Factors Associated with 6 Months Follow-Up in Clients Who Completed the Rehabilitation Program at Bangkok Behavior Modification Center

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Abstract

Drug abuses are a major problem that worldwide causing negative effects on physical health and mental health. The previous reported that relapse rates for individuals who enter recovery from a drug or alcohol addiction are quite high. Bangkok Behavioral Modification Center (BBMC) is center mainly developed an appropriate treatment, monitoring and assisting of patients with addiction in continuous and systematic. The specific objective of this research is to determine factors associated with completed in therapy and follow up of client at BBMC. The data from substance abuse treatment report form 3 (Bor sor tor 3) of 1869 clients were used to analyzed. All variables were described as percentage, mean and standard deviation. Chi-square test and multiple logistic regression was used to assess relationship, proportional comparison between various factors such as socio-demographic information and type of substances used with 6 months follow up at a statistical significance level of 0.05. The results showed that most of clients are age 25 years and above (70.5%), single (81.9%), knowledge in secondary education level (50.9%), have a career (89.6%) and income between 10,000 - 20,000 THB (56.7%). Amphetamines is a major of drug used (59%). 726 from 1869 clients are completed 6 months follow-up with non-relapse. The association between variable factors and 6 months complete follow up clients found that marital status, occupation, family relationships and type of drug use were statistically significant (p <0.05). The study suggests that treatment program should add more in family section by educate and guide the family members of individuals with drug addiction to care more about them or may be asked to families to participate in treatment. To create a career for clients can added more value in themselves and more accepted by society.

Keywords: Addiction, Rehabilitation, Bangkok Behavior Modification Center, Drug Abuse, 6 Months Follow-Up

Introduction

They established center for patients in therapy and screening in the name of Bangkok Behavioral Modification Center (BBMC) in 2017. The purpose of these program is clients had the opportunity to receive a rehabilitation without a legal offense. This center mainly developed an appropriate treatment process as well as monitoring and assisting the addicted users systematically and continuously. The program support all for physical, mental and social developments in various areas that are appropriate until their patients being able to return to normal life in society. BBMC provides 12 days of rehabilitation according to the guidelines set by the Ministry of Public Health under the supervision of the Bangkok Metropolitan Administration. In 2018, 1869 people completed the program and follow-up. In the case of a person who has passed rehabilitation from the voluntary system under the care of BBMC, Bangkok or hospital under MOPH will monitored. In the process of follow up, clients will be received providing a monitoring and assistance to be able to return to a normal life in society. For client's strengthening, they will get a counselling and support for admission rehabilitation in the event that able to quit drugs by themselves or improving the quality of life such as education, developing professional skills, job etc.

Many drug users returned to use drugs caused by triggers, therefore, can be seen often and repeatedly bringing drug addicts into the drug use cycle. There are found many drug users relapse of rehabilitation (Afkar, Rezvani, & Sigaroudi, 2017) (PMNIDAT, 2016). So, there are a large number of drug patients including relapse to drug use. Under the relapse rate for substance use disorders is estimated to be between 40% and 60% (National Institute on Drug Abuse (NIDA), 2018). Based on previous studies, Factors that people who can quit drugs and relapse drug addicts, there are differences, such as the perceived self-worth in past achievements, self-esteem, and methods of solving problems. Drug users who relapse drug addicts had less success, less pride than people who can quit drugs and have different ways to solve problems (Aphonsiri, 2007). Patients who had relapsed were found to have significantly more positive family history of substance use, history of alcohol-related comorbidity, experienced a higher number of undesirable life events, and higher negative mood states and social anxiety and dysfunction in social, vocational, personal, family, and cognitive spheres compared to patients who had remained abstinent. (Chauhan, Nautiyal, Garg, & Chauhan, 2018) and regular follow up with family, peer and social support are essential along with vocational rehabilitation to prevent relapse (Sau, Mukherjee, Manna, & Sanyal, 2013).

The objective of the study was to determine factors such as age, marital status, occupation and family relationships associated with completed in therapy and follow up of client at BBMC. For early identification of association factors might be helpful in designing more effective and focused treatment program.

Methodology

Research Design and Research setting and site selection

Research design

Researcher was used a retrospective cohort studies to identify factors related non-relapse in clients who were completed in rehabilitation program on BBMC.

Research setting and site selection

Researcher was selected a data from clients who are complete of 12 days rehabilitation program at the Antiaircraft Artillery Battalion No. 6, Department of Antiaircraft Artillery 1 under the supervision of Bangkok.

Population and sample

Population were used a secondary data from clients who were completed in rehabilitation program on BBMC. The data were collected from National drug addict database that has been collected previously by staff of the BBMC in year 2018.

The researcher used the Yamane (2009) to calculate the sample size for this study; Where n represents the sample size, Population size is represented capital N and e^2 Represent the level of precision (± 5%, or at the 95% confidence level).

Data were analyzed by using IBM SPSS program. First part of analysis was to describe information in descriptive form. The statistics used the percentage, mean and standard deviation to describe all variables. The Chi-square test was used to assess relationship, proportional comparison between various factors such as socio demographic information and type of substances used with 6 months follow up and Multiple Logistic Regression to determine the association between study factors and 6 months complete follow up clients at a statistical significance level of 0.05.

Results and discussion

Baseline data of patient's characteristic are shown in **Table 1**.

Table 1 Baseline data of patient's characteristic.

	Variables	n	%
Gender	Male	1869	100.0
Age	18-25 years	552	29.5
	25 years and above	1317	70.5
Marital status	Single	1531	81.9
	Married	248	13.3
	Other (Widow /Divorced/Separated)	90	4.8
Education	Secondary education	951	50.9
	No formal education / Primary Education	793	42.4
	Higher Secondary education	125	6.7
Occupation	Private company, factory employee Employment	1484	79.4
	Unemployed	195	10.4
	Others (Policeman, Soldier and students)	190	10.2
Income	Less than 10000 THB	664	35.5
	10000-20000 THB	1059	56.7
	More than 20000 THB	146	7.8

There are 1869 clients (100%) were male. Age 18-25 years are 552 patients (29.5%) and 25 years and above 1317 clients (70.5%). Mostly marital status of clients is single 1531 (81.9%), married 248 (13.3%) and other (Widow /Divorced /Separated) 90 (4.8%). Education of patients are secondary education 951 (50.9%), no formal education / primary Education 793 (42.4%) and higher Secondary education 125 (6.7%). Occupation of clients are private company, factory employee and employment 1484 (79.4%) Unemployed 195 (10.4%) and Others (Policeman, Soldier and students) 190 (10.2%). Of patients are less than 10000 THB 664 (35.5%) 10000-20000 THB 1059 (56.7%) and more than 20000 THB 146 (7.8%), respectively.

The first predictor, marital status shows that the group of clients who had married is completed 6 months follow up 2.22 times more than the group of other (widow /divorced /separated) (Adj. OR=2.22, 95% CI=1.31-3.76) (P-value=0.03). Single status completed 6 months follow up 1.53 times more than the group of Other (widow /divorced /separated) (Adj. OR=1.53, 95% (P-value=0.08).

Another predictor, which completed in the rehabilitation program at BBMC. Shows that the group of client's occupations who private company, factory employee and employment is completed 6 months follow up 0.67 times less than the group of other (policeman, soldier and students) (Adj. OR=0.67, 95% CI=0.49- 0.91), (p=0.01). Group of unemployed is completed 6 months follow up 0.57 times less than the group of other (policeman, soldier and students) (Adj. OR=0.57, 95%CI=0.37-0.86), (p=0.01).

In family relationships, shows that the group of client's family relationships who stay together with good relationship is completed 6 months follow up 1.36 times more than the group of other (family was separated/ Divorced). (Adj. OR=1.36, 95%CI=1.07-1.72), (p=0.01).

Conclusions

In our study, in part socio-demographic characteristics factors of clients found marital status, education level, occupation, income and family relationships time of drug and substance abuse and types of drug and substance abuse. In part of age, our study showed that the majority of client's age was 25 years and above (70.5%). According to data of PMNIDAT in 2020 mostly age 25- 29 years old are 1,097 clients (21.14%) and the study of the motivation to quit using drugs of patients at Thanyarak Khonkaen Hospital found that the majority of the participants were male with the average age of 30.28 years old (Sittipong, 2016). Similar a study of addiction relapse and its Predictors: A prospective study showed that sample consists of relatively young individual people with an average age of 31.38 years (Mohammadpoorasl et al., 2012). Normally, Drug addiction typically begins at a young age, and increases in adolescents and young adults. On the other hand, for clients who seeking treatment are adults because they don't want to have problems in their job.

In part of marital status, our study founded that most of clients are single 1531 (81.9%), married 248 (13.3%) and other (Widow /Divorced /Separated) 90 (4.8%), respectively. Marital status of clients it shows that there is statistically significant association with follow up report (p<0.05). Similar to a study of the individual and social/environmental predictors of alcohol and drug use 2 years following substance abuse treatment found marital status also predicted alcohol and drug use indirectly (Walton et al., 2003). These findings suggest that couple provides the primary form of social support. The relationship of family can give a better outcomes over time.

In part of education, the majority education of patients is secondary education 951 (50.9%), and no formal education / primary Education 793 (42.4%). Secondary education level of clients it shows that is statistically significant with follow up report (p<0.05). According study of factors associated with completion of a drug treatment court diversion program found that factors associated with program completion included race, education, and frequency of drug use (Butzin et al., 2002). Also studies report statistically significant as association between drop out and education, with lower education being risk factor (Brecht et al., 2005; Patkar et al., 2004). Also study of factors associated with drug abuse relapse: A study on the clients of rehabilitation centers found educational level of the respondents is associated with the drug relapse (p<0.004) (Bhandari et al., 2015). As well as the study substance abuse relapse in a ten-year prospective follow-up of clients with mental and substance use disorders. The results predictors of relapse included male sex, less than a high school education, living independently, and lack of continued substance abuse treatment. (Xie et al., 2005).

In part of occupation, our study found that the majority of clients have a job (79.4%) (i.e. private company, factory employee and employment). Occupation of clients it shows that there is statistically significant with follow up report (p<0.05). Also, data of PMNIDAT in 2020 mostly occupation are employment 2,372 clients (45.72%). And the study of the motivation to quit using drugs of patients at Thanyarak Khonkaen Hospital found working as general laborers (Sittipong, 2016) Similarity, Study of the success of treatment among drug dependent patient compared between compulsory and voluntary systems (Watisunthon & Cheidchom, 2009) found that participants in the treatment of the majority are unemployment, occupation factors joblessness. Previous studied show steady employment or job security has the most pronounced negative effect on alcohol and drug use, while characteristics such as the pace of activity, job independence, and skills utilization to include feelings of accomplishment have little or no effect on employees' alcohol and drug use, Occupational conditions have a discernible influence on alcohol and drug use among employees (Zhang & Snizek, 2003).

In part of income, the majority income of patients is 10,000-20,000 THB 1,059 (56.7%) and less than 10,000 THB 664 (35.5%) respectively. Income per month of clients it shows that there is statistically significant with follow up report (p<0.05). On the other hand, data of substance abuse report in 2006 mostly income are less than 10,000 THB. Also, the study of the motivation to quit using drugs of patients at Thanyarak Khonkaen Hospital found mostly earned an income of 5,001-10,000 baht per month (Sittipong, 2016). Our study is similarity to study of the Individual and social/environmental predictors of alcohol and drug use 2 years following substance abuse treatment found income, gender, problem severity, marital status,

and race also predicted alcohol and drug use indirectly (Walton et al., 2003). Data of income is different because is difference of sample in each country and at the present law of employment in Thailand have change minimum income in employment.

In part of family relationships pattern, the majority of relationship of clients with father-mother are stay together with good relationship 595 (31.8%), other (Separated/ Divorced) 561 (30.0%), either father or mother passed away 527 (28.2%) and no information 186 (10.0%) respectively. Family relationships of the clients are statistically significant with follow up report (p<0.05). Also the study of the factors that were statistically significantly related to alcohol drinking behaviors of adolescents, included social support from family, social support from friends and social support from school (Saelim et al., 2017). In Thai culture, respect parents can potentially affect their physical and emotional status and can inhibit a negative behavior of our clients. Therefore, expressing love and understanding that family members have for patients undergoing drug addiction treatment. To give patients a sense of love, warmth and encouragement. Caregivers of drug addicts the patient must be brought to the treatment facility at regular appointment times. To ensure continuity and best results for addiction treatment patients

Acknowledgements

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