 patients, accounting for 43.1 percent, returned for repeat treatment. Traditional treatment methods failed to produce significant behavioral changes in these patients. Consequently, the researcher implemented a motivational enhancement program alongside an integrated treatment program targeting both alcohol consumption and psychotic symptoms in these individuals, designed according to self-efficacy theory and illustrated through a paradigm map. Additionally, a post-discharge program aimed at altering alcohol consumption behavior among psychiatric patients was developed. This draft program was reviewed by three experts, who rated its suitability at availabilitywith an average score of 0.9(IOC).

Keywords - Alcohol Use Behavior Modification Program, Alcohol Use Disorders, Psychiatric Patients, Self-Efficacy Theory

I. INTRODUCTION

Schizophrenia, characterized by abnormalities in thoughts, perceptions, emotions, and behavior, ranks among the top 20 serious global illnesses. It can be caused by factors like genetics, substance abuse, family issues, or social adjustment [1]. Individuals with schizophrenia are 4-6 times more likely to engage in violent crimes compared to the general population[2] and tend to consume up to three times as much alcohol. The lifetime prevalence of alcohol use disorder in this group is 24.3 percent, leading to risks of depression, suicide, and aggression, alongside challenges such as irregular medication adherence, chronic physical health problems, and frequent hospital admissions[3].

Factors contributing to alcohol consumption in schizophrenia patients include a family history of alcohol problems, using alcohol to elevate mood and alleviate stress, self-rewarding behavior, managing negative psychiatric symptoms, combating social isolation and boredom, and lacking motivation to quit [4]. The consequences of alcohol use in these patients encompass relapses in psychotic symptoms, health deterioration, impaired self-control, inappropriate behavior, medication non-adherence, reduced work capacity, and recurrent treatment admissions[5].

In fiscal year 2021, a psychiatric hospital in Thailand, with a capacity of 90 beds, admitted 87 alcoholic patients diagnosed with schizophrenia. Of these, 31 patients (35.6 percent) returned for repeat treatment. In fiscal year 2022, there were 109 admissions, and 47 patients (43.1 percent) returned for repeat treatment[6]. Despite following current treatment guidelines, there were no substantial improvements in patient behavior, leading to readmissions. The primary cause for re-treatment was the concurrent use of medication and alcohol.

Consequently, the researcher introduced a program to modify alcohol consumption behavior among psychiatric patients post-discharge, drawing inspiration from Nimit Kaewarj et al. (2020) and fostering collaboration with a multidisciplinary team, including psychiatrists, pharmacists, nurses, psychologists, and social workers, for comprehensive care management. The study's promising and effective outcomes may pave the way for future broader implementation among other service recipients.

II. MATERIALS AND METHODS

2.1 Aim

To Purposed alcohol use behavior modification program among post-discharged psychiatric patients atone psychiatrichospital inThailand.

2.2 Definition of words

Post discharged Psychiatric Patients:
Alcoholic patients diagnosed with schizophrenia based on ICD-10 criteria (F20.xx for schizophrenia and F1.xx for alcohol-related disorders), aged 18 to 60 years, who had a history of dangerous drinking in the past year and exhibited symptom relief (with BPRS scores decreasing by at least 24% or not exceeding 36 points), were capable of effective communication and cognitive function (TMSE score $\geq$ 26) and scored 0 on the Alcohol Withdrawal Scale (AWS), underwent a 5-week inpatient program targeting alcohol use behavior modification. This

program included post-discharge follow-up through the treatment process.

2.3. To create a self-efficacy promotion model

In developing a program to modify alcohol use behavior among psychiatric patients post-discharge at a Thai psychiatric hospital, the approach involved applying for a motivational enhancement program in conjunction with an integrated treatment program for alcohol consumption and psychotic symptoms in alcoholic patients with schizophrenia, as proposed by Nimit Kaewarj et al. (2020). The program was structured around the principles of self-efficacy theory, emphasizing the importance of equipping individuals with the ability and confidence to successfully adopt and sustain behavior change, ultimately leading to reduced alcohol consumption in this patient population and enhancing treatment effectiveness.

The paradigm diagram derived from self-efficacy theory has been utilized as a guiding framework and further refined into a program for alcohol use behavior change, as depicted in Figure 1.

2.4 Alcohol Use Behavior Modification Program among Post Discharged Psychiatric Patients at One Psychiatric Hospital in Thailand

The researcher has incorporated Nimit Kaewarj's program into their study titled "The Effect of Motivational Interviewing with Integrated Program on Alcohol Consumption Behavior and Psychotic Symptoms in Alcohol Use Disorders with Schizophrenic Patients". This program is based on the ICORD-Rr model, a revised version of motivational activities developed and enhanced by Boonsiri Junsirimongkol and colleagues in 2016 from the Drug Psychiatry Working Group at the Somdet Chaopraya Institute of Psychiatry. It consists of 14 group therapy activities, each aligned with the principles of self-efficacy theory to achieve desired outcomes.

2.5Bandura's Self-Efficacy Theory

According to Bandura (1997) [7], self-efficacy is influenced by four factors.

1. Mastery learning (past experiences)is the most effective approach for fostering self-efficacy.
2. Vicarious learningis whether it succeeds or fails, learning from a model is called vicarious learning.
3. Verbal persuasioninvolves influential individuals convincing people that they can perform a specific task.
4. Emotional arousaloccurs when a person, confident in their abilities, becomes motivated to tackle challenges and adapt their behavior effectively.

The program spans a 5-week duration for inpatients without interfering with standard hospital treatments. Each activity occurs with 1-2 days between them, and participation eligibility is determined by the activity organizer, aligning with the four conceptual components of self-efficacy theory.

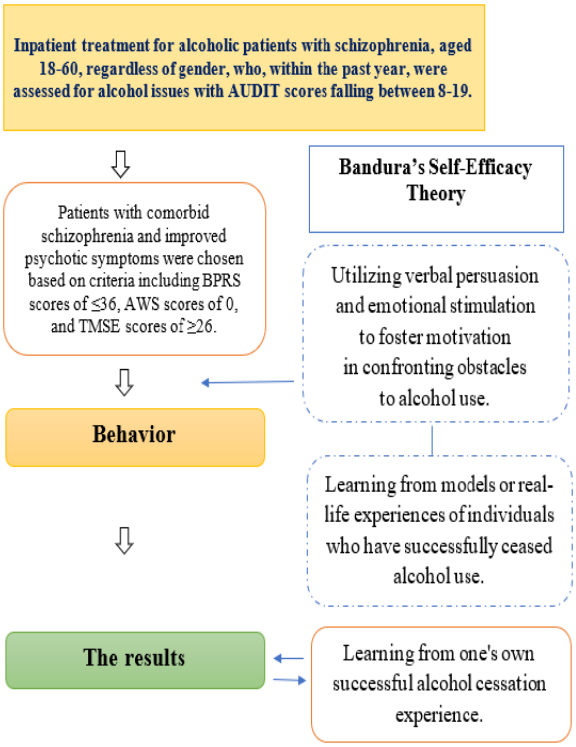

Figure 1: Paradigm creation diagram.

III. RESULTS AND DISCUSSION

3.1Purposed alcohol use behavior modification program among post-discharged psychiatric patients at one psychiatric hospital in Thailand.

Week 1: Modify behavior and establish rapport with research subjects.

During the first week, which focuses on alcohol detoxification, the primary emphasis is on establishing rapport and fostering positive relationships with the research subjects through various activities.

1) Art group:

To initiate group therapy effectively for psychiatric or alcoholic patients, the first step involves establishing individual relationships with each patient. Before progressing to other group therapy sessions, it's crucial to implement activities that can dissolve barriers in patient behavior, encourage self-expression, foster group cohesion, and facilitate a deeper understanding of group dynamics. This can be achieved through art group activities.

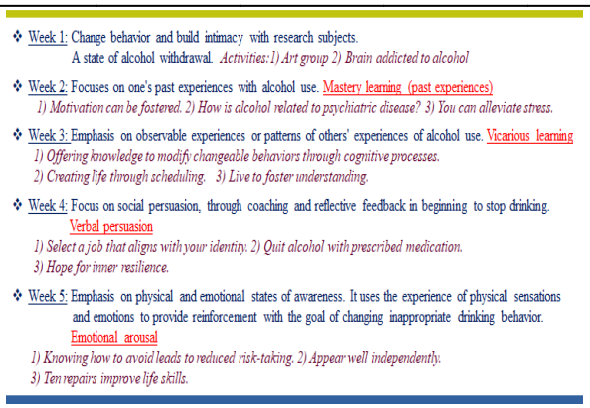

Figure 2: The Alcohol Use Behavior Modification Program Among Post-Discharged Psychiatric Patients at One Psychiatric Hospital in Thailand (OPHT)

2) Brain addicted to alcohol
Individuals with alcohol use disorder tend to use drugs up to seven times more frequently, with a majority being males, of relatively young age, often single, and commonly facing social and economic challenges. Given their heightened vulnerability to mental illness, imparting knowledge is crucial to enhance understanding and awareness of the condition.

Week 2: Emphasizes past alcohol use experiences.
In line with the Mastery Learning theory related to past experiences, research subjects were interviewed and prompted to recollect their instances of problematic alcohol use through specific activities.

1) Motivation can be fostered.
Motivation to quit drinking is applied during the initial stages of alcohol detoxification treatment, aiming to heighten awareness about alcohol-related issues. This approach is particularly effective as many patients are initially in a state of indifference or ambivalence towards their alcohol use problems. Motivational therapy and open discussions with therapists about actual challenges and barriers enhance patients' self-awareness regarding their issues.

2) How is alcohol related to psychiatric disease?
Alcohol consumption can trigger psychiatric symptoms, notably depression, and long-term studies show that patients with more severe psychiatric symptoms tend to increase their alcohol intake, leading to higher rates of hospital readmissions in this group.

3) You can alleviate stress.
Stress in patients can lead to the development of new addictive behaviors, underscoring the importance of instructing them in effective stress management techniques like breathing exercises.

Week 3: Centers around observable experiences and the patterns of others' alcohol use experiences.
Aligned with the theory of Vicarious Learning, activities were designed to facilitate learning from both successful and unsuccessful models.

1) Offering knowledge to modify changeable behaviors through cognitive processes.
Cognitive-behavioral therapy focuses on two primary goals: managing impulsive behavior and handling cravings in patients. Addressing inappropriate thoughts, it's observed that these thoughts play a role in the connection between negative and positive emotions influencing alcohol consumption decisions, often stemming from distorted thinking. Patients learn to recognize that these initial thoughts arise unconsciously and can express their emotions and actions, preventing further inappropriate behavior.

2) Creating life through scheduling.
Boredom triggers the recurrence of binge drinking cycles, emphasizing the need for incorporating new activities into daily routines and time management planning. The objective is to minimize relapses in alcohol use and enhance patients' quality of life.

3) Live to foster understanding.
Family involvement in care highlights the significance of integrating therapy with family counseling, especially when negative communication within the family can contribute to patient relapse. Teaching positive communication skills to family members is essential for fostering a proper understanding of the situation.

Week 4: Prioritize social persuasion, employing coaching and reflective feedback to initiate cessation of inappropriate drinking behavior.
Drawing from the theory of Verbal Persuasion and group dynamics, knowledge integration is utilized to design simulation exercises in the following activities.

1) Select a job that aligns with your identity.
Economic and social challenges contribute to increased alcohol use and suicide risk among patients, further exacerbating mental symptoms and recurrent illnesses, accompanied by cognitive decline. Employment plays a crucial role in promoting effective time management and, once patients successfully cease alcohol consumption, it opens doors to improved societal and occupational opportunities.

2) Quit alcohol with prescribed medication.
Patient severity levels with alcohol addiction and psychiatric comorbidities are assessed to determine appropriate treatment plans. When alcohol detoxification symptoms are present, Benzodiazepines are administered, recommended for treating alcohol withdrawal symptoms and preventing alcohol-related delirium. Educating patients about

their medications and the conditions they address enhances patient awareness and promotes medication adherence and ongoing treatment cooperation.

3) Hope for inner resilience.
This patient group necessitates an extended treatment duration with a focus on palliative counseling to cultivate mental strength, instill hope, and impart self-responsibility skills, crucial for fostering optimism, a pivotal element in mental rehabilitation.

Week 5: Stresses physical and emotional awareness, utilizing these sensations and emotions as reinforcement to alter inappropriate alcohol consumption behavior.
Aligned with the theory of Emotional Arousal, individuals motivated by self-confidence in their abilities engage in knowledge exchange activities by bringing prepared research samples for collaborative learning.

1) Knowing how to avoid leads to reduced risk-taking.
Handling risky situations involves external stimuli and internal motivations, which can trigger a relapse into alcohol consumption and are closely tied to problem-solving abilities. Anticipated outcomes and cessation results are influenced by factors such as lifestyle choices, strong alcohol cravings, and the presence of alcohol-seeking symptoms that precede relapse episodes.
To prevent relapse, therapists and patients must jointly comprehend each therapeutic phase, including the crucial step of mastering risk situation management skills. Enhancing patients' proficiency in handling challenges in their usual environment elevates their self-efficacy, bolstering confidence. Additional strategies encompass knowledge dissemination, cognitive restructuring, and instruction in stress management techniques, including visualization and the use of reminder cards, all contributing to relapse prevention.

2) Appear well independently.
Individuals seeking treatment for alcohol problems and psychiatric disorders in hospitals often exhibit severe psychiatric symptoms, rendering them unable to self-care. Common accompanying complex issues include marital and relational difficulties, inadequate stress management, performance challenges, financial mismanagement, and irregular adherence to psychiatric medications. It is crucial to prioritize strengthening motivation and bolstering self-esteem through relevant activities.

3) Ten repairs improve life skills.
Empowering patients to acquire relationship-building skills, foster positive connections with family and society, and effectively express themselves through body language and spoken language, while upholding cultural norms and etiquette. Additionally, encouraging them to shoulder responsibilities for continued social engagement.

3.2. The expert opinions' assessment levelsregarding the program forthe self-efficacy promoting model(OPHT).

Developed a post-discharge program for alcohol use behavior modification among psychiatric patients at a Thai psychiatric hospital. This program underwent suitability assessment by three experts with the following names:
- Assistant Professor Nitikorn Phoosuwan and Assistant Professor Passakorn Ongarj are affiliated with the Department of Public Health Administration, Faculty of Public Health, Kasetsart University, Chaloem Phrakiat Campus, Sakon Nakhon Province.
- Assistant ProfessorBenjayamas Pilayon is associated with the Boromarajonani College of Nursing, Nakhon Phanom University,Nakhon Phanom Province.

The program's suitability and consistency were evaluated using 3-level scoring criteria(Rating scaleof IOC).The Index of Item-Objective Congruence (IOC) is a statistical measure used to assess the alignment or compatibility between test items and the intended objectives in the context of educational or psychological testing.
Here is a common example of IOCwith scores:1)Give a rating of 1 when you see that the above questions can be measured according to that objective. 2)A score of 0 was given when it was not certain that the question was measured according to that objective.3)Give a score of -1 when it is seen that the test questions do not measure according to that objective.

Based on the opinions of 3 experts, and the average score was calculated. The results indicated anavailability of suitability, with an average score of 0.9, as shown in Table 1.A score in the range of 0.5-1.0 has acceptable accuracy[8].

IV. DISCUSSION

Alcohol addiction is a complex neurobiological process driven by positive brain circuits in the brain's reward system, alleviating stress and negative emotions by releasing dopamine in the nucleus accumbens, amygdala, and prefrontal cortex. Additionally, alcohol induces dynorphin release, which has adverse emotional effects and impairs memory. Prolonged alcohol use triggers neuroadaptation and changes in motivational and cognitive control, fostering addiction. Repeated stimulation of this system leads to heightened cravings and an increased fixation on alcohol. Over time, the dopamine neurotransmitter system's response diminishes, necessitating higher alcohol consumption to achieve the same effect[9].

Treating alcohol use disorder involves two critical steps: alcohol detoxification, typically utilizing benzodiazepines as the primary treatment, and prevention of relapse. However, relapse prevention faces challenges due to the high number of alcoholics and the cost of some medications, which are not on the national list of essential medicines. Consequently, care planning relies on knowledge and robust academic evidence, representing a crucial approach to averting alcohol addiction recurrence[10].

Distinguishing between alcohol consumption, problem drinking, and addictive drinking is essential. Problematic drinking encompasses a range of risk levels, from hazardous drinking (AUDIT score 8-15) to addictive drinking (AUDIT score 20 or higher). Addictive drinking warrants short consultations, motivational conversations, and a tailored treatment plan that may include specific medications. Data reveals that increased alcohol consumption diminishes self-control, and consuming over 10 standard drinks poses life-threatening risks [10].

When assessing levels of alcoholism, it is advisable to align AUDIT scores with diagnostic information, adhering to the guidelines provided by Pharmacotherapy for Alcohol Use Disorder: Current and Emerging Therapies [11].

1. Scores falling within the range of 8-15 warrant straightforward recommendations, primarily aimed at mitigating risky drinking.
2. Scores in the range of 16-19 call for brief counseling, encompassing result notification, risk identification, medical advice, discussion of adverse outcomes, motivating the patient to acknowledgethe issue, setting goals for alcohol reduction or cessation, and offering ongoing support and follow-up.
3. Scores of 20 and above necessitate additional evaluation for alcohol dependence.

Assessment of multiple facets	Level of expert opinion			sum	$\bar{x}$	results
	Person 1	Person 2	Person 3			
1. The program consists of comprehensive components.	1	1	1	3	1.0	available
2. The program is based on self-efficacy theory.	0	1	1	2	0.7	available
3. The program outlines suitable activities in detail.	1	0	1	2	0.7	available
4. The program incorporates appropriate methods for conducting activities.	1	1	1	3	1.0	available
5. The program includes relevant activity indicators.	1	1	1	3	0.7	available
6. The program aligns with the appropriate timing and number of activities.	1	1	1	3	1.0	available
				16	0.9	available

Table 1**:Displays the expert opinions' assessment levels regarding the program for modifying alcohol use behavior among psychiatric patients after their discharge from a single psychiatric hospital.(IOC)**

V. CONCLUSION

The program aims to assist alcoholic patients with schizophrenia in decreasing their alcohol consumption, thereby enhancing the effectiveness of their treatment upon discharge from a psychiatric hospital in Thailand.

ACKNOWLEDGMENTS

The authors express their gratitude to the public health professionals involved in this study, as well as to the staff and directors at Sakonnakhon Public Health Provincial and District Offices for their assistance in data collection.

REFERENCES

[1] Jamuenwai R. “The Effectiveness of Cognitive Behavior Therapy Program among Schizophrenic Disorders with Behaviors Alcohol Drinking”,Journalof Health and Environmental Education,vol.8, no. 1,pp.477-487, 2023.
[2] Juntapim S. and Nuntaboot K. “Care of Schizophrenia Patientsbythe Community”,Journal of Nursing, vol.36, no. 2, pp.68-76, 2018.
[3] Brunette MF, Mueser KT, Babbin S, et al. “Demographic and clinical correlates of substance use disorders in first episode psychosis”,Schizophr Res;194:4-12. PMID: 28697856, 2018.
[4] Kaewarj N.,Sirisuk S., Bualakorn N. and Srimungkhul P. “The Effect of Motivational Interviewing with Integrated Program on Alcohol Consumption Behavior and Psychotic Symptoms in Alcohol Use Disorders with Schizophrenic Patients”, Mental Health Knowledge Bank Department of Mental Health, accessed January 19, 2023, https://dmh-elibrary.org/items/show/1294.
[5] Chaihanit P. and Dangdomyouth P. “Selected Factors Related to Alcohol Consumption Behavior in Alcohol Dependencewith Psychiatric Comorbidity”, Journal of Psychiatric Nurse Association of Thailand, vol.28, no. 1, pp.105-120, 2014.
[6] One Psychiatric Hospital. “Report on the results of internal affairs operations at One Psychiatric Hospital”. Fiscal year 2021. 150 pages, 2022.
[7] Bandura A. 1997. “Self-efficacy: The exercise of control”. New York: W.H. Freeman & Company.Prochaska JO, Redding CA, Evers K. 2002. The transtheoretical model and stages of change. In: K. Glanz, BK Rimer, FM. Lewis, editors. Health Behavior and Health Education: Theory, Research and Practice. 3rd Ed. San Francisco: Jossey-Bass.
[8] Rovinelli, R.J. and Hambleton, R.K. “On the use of content specialists in theassessment of criterion-referenced test item validity”. Paper presented at the annualmeeting of the American Educational Research Association. 1976.
[9] Anton RF. “Naltrexone for the management of alcohol dependence”. New England Journal of Medicine. 359: 715-721, 2008.
[10] Boonlue T. “Teaching materials for course 1506-424 Pharmacotherapy 2; Common psychiatric diseases”. Faculty of Pharmacy Ubon Ratchathani University, Ubon Ratchathani, 2017.
[11] Swift RM, Aston ER. “Pharmacotherapy for Alcohol Use Disorder: Current and Emerging Therapies”. Harvard review of psychiatry. 23: 122-133, 2015.

★★★