

## DESCRIPTION OF FORMER DRUGS AND ALCOHOL ABUSERS IN TETIRAH DHIKIR REHABILITATION CENTER YOGYAKARTA

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### ABSTRACT

Drugs and alcohol abuse is a major public health problem in worldwide. Prevalence of drug use in Yogyakarta, 2.72 percent of ages 10-59 (2.5371 million). Negative effect of drugs and alcohol abuse can produce crime behavior, even can cause death. The prevention, treatment, and rehabilitation in Indonesia have been done, but the basic characteristics of patients in rehabilitation centers have not been studied yet. The aim of the study was to determine the basic characteristics of former drugs and alcohol abusers in Tetirah Dikir rehabilitation center Yogyakarta. This study was observational study, with total sampling methods. Observations, interview, and examination were performed on all patients. Case description was analyzed by descriptive statistics. All patients were men and productive age (34,4±1,35 years old). Mostly subjects unemployment (80%), totally recovered (60%), senior high school student (60%), outside Yogyakarta resident (60%), and up to 1 year followed therapy (60%). They preferred to choose multiple combination of alcohol (80%) and single kind of drug (60%). SGOT (25,2±8,2 U/L), SGPT (28,4±1,98 U/L), BUN (22,18±1,27 mg/dL), and creatinine (0,7±0,06 mg/dL) were within normal limit. The patients were mostly male, productive age, senior high school student, and unemployment, from outside Yogyakarta, totally recovered, and up to 1 year followed therapy. Mostly patients preferred to choose multiple combination alcohol and single kind of drug. The mean of liver and renal function test were within normal limit. Further evaluation of patients recovery status are needed.

**Keywords:** rehabilitation center, former drug abuser, liver, renal function status

### INTRODUCTION

The World Health Organization (WHO) estimated that there were about 2 billion people worldwide who consume alcoholic beverages and 76.3 million with diagnosable alcohol use disorders [1]. According to NHSDA, 6.3 percent of the U.S. population reported current use of illicit drugs [1]. The current rates for illicit drug use were 6.4 percent each for whites and African Americans and 5.3 percent for Hispanics/Latinos. The rate was highest among American Indian/Alaska Natives (12.6%), with Asians reporting the lowest rate (2.7%) [1]. Almost half (46.6%, approximately 104 million) of the U.S. population reported current use of alcohol [1]. Almost 6 percent of the US population (5.6%, 12.6 million) were heavy drinkers, consuming five or more drinks on one occasion in five or more days during the thirty days prior to interview [1]. Yogyakarta as the educational, culture and tourism city is very possible to be national and international drugs and alcohol trafficking. As the region with the highest number of universities in Yogyakarta, Sleman regency is a potential site for illegal drugs marketing. Trends in drug trafficking has also been extended to the village as in Gunung Kidul and Kulon Progo.

Drugs and alcohol abuse can lead to dependence syndrome and adverse effects on health. Alcohol consumption has health and social consequences via intoxication (drunkenness), alcohol dependence, and other biochemical effects of alcohol. Alcohol abuse produces many harmful outcomes, such as killed or

disabled at a relatively young age. According to Prof. Dr. dr. Samsuridjal Djauzi, PhD, FACP, uses of methamphetamine, could do abnormal behavior, impaired liver and kidney function, easily confused, always hungry, insomnia, and anxiety [2, 3]. Heroin can cause a weak heartbeat, shortness of breath, organ damage, sleeping difficulty, runny eyes and nose, tremors, diarrhea, and vomiting. Cocaine can trigger heart attacks, strokes, kidney failure, aggressive behavior, excessive shaking, blurred vision and hallucinations. Cannabis can cause depression, paranoid, impaired perception, impaired balance, and difficulty concentrating [4,5,6].

According to the government target "Indonesia free drug on 2015", the private community centre "Tetirah Dikir-Sleman-Jogjakarta-Indonesia" has took involve in the rehabilitation program for the early alcohol and drug abuser in that region. They have used non-medical method to relieve the withdrawal syndrome. Focusing on this program, we concerning on the evaluation of health level of the patients. On this study the basic characteristic health of patients, such as liver and renal function, and their recovery status have been determined.

### MATERIALS AND METHODS

The study based on total sampling methods. All patients were observed, interviewed, and physical examined. The blood of patients were taken to examine: SGOT, SGPT, BUN, and creatinine level.

Table 1. Proportion of patients characteristic Tetirah Dhikir

Variable	N (%)	Variable	N (%)
Age		Educational status	
-10-20 year	1(20)	-Senior high School	3(60)
-21-30 year	1(20)	-Undergraduate	2(40)
-31-40 year	1(20)	Employment	
-41-50 year	1(20)	-Working	1(20)
-51-60 year	1(20)	-Unemployment	4(80)
Sex		Recovery status	
-Male	5(100)	-Totally recovered	3(60)
Kind of Drugs		-Partially recovered	2(40)
-Single drug	3(60)	Regency	
-Multiple combination	2(40)	-Yogyakarta	2(40)
Kind of Alcohol		-Out side Yogyakarta	3(60)
-Single brand	1(60)	Duration of therapy	
-Multiple combination	4(80)	-≤1 year	2 (40)
SGOT		->1 year	3 (60)
-Normal	5(100)	SGPT	
BUN		-Normal	4(80)
-Normal	5(100)	-High	1(20)
		Creatinine	
		-Normal	5(100)

While the interview all the subjective data such as: name, address, age, gender, education level, occupation, type of drug and alcohol has consumed, duration of therapy, and recovery status, were collected. This study was conducted on August 2012. All data were described and statistically analyzed

## RESULTS AND DISCUSSION

There were totally 5 patients, who involved on the Tetirah Dhikir Program (TDP). The TDP did not have basic characteristic health status of their patients. The collected basic characteristic health patients show in Table 1, All of former drugs and alcohol abusers were male. They were all unemployed and were firstly consumed drug and alcohol at the productive age (18-52 years). The mean age of patients were 34,4±1,35 years old, and arranged from 18 - 52 years old. The SGOT level was 25,2±8,2 U/L, 28,4±1,98 U/L for SGPT, 22,18±1,27 mg/dL for BUN, and 0,7±0,06 mg/dL for creatinine, respectively. The TDP was one of a private and community based rehabilitation center in Yogyakarta. There were several healing non-medical therapy such as, praying (*sholat fardhlu and dzikir in jamaah*), planting, sports, reading, and etc. The facilities and funding of Tetirah Dhikir were limited. Individual's health condition was relatively better than before treatment. Some of patients that totally recovered have returned in their own society.

Results of this study showed that the majority of former drugs and alcohol abusers were male, productive age, senior high school student, and unemployment. It were consistent with the report from U.S., alcohol is the leading risk factor in deaths of males aged 15-59. In U.S. 17,6 million people, about 1 in every 12 adults, are alcohol dependent. Most

alcoholic in the U.S. seeking treatment are in 26-34 age group [7]. Alcohol is by far the greatest drug in use among high school students. Even though most teens do not use drugs every day, the truth is that most teens have had some sort of experience with drugs at least one point in their lives. In the case of alcohol, nearly every teen has tried it. Drugs and alcohol can decrease discipline and motivation in study. Learning achievement of these students can be dropped dramatically. Because they can't continue the study, almost former drugs and alcohol abusers are unemployment. National Survey on Drug Use and Health (NSDUH) findings included, 18,5% of drugs users are unemployed adults, only 8.8 % are full time employees [7].

Drugs and alcohol also can cause cognitive impairment, reduce memory, concentration, desire and ability to learn. Mental, emotional and social development in adolescent are destroyed [8, 9]. Social influences on drug abuse including loss of religious, social, and cultural value. They became asocial, selfish, and do not care about other people. There are increasing in criminal action, such as sexual abuse, stealing, extortion, and even murder. The future of patient are destroyed, become drop out of school, unemployed, and being excommunicated [10, 11]. In TDP, the fully recovered patient can back in to his own society, socialize with the others, and having normal life. The religious habit in TDP, can help their recovery process and increase their obedience in God.

The liver and renal function of patients, who involved on the TDP were still within normal limit. The level insufficient of this organ was depended on the type drug-alcohol uses, dosis, and how long was consuming the drugs-alcohol. It was reported drug and alcohol

consume could decrease liver and renal function. Most drugs and alcohol were metabolized in liver and excreted through the renal. Impairment of this organ through intensive drug and alcohol use could due insufficient organ. All our former drugs and alcohol consumer on the TDP have normal liver and renal function. Their past consumption was not sufficient enough to decrease liver and renal function.

Recovery status depends on patient adherence in therapy. Encouragement from family, friend, society, and government also very important. Government institution in Indonesia who taking part in drugs eradication is Badan Narkotika Nasional (BNN). There are several, prevention, treatment, and rehabilitation programs for drugs and alcohol abusers. One of the target from rehabilitation are, patient can life normally in society, without drugs and alcohol anymore [12,13].

Mostly patients preferred to choose multiple combination alcohol and single kind of drug. Every group of drug have different recreational effect. Tendency to choose special type of drugs based on the effect were desired by abuser. Stimulants include illegal drugs such as cocaine and methamphetamine, as well as legal substances such as nicotine, caffeine and over-the-counter stimulants. This reinforces their abuse, feels dysphoria, depletes energy and creates intense drug cravings and withdrawal symptoms. Depressants include opiates such as heroin, morphine, opium, and sedative-hypnotic medications such as valium. Depressants slow down the central nervous system, diminish inhibitions, create relaxation and decrease pain. Psychedelic abuse includes LSD, psilocybin mushrooms, MDMA or ecstasy, and ketamine. Psychedelics, called hallucinogens that can distort the user's perceptions, thoughts and sensations. The most commonly abused illegal drug, marijuana induces short-term euphoria, physical relaxation, distorted perception and thought, increased appetite, impairment of memory and physical coordination. Alcohol abusers like to choose multiple combination of alcohol, because it is cheaper. Alcohol abuse is linked to increases in aggression, impaired judgment, diminished inhibitions, mood problems such as depression and anxiety, health problems, sexual dysfunction and relationship problems [14].

## CONCLUSIONS

Basic characteristics of drug abusers were mostly male, productive age, senior high school student, unemployment, from out side Yogyakarta, totally recovered, and up to 1 year followed therapy. Mostly patients preferred to choose multiple combination alcohol and single kind of drug. The mean of liver and renal function test were within normal limit. Further research is needed to reevaluation the liver and renal function test of these patients. Patient with high level of SGOT and SGPT need ultrasonography examination to find alcoholic fatty liver disease.

Combination with medical therapy is needed in Tetirah Dhikir to accelerate the patient recovery.

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