Innovations

Biopsychosocial-Spiritual Predictors of Relapse Tendency among Substance use Disorders Patients in Selected Rehabilitation Centers in South-West, Nigeria

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Abstract: *Studies show that relapse or uncontrolled return to drugs among patients diagnosed with substance related disorders following competent treatment has been a severe problem. This has remained a major challenge to substance abusers and the treatment teams. The objective of this research aimed at accessing the Biopsychosocial-Spiritual Predictors of Relapse Tendency among Substance Use Disorder Patients in selected Rehabilitation Centers in South-West, Nigeria. The predictors included Body Mass Index, Gender, Impulsivity, Stigma and Religiosity. The study is a cross-sectional survey design targeting 177 inpatients receiving treatment for substance use disorder at two selected rehabilitation centers in South-West, Nigeria. Purposive sampling was adopted as it gives more freedom with selection of patients. The Study was investigated by adopting the Advanced Warning of Relapse Scale (AWARE), the barratt impulsiveness scale short-form (BIS-11 sf), the perceived stigma towards substance users scale (PSAS) and The Centrality of Religiosity Scale (CRS). Data collected was analyzed by statistical software (SPSS version 25) using linear regression to test the hypotheses. Research discovered impulsivity to be the only predictor of Relapse Tendency [R^2 = .327, F(1,175) = 84.919, p<.001]. Study suggested that Impulsivity is a significant predictor of Relapse Tendency among patients with substance use disorders therefore making it risk factor to be considered during treatment. There is need for more focus to be placed on the psychological variables that could be a risk factor towards Relapse while still maintaining the Biopsychosocial-Spiritual view in treating Relapse.*

Keywords: *Biopsychosocial-Spiritual, Relapse Tendency, Substance Use Disorder, Body Mass Index, Impulsivity, Stigma, Religiosity.*

Introduction

The use of psychoactive substances has been around since the beginning of civilization, for several different reasons (including religious, recreational, and medicinal purposes). However, there has been a significant shift in the way people think about drug use and the issues it causes, both historically and socially. Because of the high mortality, disease, and economic costs associated with drug and alcohol abuse, as well as the problem's ubiquity, it is a critical global health issue. According to the 2021 World Drug Report, around 275 million individuals world-wide used drugs and over 36 million people suffered from drug use problems. According to the most recent global figures, approximately 5.5 percent of the population aged 15 to 64 years has used drugs at least once, while 13% of all drug users suffer from drug use disorders in Nigeria with a 14.4% prevalence significantly higher than the global average (UNODC, 2018). Repeated use, dependence, and tolerance are all signs that a person is abusing drugs or substance. This leads to poor health and in some cases increases the risk of non-communicable diseases (SAMSHA, 2022).An issue has evolved in individuals who use psychoactive drugs to the point where it has an adverse effect on their well-being, productivity at their daily activities, school, and interpersonal connections. This is referred to as substance use disorder (SUD).

Substance use disorder is described by the DSM V as a combination of mental, behavioral, and physical symptoms that suggest that a person has no control over substance use and keeps using with no caution over major substance issues (American Psychiatric Association, 2013). 40,3 million adults (or 14.5%) had a substance use disorder in the previous year by 2020; this included 28,3 million with alcohol use disorder, 18,4 million with illicit drug use disorder, and 6.5 million with alcohol use disorder as well as illicit drug use disorders (SUDs). In 2020, the percentage of people aged 12 or older with an alcohol use disorder was highest among young adults aged 18 to 25 (15.6 percent or 5.2 million people), followed by adults aged 26 or older (10.3 percent or 22.4 million people), then by adolescents aged 12 to 17 (2.8 percent or 712,000 people) (2.8 percent or 712,000 people). Another finding was that young adults were more likely to have experienced an illicit drug-use disorder in the previous year than either adolescents or adults aged 26 and above(SAMHSA, 2022). Other than alcohol-related overdose fatalities, the number of people dying directly as a result of drug usage has grown by more than 60% since 2000. In 2016, an extra 3 million people died as a direct consequence of alcohol abuse (WHO, 2018).

Irrespective of the problems faced by substance abusers, there is hope for them to bounce back and be an integral part of the society as well as a motivation for other substance abusers. The country has gone through some lengths to provide standard rehabilitation centers that provide treatment for substance abusers such as Detoxification, Psycho-educations, Temporary Abstinence, Cognitive rehabilitation, Behavioral Modifications, Social and Interactive Skills,

Therapy and many more treatment techniques. However, despite the provision of treatment, there is an issue that accompanies addiction which plagues the efforts and resources used to achieve recovery in substance abuser. This is referred to as Relapse. Addiction, like many other chronic illnesses, may lead to relapses and recurrences (Smith, 2012).

The term relapse is used across all disciplines in health and behavioral sciences to describe the recurrence of a condition or a pattern of behavior. With respect to substance abuse,it is becoming more difficult to describe substance relapse since the concept of relapse itself is changing. Experts argue on whether drug relapse is a process or a final result in and of itself (Donovan &Marlatt, 2005). For many years, the term "relapse" was used to describe the return of a user to an unhealthy condition following an extended period of abstinence. After some time, the concept developed to include the process by which persons in recovery are lured back into their drug use (Hendershot et al., 2011). According to Marlatt and Gordon (1985), relapse may be defined in two ways, as the return of illness symptoms following therapy or as an action indicating that patients have recovered or have worsened to the point where they are now incurable. Gossop, Green and Phillips (1989) defined Relapse as drug usage following a period of abstinence. More than 85% of people who have completed treatment for drug addiction return to drug usage within a year of finishing it (Sinha, 2011). Researchers estimate that more than 2/3 of patients in recovery relapse within weeks to months after commencing addiction treatment. These figures on substance relapse are disheartening, and many academics are left wondering why the percentages are so high in comparison to those who can recover from their addiction. According to current research, relapse may be a gradual process inwhich a person in treatment regresses into an earlier stage of abuse. This implies that relapse might occur weeks or even months before a person returns to a substance of choice. This calls for researchers to put more effort into studying Relapse Tendency to predict if a certain individual with substance use disorder is more likely to relapse. Relapse tendency refers to the likelihood and propensity of relapse behavior, which is a necessary condition for a person to create a certain behavior. The greater the propensity to relapse, the greater the likelihood that the individual would engage in relapse behavior (Zeng& Wei, 2021).)As a result, decreasing the tendency to relapse is not only an indication that may be used to measure the success of drug treatment intervention, but it is also a significant challenge that must be overcome in drug treatment intervention (Zeng, Lu &Chen, 2021).

The Biopsychosocial model of health emphasizes that chromosomal assemble (biology), psychological wellbeing and character (Psychology) and the Socio-Cultural surroundings all connect to add to the knowledge of Health or Illness. Understanding health, sickness, and the delivery of health care requires a

multidisciplinary approach that examines biological, psychological, and social aspects as well as their relationships. Not a singular factor may bring about health or disease on its own. Recently, this model has been developed to the 'biopsychosocial-spiritual' (BPSS) model (Sulmasy, 2002), which adds the spiritual aspect into the model and may be especially relevant for describing relapse given the role of spirituality in many SUD treatment and mutual aid programmes (Sliedrecht et al., 2019).

The aim of the study was to determine the role of some Biopsychosocial-Spiritual Factors (Body Mass Index, Impulsivity, Stigma and Religiosity) in predicting Relapse Tendency among individuals with substance use disorder in some selected Neuropsychiatric hospital.

Methods

Research design

The study adopted a Cross-Sectional survey research design with seven independent variables (Age, Body Mass Index, Gender, Impulsivity, Perceived Stigma, Religiosity) and one dependent variable (Relapse Tendency).A cross-sectional study is a sort of observational research that examines information on variables gathered during one moment across a sample population or a pre-defined subgroup. The Design may be completed rather quickly, and researchers can gather all the variables at once. Additionally, the prevalence of all components may be assessed, and numerous outcomes can be examined simultaneously. The survey serves as a basis for analyzing the independent factors and determining whether they can accurately predict the dependent variables at two (2) different rehabilitation facilities.

Population of Study

The Participants includes inpatient currently receiving treatment for substance use disorders at two (2) rehabilitation centers. Patients were drawn from different wards and different departments of the Rehabilitation centers. Both male and female wards were considered due to the interest in the variable Gender.

Inclusion criteria

Participants must be undergoing treatment at the rehabilitation centers for substance use disorder. Participants must also meet the required criteria for the diagnosis of substance use disorder by the DSM-V. Participants included inpatients currently receiving treatment at the rehabilitation center. Participants must be willing to consent voluntarily to participate in the research

Exclusion criteria

Participants not willing to participate were excluded from the study. Participants not meeting criteria for substance use disorder or not being treated for substance

use disorder or any related substance issues were also excluded. Participants not available at the time of data collection were excluded. Participants who find it difficult to understand English and do not know how to read and write were excluded from the study.

Sampling and Sampling Technique

The research adopted the purposive sampling technique. It is a kind of non-probability sampling also known as subjective sampling, judging sampling, or selective sampling in which researchers use their own judgement to pick people to participate in their surveys. In purposeful sampling, the researchers carefully consider how they will generate a sample population, even if the sample group is not statistically representative of the larger population being studied. The researchers engage a community on purpose because, as the name says, they believe that the people there suit the profile of the people that they need for the study. This sampling technique was selected as it gives more freedom concerning who gets to participate in the study. It gets a lot of information out of the data which enables researchers to explain how their discoveries will have a significant influence on the public. Also, when compared to the other techniques of sampling, the purposeful sampling technique is regarded as one of the most time and money-efficient options available to researchers. Table 1 shows the sampling proportions of the study

Table 1

Sampling Proportions

Rehabilitation Centers	**Wards**	**N (Patients)**	**N (SUD)**	**N (Participated)**
Federal Neuropsychiatric Hospital, Aro	Dater Phase 1	31	31	29
	Dater Phase 2	18	18	17
	MW1	15	12	10
	Lantoro MW1	17	11	10
	Lantoro MW2	9	6	4
	Lantoro MW3	14	12	11
	Lantoro MW4	16	15	10
	Lantoro MW5	25	25	21
	Lantoro FW 1&2	29	3	3

Federal Neuropsychiatric Hospital, Yaba	Yaba MW1 & MW2	43	40	36
	Yaba MW3	10	3	3
	Yaba MW4	24	20	19
	Yaba FW 1&2	5	4	4
Total		**256**	**200**	**177**

From a total of 256 patients, 200 of them were diagnosed with MBD.MPSU (substance use disorders). However, only 177 participated in the study due to certain reasons

Table 2

Reasons for Incomplete Retrieval of Data

S/N	**Reasons**	**Total**
1	Distractions	5
2	Effect of Medications	6
3	Incomplete Response	7
4	Literacy	3
5	Others	2
	Total	**23**

Research instruments

A questionnaire was used as the tool for data collection. The collection of data for all components was done by self-reporting, except for the collection of data for body mass index, which required the participant to be measured using a stadiometer and a weighing scale.

Impulsivity was measured using the Barratt Impulsiveness scale short form (BIS-11 SF) by spi which comprises of 15 items, each rated on a 4-point scale with an internal consistency (cronbach alpha α) of 0.83. Construct validity showed Bivariate correlations showed moderate to strong relationships between subscales and the total scores of the Frontal systems behaviour scale and BIS-11 SF. The Barratt Impulsiveness scale is the most widely used scale in the studies regarding Impulsivity (Stanford et al., 2009).

Perceived Stigma was measured by adopting the Perceived Stigma towards substance users scale (PSAS) by Luoma et al. (2010) which contains 8 items each measure with a 5-point likert scale. The scale has an internal consistency of .73. Exploratory Factor Analysis resulted in three factors with eigenvalues greater than 1.0, accounting for 63% of the variance. Convergent and Discriminant Validity showed that Perceived stigma was not related to gender, age, education level, number of previous treatment episodes, ethnicity, employment status, or whether the person was having problems with the legal system. It also showed that the PSAS was moderately correlated with most other measures of stigma-related constructs. Perceived stigma was moderately correlated with internalized shame [$r(111) = .39$, $p < .00001$], self-concealment [$r(131) = .48$, $p < .00001$], and internalized stigma [$r(129) = .48$, $p < .00001$].

Religiosity was assessed by adopting the Centrality of Religiosity Scale (CRS) by Huber & Huber (2012) which is a measure of the centrality, importance, or salience of religious meanings in personality. The scale has a internal consistency of 0.94. The CRS scale comes in different forms with the CRS-15 having the highest internal consistency (Huber& Huber, 2012). Construct Validity showed that there are very high correlations between the CRS and self-reports of the salience of the religious identity, which are traditionally applied as one item scales for religiosity. They amount to 0.83 in a students‘ sample and 0.73 in the international Religion Monitor. Furthermore, there are also high correlations between CRS values and self-reports of the importance of religion for daily life, with coefficients of 0.78 in a students‘ sample [1,2] and 0.67 in the international Religion Monitor.

Relapse Tendency will be measured using The Advanced Warning of Relapse (AWARE) Scale by Miller & Harris., (2000), a 37-item scale which has been validated recently and reduced into 25 items by Kelly et al., (2011). Convergent validity showed Pearson's correlations between concurrent assessments of the AWARE scale and Brief Symptoms Inventory were statistically significant across assessments ($R = .61$, $p<.001$). Predictive Validity showed that AWARE scores predicted relapse (i.e., any substance use) at the 1-month ($R^2 = .26$, $p<.05$) and 6-month ($R^2 = .46$, $p<.05$) assessments.

Pilot study

A Pilot study was conducted using 20 patients with substance use disorder at a neutral rehabilitation center to ascertain the reliability of the instrument. Face Validity and Content Validity were also conducted to reduce ambiguity of instrument items. The AWARE scale for Relapse tendency recoded a Cronbach alpha (α) of .85. The BIS-11 SF reported a Cronbach alpha (α) of .81. The PSAS scale reported a Cronbach alpha (α) of .71 and the CRS scale reported a Cronbach alpha (α) of .75

Procedure for Data Collection

A pilot study was conducted to ascertain the psychometric principles of the instruments required for the study. A letter was obtained from the department asking authorization to carry out the research on the individuals who are currently enrolled in rehabilitation programmes Ethical Review of the research was also carried out by respective Centers to ensure all ethical matters are resolved and safety for the participants. A questionnaire was administered to patients at the rehabilitation clinics in order to obtain the necessary data from the facilities. Participants were given their informed permission and were assured that all information and data acquired will be kept confidential. Upon completion of the survey, patients' weight and height were measured to deduce their Body Mass Index.

Data analysis

The Statistical Package for the Social Sciences (SPSS) Version 25 was used for analysis of the obtained data.

Results

Body Mass Index and Relapse Tendency

It was hypothesized that Body Mass Index is not a significant predictor of Relapse Tendency among patients with substance use disorders. To test this hypothesis, linear regression analysis was used. Table 3 shows the extent to which Body Mass Index predicts Relapse Tendency among patients with substance use disorders.

Table 3

Regression coefficients of Body Mass Index on Relapse Tendency

Variables	**B**	**SE**	**β**	**t**	**p**	**95%CL**
Constant	51.82	7.03		7.37	.000	[37.94,65.70]
BMI	.217	.287	.057	.757	.450	[-.349,.784]

Note: R^2 = .003, F(1,175) = .573, p =.450

From the results, the null hypothesis $\mathbf{H_0}$ was accepted and the alternate hypothesis $\mathbf{H_1}$was rejected which implies that Body Mass Index is not a significant predictor of Relapse Tendency among patients with substance use disorder, R^2 = .003, F(1,175) = .573, p =.450

Gender and Relapse Tendency

It was hypothesized that Gender is not a significant predictor of Relapse Tendency among patients with substance use disorders. To test this hypothesis, linear regression analysis was used. Table 4 shows the extent to which Gender predicts Relapse Tendency among patients with substance use disorders.

Table 4

Regression coefficients of Gender on Relapse Tendency

Variables	**B**	**SE**	**β**	**t**	**p**	**95%CL**
Constant	56.59	1.08		52.37	.000	[54.46,58.72]
Female	5.18	3.49	.112	1.49	.139	[-1.71,12.06]

Note: R^2 = .012, F(1,175) = 2.204, p =.139

Results showed that the null hypothesis $\mathbf{H_0}$ was accepted and the alternate hypothesis $\mathbf{H_1}$was rejected which implies that Gender is not a significant predictor of Relapse Tendency among patients with substance use disorder, R^2 = .012, F(1,175) = 2.204, p =.139, β = -.112, p>.05 (MALE), β = .112, p>.05 (FEMALE).

Impulsivity and Relapse Tendency

It was hypothesized that Impulsivity is not a significant predictor of Relapse Tendency among patients with substance use disorders. To test this hypothesis, linear regression analysis was used. Table 5 shows the extent to which Impulsivity predicts Relapse Tendency among patients with substance use disorders.

Table 5

Regression coefficients of Impulsivity on Relapse Tendency

Variables	**B**	**SE**	**β**	**t**	***p***	**95%CL**
Constant	23.77	3.71		6.40		[16.44,31.10]
Impulsivity	1.18	.13	.572	9.22	.000	[.93,1.44]

Note: R^2 = .327, F(1,175) = 84.919, p<.001

Results showed that the null hypothesis $\mathbf{H_0}$ was rejected and the alternate hypothesis $\mathbf{H_1}$was accepted which implies that Impulsivity is a significant predictor of Relapse Tendency among patients with substance use disorders. 32.7% of the variance in Relapse Tendency was accounted for by Impulsivity, R^2 = .327, F(1,175) = 84.919, p<.001.

Stigma and Relapse Tendency

It was hypothesized that Stigma is not a significant predictor of Relapse Tendency among patients with substance use disorders. To test this hypothesis, linear regression analysis was used. Table 6 shows the extent to which Stigma predicts Relapse Tendency among patients with substance use disorders.

Table 6

Regression coefficients of Body Mass Index on Relapse Tendency

Variables	B	SE	t	p	95%CL
Constant	52.31	5.47	9.57	.000	[41.52,63.10]
Stigma	.233	.262	.89	.375	[-.284,.751]

Note: R^2 = .004, F(1,175) = .791, p =.375

Results showed that the null hypothesis $\mathbf{H_0}$ was accepted and the alternate hypothesis $\mathbf{H_1}$was rejected which implies that Stigma is not a significant predictor of Relapse Tendency among patients with substance use disorder, R^2 = .004, F(1,175) = .791, p =.375.

Religiosity and Relapse Tendency

It was hypothesized that Religiosity is not a significant predictor of Relapse Tendency among patients with substance use disorders. To test this hypothesis, linear regression analysis was used. Table 7 shows the extent to which Religiosity predicts Relapse Tendency among patients with substance use disorders.

Table 7

Regression coefficients of Religiosity on Relapse Tendency

Variables	**B**	**SE**	**T**	**p**	**95%CL**
Constant	65.95	5.29	12.47	.000	[55.51,76.40]
Religiosity	-.162	.095	-1.71	.089	[-.348,.025]

Note: R^2 = .016, F(1,175) = 2.920, p =.089

Results showed that the null hypothesis H_0 was accepted and the alternate hypothesis $H_1$was rejected which implies that Religiosity is not a significant predictor of Relapse Tendency among patients with substance use disorder, R^2 = .016, F(1,175) = 2.920, p =.089.

Discussion

The purpose of this study was to gain better understanding of how some Biopsychosocial-Spiritual factors can predict Relapse Tendency among patients with substance use disorders. Findings suggested that the Biopsychosocial-Spiritual Factors jointly predicted Relapse Tendency among the patients with substance use disorders. This supports the idea that health and diseases are best understood in terms of the combination of the biological, psychological, social and spiritual factors rather than purely biological terms.

Patients with normal weight took the highest percentage of the population followed by patients who are overweight with. Patients who were obese or underweight took a very low percentage. From the results, the null hypothesis was accepted suggesting that Body Mass Index is not a significant predictor of Relapse Tendency among patients with substance use disorder. One way to explain this idea is that an increased body mass index has been associated over time with more of alcohol users than individual who use other substances (Wills et al., 2017). Majority of the patients who participated in the study were abusing other drugs with alcohol taking just 13% of the population. This is also consistent with some past research such as a cross-sectional study among 40,364 U.S. adults which suggested that overweight and obesity were not associated with illicit drug use disorders, such as marijuana, cocaine and opiate, after adjusting for sociodemographic background (Barry &Petry, 2009).

Majority of the patients were males as there is a reported prevalence of substance use and abuse among males than females. The results showed that

gender differences had no significant associations with Relapse Tendency with neither being male or female explaining no significant amount of variance in Relapse Tendency. This pattern of result is consistent with previous literature which suggested that gender was not a significant factor predicting Relapse Tendency (Nalpas et al., 2018). However, further investigation using independent t test analysis shows a significant difference in the scores of male and female gender on Relapse Tendency with females showing a significant tendency to Relapse than males. This can be explained by the general emotional state of women and a better relation to the scale measuring Relapse Tendency. The role of gender in relapse remains inconclusive but warrants further research to specify segregated outcomes for males and females. Nonetheless, there is important pre-clinical work suggesting sex differences in relapse (Becker et al., 2017), and it is important to consider social and cultural factors when examining the association between gender and relapse (Becker et al., 2016). Some research suggests a 'telescoping effect' that suggests AUD in women may be followed by a more severe and progressive addiction course (Greenfield et al., 2010).

Impulsivity is a multidimensional concept that can be characterized as a proclivity for quick, unexpected responses to environmental stimuli, regardless of the negative repercussions to the impulsive individual or others (Moeller et al., 2001). A rising number of research have proven a significant link between impulsivity and substance use disorders (SUDs), i.e., impulsivity is higher in SUDs, such as alcohol (Mitchell et al., 2005) and heroin (Kirby et al., 1999), than in non-substance-using populations. High levels of impulsivity raise the likelihood of substance exploration, harmful substance use, and difficulty quitting using drugs. Results showed that the null hypothesis was rejected and the alternate hypothesiswas accepted suggesting that Impulsivity is a significant predictor of Relapse Tendency among patients with substance use disorders. 32.7% of the variance in Relapse Tendency was accounted for by Impulsivity. Also, findings suggested that low impulsivity can act as a from of protective factor against as it was not a significant predictor of Relapse. This finding is in agreement with previous research that showed that impulsivity is a predictor of Relapse Tendency [Quolin et al., 2018; Evren et al., 2012]. A way to explain the finding is the fact that impulsivity is a crucial behavioral feature that promotes and maintains drug intake and drug seeking and studies have shown that disturbances in cognitive functioning, including risk-taking and decision-making, and associated abnormal frontostriatal brain activation patterns are strong predictors of treatment outcome and relapse susceptibility in Substance Users (Bernhardt et al., 2020). Findings also discovered that impulsivity was the only significant predictor amongst all other variables. This also contradicts the Biopsychosocial-Spiritual model explaining that not one of the factors on its own can be used to explain an illness as they all must interact to explain the illness. This can be explained by the fact that it is a psychological variable and relapse

according to the Cognitive-Behavioural Theory of Relapse explained that Relapse begins with a psychological challenge or what the theory refers to as a high-risk situation. Therefore, an exception can be given to impulsivity and can be said that the psychological variable can be used to explain the illness relapse.

Substance addiction is one of the most stigmatized mental illness in a number of studied countries. The finding concerning stigma showed that the null hypothesis was acceptedwhich implies that Stigma is not a significant predictor of Relapse Tendency among patients with substance use disorder. One way to interpret this idea is that stigma can be acting as a form of protective factor over Relapse Tendency in the sense that patients do not want to be affiliated with substance users and would like to avoid the consequences of being associated with them and may focus their attention on getting better and being cautious of Relapse. This is further explained by research carried out by Hill &Leeming. (2014) that explains stigma can have a positive influence on recovery when the individual transforms stigmatizing labels such as ‘‘alcoholic’’ from markers of social deviance to indications of self-awareness. These results are supported by Kulesza et al. (2014) who discovered that pre-treatment stigma did not predict post-treatment substance use as stigma ratings did not change even as substance use symptoms improved.

Majority of the patients who participated in the study reported high level of religiosity. Result on religiosity supports the hypothesis that Religiosity is not a significant predictor of Relapse Tendency among patients with substance use disorder. This finding may be explained using the Moral/Ethical model due to the high level of religiosity, which focuses on whether a behavior is morally "good" or "bad," and considers addiction to be a sin or the behavior or drug to be evil, and offers a variety of treatment ideas, many of which, in more religiously focused forms, tend to be based on religious beliefs. Religiosity has also been found to be a protective factor against Relapse (Roos et al., 2015) as it serves as a shield against the many triggers of relapse. The high level of religiosity among patients can also mean that they might be segregated from their affiliated religion which is interrelated with stigma and due to this, patients might be well closed to the propensity to relapse and focus more on their recovery.

Conclusion

The study contributes to the knowledge needed in decreasing the existing figures of Relapse among patients who are putting in the effort to recover from their illness. It also contributes to the knowledge of the issues or triggers that need to be considered and corrected before discharging patients from rehabilitation centers. It may also serve as the basis for the deployment of methods that might assist in ensuring a successful recovery without the occurrence of Relapse. The use of the Biopsychosocial-Spiritual model allows

more understanding of the etiology of the illness and provides a comprehensive viewpoint on how to address the problem of relapse.

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