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The Preparedness to Cope with Alcohol Relapse Risks among Alcoholics in Selected Rehabilitation Centers in Nairobi, Kenya

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Abstract: There has been increasing drug and alcohol abuse in Kenya with the associated adverse consequences. As a result, there has been increase in the establishment of treatment and rehabilitation services and demand for the same to assist abusers in recovery and avoid relapse. However, despite the availability and demand of these services, there has also been a simultaneous increase in the relapse cases. This casts doubt on the effectiveness of the existing treatment and rehabilitation services in meeting the ever-increasing number of admitted cases. This study sought to establish the preparedness of alcoholic in coping with the risks that predispose one to relapse assess the effectiveness of treatment and rehabilitation services in addressing alcohol relapse in selected centers in Nairobi, Kenya. This study adopted ex post facto research design. The target population was all the relapse cases in the 14 rehabilitation centers registered by NACADA in Nairobi. A random sample of 109 alcoholics and 8 counselors drawn from 4 purposively selected rehabilitation centers were involved in the study. Data was collected through administration of two sets of self-structured questionnaires to the selected respondents. The questionnaires were piloted to validate and test its reliability before the actual data collection. The data was then processed and analyzed using descriptive statistics including frequencies and percentages with the aid of Statistical Package for Social Sciences (SPSS) version 22.0 for Windows. The results of study have shown that relapse was influenced by the interaction of past-risks within the individual and environmental situations and level of preparedness to cope with these past-risks to resist drinking.
Keywords: Alcohol, Risk factors, Relapse, Rehabilitation Centers, Preparedness.

INTRODUCTION

Alcohol is used as social lubricant and relaxation facilitator, which provides pharmacological pleasure [1]. However, when abused, it turns into an evil, which is sufficiently inflammable to burn the families, society and country. Alcoholism is one of the major health and social problem seen all over the world. Globally there are 140 million alcohol dependents and 78% of them are not treated. One of the most distressing problems in alcoholism treatment is the relatively high rates of relapse to alcohol use following periods of abstinence. Although specific criteria for relapse or to differentiate relatively limited episodes of use from episodes that lead to a resumption of uncontrolled use have not been universally adopted [2], relapse is generally defined as an episode of substance use following some period of abstinence.

According to World Health Organization [3], alcohol dependence is typically a chronic, relapsing condition in which there is evidence of significant change in the motivation and control systems in the brain. All over the world in general and Kenya in particular, the excessive use of alcohol presents significant public health concerns [4]. This is substantiated through the report by United Nations Office for Drug Control and Crime Prevention [5] that approximately 185 million people all over the world are current drug users. There has been a steady increase in the demand for alcohol and other drugs treatments in Kenya in recent past, due to the increase in drug abuse and relapse cases.

People who have long-term alcohol dependence often have other social, psychological and physical difficulties [6]. The lack of empirically supported treatments, and the minimal utilization of available treatments by those needing services indicates that brief, innovative treatments to serve those individuals with alcohol and drug use disorders are highly desired [7]. Mutual support groups, such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA), are the most commonly available treatments in many developed countries worldwide [8]. However, these approaches may not he clinically indicated for certain drug and alcohol abusers given the substantial economic and individual costs of substance abuse worldwide [9]. It is critical for cost effective,

empirically supported treatments to be developed, evaluated, and disseminated internationally [10]. Marlatt and Gordon [11] have estimated the likelihood of return to drug abuse to be about 50 percent by the most optimistic estimation. Realistically, the probability of relapse varies from 60 to 90 % [12].

The primary goal of alcoholism treatment is help the alcoholic to achieve and maintain sobriety. However, there is concern about the high rate of relapse among the alcoholics, and the increasingly adverse consequences of continuing disease. Although relapse is a problem of addiction, it is preventable. For this reason, preventing relapse should be the fundamental issue in alcoholism treatment. People who have relapsed can usually point back to certain things that they thought and did long before they actually drank that eventually caused the relapse (past risks). The quicker they learn to spot the signs and signals, the sooner they can take positive actions for their own well-being (acquisition of skills to cope with risks). There are many factors that contribute to it, as well as identifiable evidence and warning signs, which indicate that the individual may be in danger of using alcohol again. It is helpful to view relapse as a process that begins well in advance of that act itself. Alcohol relapse prevention will give the individual the tools and the techniques they can use to combat the cravings and help avoid peer pressure [13]. It is the key to maintaining long-term sobriety. The primary goal of an alcohol relapse prevention program is to educate people so they can easily identify the triggers for relapse. A quality program will also offer ways to manage life's challenges, as well as, the myriad of feelings one experiences after completing rehabilitation [14]. An individual's success outside any treatment centre depends on their ability to recognize when they are in a "slippery" situation, how to deal with it appropriately, who to talk to for help and where to go for support. If an individual is without these fundamentals, their chances of staying sober drastically decrease [15].

RELAPSE PREVENTION

The CB model of addiction forms the basis for relapse prevention, an intervention that attempts to describe, understand, prevent, and manage relapse in individuals who have received, or are receiving, treatment for substance use disorders [16]. The relapse prevention model has provided an important heuristic and treatment framework for clinicians working with several types of addictive behavior [17]. Relapse prevention combines behavioral skill training with cognitive interventions designed to prevent or limit the occurrence of relapse episodes. Relapse prevention treatment begins with the assessment of the potential interpersonal, intrapersonal, environmental, and physiological risks for relapse and the factors or situations that may precipitate a relapse. Once potential relapse triggers and high-risk situations are identified, cognitive and behavioral approaches are implemented that incorporate both specific interventions and global self-management strategies.

The cornerstone of relapse prevention is the identification and modification of deficits in coping skills, the bolstering of self-efficacy and the challenging of positive outcome expectancies, and education about the abstinence violation effect. One of the major, and often overlooked, components of relapse prevention is the focus on lifestyle balance and relapse management techniques. An individual who is trying to maintain abstinence may be encouraged to pursue a "positive addiction" [18], such as exercise, reading, or meditation. Relapse prevention training also tends to place a greater emphasis on alternative methods for coping with urges or temptations to use substances. For example, urge surfing is a common technique, which incorporates both cognitive (imagery) and behavioral (relaxation) coping strategies.

Relapse prevention has become one of the most widely disseminated and successful adjuncts to treatment for addictive and non-addictive disorders, including cocaine abuse [19], depression [20], eating disorders [21], erectile dysfunction, gambling, bipolar disorders, marijuana dependence, schizophrenia, and sexual offenses [22]. Two recent qualitative and quantitative reviews of relapse prevention have demonstrated the clinical effectiveness and efficacy of relapse prevention in the treatment of a variety of addictive disorders [23]. In a qualitative review of studies on relapse prevention for smoking, alcohol, marijuana, and cocaine addiction, Carroll [24] concluded that relapse prevention was more effective than no treatment and equally effective as other active treatments, such as nicotine gum, interactional and interpersonal therapies, behavioral marital therapy, social support group, and 12-step support groups [25]. Several of the reviewed studies demonstrated that relapse prevention techniques significantly reduced the intensity of relapse episodes and several studies identified sustained main effects for relapse prevention.

Carroll [26] hypothesized that relapse prevention may provide continued improvement over a longer period (indicating a "delayed emergence effect"), whereas other treatments may only be effective over a shorter duration [27]. Irvin and colleagues [28] conducted a meta-analytic review including 26 studies of treatment for alcohol, smoking, polysubstance, and cocaine use, representing a sample of 9,504 participants with addictive disorders. The results demonstrated that relapse prevention was a successful intervention for drug and alcohol use (overall treatment effect size: r = .14; alcohol treatment effect: r = .37; polysubstance treatment effect: r = .27; cocaine treatment effect r = -.03; smoking treatment effect: r = .09). Individuals who had received relapse prevention training were more

likely to report better psychosocial outcomes (overall effect on psychosocial adjustment: r - .48), such as marital adjustment, increased social and problem-solving skills, and decreased levels of health, employment, and social impairment. The authors concluded that relapse prevention is an efficacious treatment, but cautioned that little is known about the moderators and mediators of relapse prevention's effectiveness.

As Sanchis-Segura and Spanagel [29] argue relapse in alcohol dependence can be triggered by positively valenced situations in which consumption has previously taken place. A paradigm to model this effect experimentally is Pavlovian to-instrumental transfer (PIT), which measures the influence of Pavlovian-conditioned cues on instrumental behavior [30]. For example, affectively positive Pavlovian cues can promote approach, while negative Pavlovian cues can inhibit approach [31]. In alcohol-dependent patients, confrontation with Pavlovian cues may interact with more complex effects of context and mood, which have been shown to interact with the relapse risk of detoxified patients [32]. Nevertheless, the neural activation patterns underlying PIT effects are candidate mechanisms mediating or influencing drug seeking and relapse [33]. A better understanding of PIT effects in substance dependence may thus help to explain how and why drug-related cues can induce craving and promote relapses even after prolonged periods of abstinence when drug intake is no longer desired [34]. Indeed, the strength of PIT effects may be an indicator of relapse risk. In animal studies, it has been shown that non-drug related PIT is enhanced in cocaine-dependent animals indicating that drug exposure causes alterations in reward learning that are not necessarily specific for drug related reinforcers but concern more general mechanisms [35]. This has been studied in animal but not in human substance dependence so far.

Recently, PIT has been investigated in non-dependent humans both behaviorally and with neuroimaging techniques [36]. The success of relapse prevention will depend on the involvement of the client in working out their own program. This is so as to increase their awareness of the choices that they have in dealing with their problem. There is also a focus on developing individualized coping skills and self-control abilities. There are two types of relapse prevention intervention strategies: specific intervention strategies and global self-control strategies.

Specific intervention strategies are procedures directed at immediate precipitants or relapse. Global self-control strategies are designed to help modify clients, lifestyles and to deal with covert threat to relapse. The procedures used in both strategies can be subsumed under the categories of skill training, cognitive reframing and lifestyle intervention [37]. Skill training involves learning both cognitive and behavioral responses to deal with high-risk situations. Cognitive reframing techniques help clients to see the habit change process as a learning experience; introducing coping imagery to deal with urges and cravings; restructuring how clients sees the initial relapses; and coping with the senses of failures and guilt or the feeling that everything gained in recovery is lost as a result of drinking slip [38].

Specific intervention strategies involve teaching the clients to recognize the high-risk situations that may trigger a relapse. These must be individualized because the risks are different for each person. It is important for the clients to recognize as early as possible in a chain of behaviors which ones are high risks. The earlier the clients are aware of these risks, the sooner they can intervene by using coping skills and by using these cues as both warning signals and as reminders to engage in alternative or remedial actions. Clients should be taught to monitor their reactions, check their sense of competency and use relapse and descriptions of previous relapses to alert themselves to modify their behavior. They should be taught relaxation, stress management and efficacy-enhancing imagery as coping responses [39].

Marlatt and Gordon [40] relapse prevention model is based on socio-cognitive model and incorporates both a conceptual model of relapse and set of cognitive and behavioral strategies to prevent or limit relapse episodes. The cognitive- behavioral model of relapse process posits a central role for high-risk situations and for drinker’s response to those situations. People with effective coping responses have confidence that they can cope with the situation (increased self-efficacy), thereby reducing the probability of a relapse. Conversely, people with ineffective coping response will experience decreased self-efficacy, which together with the expectation that alcohol use will have a positive effect can result in initial lapse. This relapse in turn can result in feelings of guilty and failure hence increasing probability of a relapse. The Diagram 1 summarizes the cognitive behavioral model of relapse.

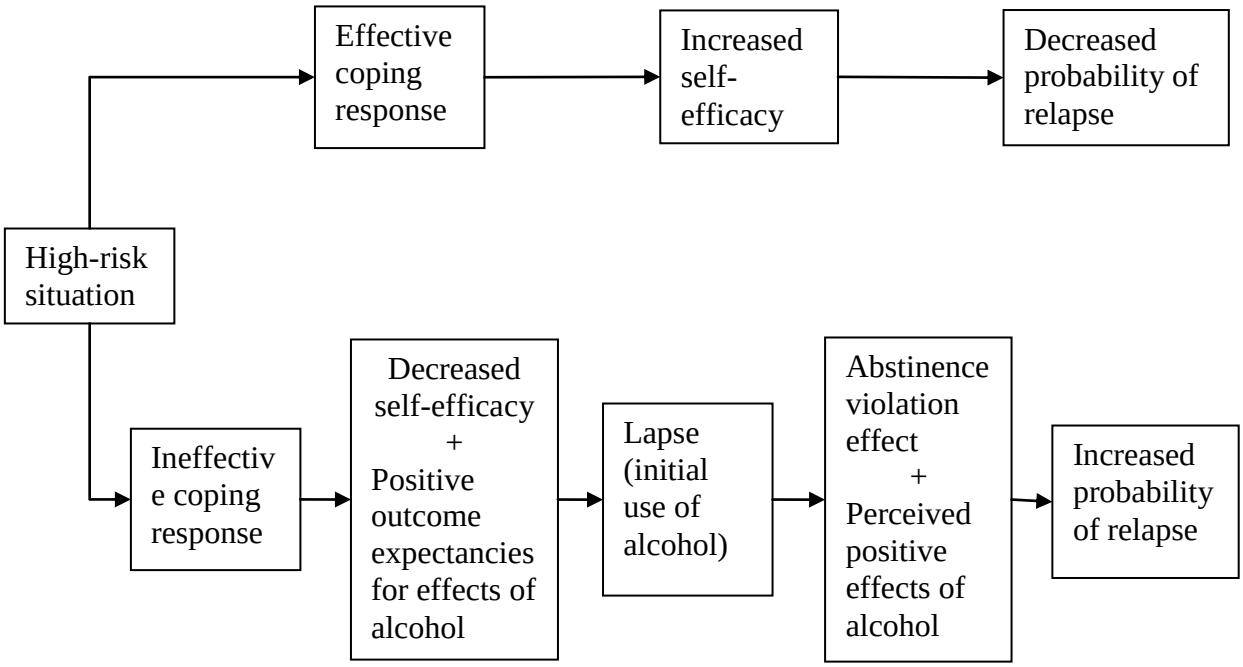

Fig-1: Cognitive-Behavioral Model of Relapse (Marlatt & Gordon, 1985)

MATERIALS AND METHODOLOGY

Design

This study adopted an *ex post facto* research design. This is a causal-comparative research design used to determine reasons or causes for the current status of the phenomenon under study. As a result of the cause-and-effect relationships, this research design does not permit manipulation of the variables [41]. The design was adopted in this study because treatment and rehabilitation services which have been implemented in rehabilitation centers were studied after they have exerted effect on the dependent variable (relapse). The researcher then proceeded to study the effects of treatment and rehabilitation services in retrospect for its possible relationship to relapse cases.

Location of the Study

This study was conducted in selected alcohol rehabilitation centers in Nairobi province, Kenya. Nairobi had the highest number of drug and alcohol rehabilitation centers in the country and only 14 had registered with NACADA. The 14 rehabilitation centers in Nairobi account for 29% of all centers in the country. Being the capital city of the country, the centers in Nairobi were more accessible and took care of a wider variety of clients compared to other parts of the country. Therefore, the level of effectiveness of rehabilitation centers in Nairobi may be used as mirror of the situation in the country.

Population of the Study

The target population for this study comprised the alcoholics and their service providers in all the 14 drugs and alcohol rehabilitation centers registered by NACADA in Nairobi. The 14 centers in Nairobi form 29% of all centers in the country [42]. These centers offered residential and non-residential services, with some having both in-patient and out-patient programs, while others had only in-patient program. Table 1 summarizes the 14 centers and their nature.

The study specifically targeted the available relapse and service providers in the rehabilitation centers because of their direct involvement in determining their success or failure of treatment and rehabilitation services. In this study, relapsee cases were targeted because they were the intended beneficiaries of treatment and rehabilitation services offered in these centers. They were the directly targeted for relapse prevention and were in a better position to provide information relevant to their situation. Service providers, especially counselors, were also be used because they were critical in ensuring adequate recovery of clients in these centers. They were therefore well placed to give the required information on the effectiveness of the services that they were offering.

Table-1: Distribution of the Rehabilitation Centers in Nairobi

Name	Services	Program
Asumbi Karen	Residential Rehabilitation	In-patient
Brightside	Residential Rehabilitation	In-patient
Chiromo Lane Medical Centre	Residential Rehabilitation	In-patient
Dapar Counseling Centre	Residential Rehabilitation	In-patient
Maisha House	Non-residential Rehabilitation	In-patient
Mathari Hospital	Residential Rehabilitation	In-patient
Medicare Wellness Limited	Residential Rehabilitation	In-patient
Nziwa Springs Counseling Centre	Residential Rehabilitation	In-patient
Nairobi Place	Residential Rehabilitation	In-patient
Nairobi probation Hostel	Residential Rehabilitation	In-patient
Psychological Health Services	Non-Residential Rehabilitation	Out-patient
Salvation Army	Non-Residential Rehabilitation	Out-patient
Youth Counseling Centre	Non-Residential Rehabilitation	Out-patient
Youth Education Support	Non-Residential Rehabilitation	Out-patient

***Source**: NACADA, 2007*

Sampling Procedure and Sample Size

Sample of 4 were purposively sampled. The 4 centers included Mathari, Asumbi Karen, Maisha and Nairobi Place. Mathari Hospital was chosen as the only public centre in the area. It offered residential services and out-patient program. Asumbi Karen was included for offering residential services without any out-patient program. Maisha and Nairobi place, unlike Asumbi, offered residential services but also have out-patient services. Table 2 summarizes the distribution of clients and service providers from the 4 selected centers in Nairobi.

Table-2: Distribution of the Clients and Service Providers

Name	**Number of counselors**	**Number of alcoholics**
Maisha house	2	8
Mathari hospital	10	28
Nairobi place	7	99
Asumbi Karen	6	16
Total	**25**	**151**

***Source**: NACADA, 2007*

In order to determine a representative sample size of alcoholics to be drawn from an estimated 151, this study adopted a formula by Mugenda and Mugenda [43] for estimating a sample size, n, from a known population size, N.

$$n = \frac{\chi^2 NP\ (1-P)}{\sigma^2\ (N - 1) + \chi^2\ P\ (1 - P)}$$

Where:

n = required sample size

N = the given population size of potential alcoholics, 151 in this case

P = Population proportion, assumed to be 0.50

σ^2 = the degree of accuracy whose value is 0.05

χ^2 = Table value of chi-square for one degree of freedom, which is 3.841

Substituting these values in the equation, estimated sample size (n) was:

$$n = \frac{3.841 \times 151 \times 0.50\ (1 - 0.5)}{(0.05)^2\ (151 - 1) + 3.841 \times 0.5 \times (1 - 0.5)}$$

$$n = 109$$

Proportionate stratified sampling was used to ensure that the sample was proportionately and adequately distributed among the 4 centers according to the population of each centre. In doing this, each centre was allocated a proportion of the sample by dividing the estimated number of alcoholics in the centre by the total number of estimated alcoholics in the 4 centers and then multiplied by the sample size (109). However, after data collection and analysis, only 100 alcoholics were included as were lost through inconsistent responses and non-response. Out of 100 alcoholics, 43 were relapsees who were isolated at data analysis. Purposive sampling was used to select two counselors from each of the 4 rehabilitation centers. The two counselors were included the head of the counseling program and any other counselor in the centre.

RESULTS AND DISCUSSION

The results of the data analysis on the level preparedness of alcoholic in coping with the risks that predispose one to relapse in selected centers in Kenya were presented and discussed. The respondents of study included alcoholics and counselors. The results and

discussions were guided by research question as follows:

What is alcoholics' preparedness to cope with risks to alcohol relapse among alcoholics in selected rehabilitation centers in Nairobi, Kenya?

The research question was to establish the preparedness of alcoholic in coping with the risks that predispose one to relapse. Preparedness involved the acquisitions of skills that will assist one appraise himself or herself in overcoming or coping with exposure to risks of relapse. Majority of respondents (62.5%) indicated that they were poorly prepared in acquisition of skills that emphasized the regular attendance in support groups, followed by poor preparation in acquisition of problem solving skills (60.5%) as indicated in Table 3. The same percentage of relapsees indicated that they were poorly prepared in self-esteem enhancement, stress management and job search skills (58.1%). The results in Table 3 show that respondents who indicated that they were poorly prepared in the identification of warning signs for the relapse were 53.5% as compared to 46.5% who were well prepared in the same.

Table-3: Distribution of Alcoholics by Extent of Preparation in Acquisition of Skills

Preparations	Poorly Prepared		Undecided		Well Prepared	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Anger management	23	53.5	3	7.0	17	39.5
Self-esteem	25	58.1	1	2.3	17	39.5
Problem solving	26	60.5	-	-	17	39.5
Assertive training	21	48.8	6	14.0	16	37.2
Decision making	25	58.1	5	11.6	13	30.2
Stress management	25	58.1	5	11.6	13	30.9
Warning signs	23	53.5	-	-	20	46.5
Unresolved issues	22	51.2	4	9.3	17	39.5
Urges to drink	25	58.1	3	7.0	17	39.5
Grief counseling	25	58.1	5	11.6	13	30.2
Time management	22	51.2	5	11.6	16	47.2
Adherence to treatment plans	25	58.1	2	4.7	16	37.2
Regular attendance of support group	27	62.7	3	7.0	13	30.2
Job search skills	25	58.1	5	11.6	13	30.2

The results of the current study had indicated that poor preparation of alcoholics in acquisition of skills to cope with high-risk situations accounted for relapse in majority of respondents. The findings concurred with social learning theory that postulates that an individual's expectations about his or her ability (level of preparedness) to cope in a situation (level of past risk) will affect the outcome (increased or decreased probability of relapse). That judgment of personal efficacy determines whether or not drinking takes place [43].The findings were also similar to results of other previous studies that asserted that the transition from the initial drink following abstinence (lapse) to excessive drinking (relapse) is influenced by an individual's perception of and reaction to the first drink [44].

CONCLUSIONS

The results of study have shown that relapse was influenced by poor acquisition of skills to cope with risks and institutional factors that diminished the level of perceived personal control (self-efficacy) to resist drinking. More than half of relapsees (62.7%) indicated that they were poorly prepared in acquisition of skills that emphasized the regular attendance in support groups, followed by poor preparation in acquisition of problem solving skills (60.5%). Alcohol relapse treatment can provide the individual with the education they need to recognize the triggers that threaten all of the hard work put in while in rehabilitation

RECOMMENDATIONS

Based on the findings of the study, the following recommendations have been made:

- The alcoholics should be assisted by rehabilitation centers to assume an active role in changing drinking behavior. This could be done by assisting the alcoholics to modify their lifestyles to enhance their abilities to cope with past-risk situations; identify and respond appropriately to internal and external cues that serve as relapse warning signals; and implement self-control strategies to reduce the risk of relapse in any situation.
- Family members or and significant others should be involved in therapeutic process to help them recognize behaviors and problems related to addiction.
- The role of support groups should be emphasized by rehabilitation centers and these should be communicated to the alcoholics.
- The rehabilitation centers should scale-up follow- ups and after care services. Alcoholism being chronic, progressive and persistent in

nature, it means that individuals who attend treatment will not be quick fixed or cured. After care programs may provide ongoing therapy so relapse has less chance of occurring.

- Multi-media campaign against alcohol use and that relapse is preventable should be scaled up as it has an advantage of reaching large audience that make it cost effective.
- There is need for training of personnel in high level of education for them to offer effective service to clients of rehabilitation center.
- Some community factors like ease availability of alcohol contributed to relapse as indicated in results in previous chapter. There is need for government to intensify community sensitization and mobilization to prevent or intervene in alcoholism problems or relapse.
- There is need for government and relevant stakeholders to intervene and assist the young people in getting jobs or assist them to get involved in business.
- Holistic counseling should be strengthened to help the process offering after-care programs that provide support systems.

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