

# Spirituality and Abstinence Self-efficacy in Patients with Alcohol Dependence Syndrome

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## ABSTRACT

**Introduction:** Spirituality and self-efficacy are the concepts related to health, which plays a protective role in maintaining abstinence as well as predicts response to treatment in alcohol dependence patients.

**Aim:** To determine the correlation between Spirituality and Abstinence self-efficacy among patients with alcohol dependence syndrome.

**Materials and Methods:** An observational study was conducted on 50 patients with DSM-IV (Diagnostic and Statistical Manual of Mental Disorders-4<sup>th</sup> edition) for diagnosis of alcohol dependence syndrome. They were recruited from the de-addiction unit of psychiatry ward at a tertiary care centre. Subjects were assessed for spirituality and abstinence self-efficacy using The Functional Assessment of Chronic Illness Therapy-Spiritual well-being scale (FACIT Sp-12) {12 indicates total number of items in FACIT Sp questionnaire, which consists of three subscales (Meaning, Peace and Faith subscales) of four questions each} and Alcohol Abstinence Self-Efficacy (AASE)

scale. Mean and standard deviation for continuous variables and frequency counts for discrete variables were obtained. Pearson's correlation coefficient (r) was used to determine the correlation.

**Results:** The current study demonstrated that the subjects had more spiritual belief in meaning and faith components and less belief in peace component of the FACIT Sp-12. AASE scale showed high efficacy (Total score=78.2±17.2) to remain abstinent. There was a significant positive correlation among two spiritual variables meaning (r-value=0.799) and faith (r-value=0.825) with negative effect, social and positive behaviour, physical and other concerns, craving and urges. There was a negative correlation (r-value=-0.026) with peace component in spiritual well-being and AASE scale.

**Conclusion:** Spiritual belief and AASE were found to be high in index study. Also, spiritual variables (meaning and faith) had a positive correlation with ASSE, which suggests that patients with high spiritual belief had a better capability to remain abstinent from alcohol and good long term recovery than others.

**Keywords:** Alcoholism, Religiosity, Spiritual well-being

## INTRODUCTION

According to International Classification of Diseases-10<sup>th</sup> edition (ICD-10), Alcohol Dependence Syndrome is a disorder characterised by a pathological pattern of alcohol use which causes impairment in social and occupational functioning [1]. It is a chronic disease in which a person craves for drinks that contain alcohol and is notable to control his or her drinking [1]. A person with alcohol dependence needs to drink greater amounts of alcohol to get the same pleasurable effect and develops withdrawal symptoms after discontinuing alcohol use [1]. Alcoholism affects physical as well as mental health which leads to problems with family, friends and work [2].

Appearance of abstinence symptoms such as insomnia, withdrawal tremors etc., is due to interaction of biological and cultural factors, which are important phenomena in Alcohol Dependence [3]. In order to relieve the withdrawal symptoms, the person starts taking alcohol, due to which a strong association is established sustaining both the development and the maintenance of dependence [3].

Investigators have studied predictors and determinants of substance abuse risk and have identified various contributing factors such as family history, gender, alcohol sensitivity, social support, and emotional regulation [4]. Also, researchers explored other potential predictors of substance use, including spirituality and self-efficacy [5].

“Spirituality can be conceptualised as a broad-based motivational construct that can be measured in an empirically rigorous manner”, as facets of spirituality have been found as robust predictors of psychosocial outcomes of substance abuse treatment [6]. Finally, there are indications that spirituality and religiosity are relevant to health, including addiction, and might best be treated as related and complementary, if not integrated constructs [7].

Self-efficacy is defined as the belief or perceived confidence in one's ability in order to manage a high-risk situation [8]. Perceived efficacy will determine the courses of action people will attempt, their ability to try, and persistence despite setbacks. In an interpersonal or intrapersonal high-risk situation, assessing the patient confidence about his drinking pattern will be helpful in treatment planning [8]. Self-efficacy is a strong predictor for maintaining response to the treatment in alcohol dependence and cigarette smoking [9].

Previous literature showed that there were only a few studies which have used spirituality and AASE in patients with alcohol dependence syndrome [10,11]. Hence, the current study was taken up to determine the probable correlation between spiritual well-being and AASE.

The aim of this study was to assess and determine the correlation between Spirituality and Abstinence self-efficacy among male patients with alcohol dependence syndrome.

## MATERIALS AND METHODS

The present study was a descriptive observational study, conducted in Department of Psychiatry, Sri Ramachandra Medical College and Research Institute (SRMC & RI), Chennai, Tamil Nadu, India from December 2013 to July 2014, for a period of eight months.

All the assessments in this study were carried out only once. The patients who attended the outpatient clinic or were admitted to the inpatient de-addiction unit of the Department of Psychiatry at SRMC & RI, Chennai, Tamil Nadu, India were recruited for the study. The sample comprised of 50 patients with DSM-IV [12] diagnosis of alcohol dependence syndrome. After getting the approval of Institutional Ethics Committee (CSP-MED/13/OCT/09/98), the study

was commenced. All patients fulfilling the selection criteria were approached and explained about the purpose of the study. Written informed consent was obtained from all potential participants.

#### Inclusion Criteria:

1. Male patients from 18-60 years of age.
2. Diagnosis of Alcohol Dependence Syndrome according to DSM-IV.

#### Exclusion Criteria:

1. Patients with any chronic co-morbid physical or psychiatric illness.
2. History of other substance abuse or dependence.
3. Those who did not give consent to take part in the study.

Following parameters were assessed in the study:

**1. Socio-demographic profile sheet:** It was developed for the purpose of study. Consisted of a semi structured proforma to record the following variables regarding the patient such as age, marital status, level of education, socio-economic class, employment and residence (urban/rural). The socio-demographic profile sheet and the scales sheet were given as a hard copy to each patient and made to fill.

**2. FACIT Sp-12-spiritual well-being scale (FACIT Sp-12) [13]:** It has three subscales with four items in each: 1) Meaning subscale; 2) Peace subscale; and 3) Faith subscale. Each item was rated in Likert format from 0 to 4 (0=Not at all; 1=A little bit; 2=Somewhat; 3=Quite a bit; and 4=Very much) and each subscale scores ranges from 0 to 16. Each subscale score was obtained by summing up individual scores which was then multiplied by four and divide by the number of items answered [13]. The total score is obtained by summing up of three subscale scores which ranges from 0 to 48. The higher the score the better the spiritual well-being.

**3. AASE scale [14]:** It has four subscales with five items in each: 1) Negative effect subscale; 2) Social/positive subscale; 3) Physical and other concerns sub scale; 4) Craving and urges subscale. Each item rated in Likert format from 1 to 5 (1=Not at all, 2=Not very, 3=Moderately, 4=Very, 5=Extremely) and each subscale scores ranges from 5 to 25. Mean scores for each subscale, was obtained by summing up of item scores for each subscale and divided by the number of items [14]. The higher the score, the more efficacy to remain abstinent from alcohol.

## STATISTICAL ANALYSIS

The data was entered in a Microsoft excel sheet and analysed by using the Statistical Package for the Social Sciences 15<sup>th</sup> version (SPSS version 15) under 'descriptive' and 'inferential' statistics.

**Descriptive Statistics:** Frequency counts were obtained for socio-demographic details. Mean and standard deviation were computed for all continuous variables e.g., age, income, subscale scores.

**Inferential Statistics:** Pearson's product moment correlation coefficient was used to examine the association between spiritual well-being and AASE scales.

## RESULTS

As shown in [Table/Fig-1], mean age of the male patients was 36.96±6.957 years, 76% were married, 42% were graduates, 76% were employed, patients belonging to, middle, lower middle and lower socio economic classes were 54%, 20% and 16% respectively; 72% hailed from urban locality.

Meaning, faith and peace subscales values are shown in [Table/Fig-2]. The total score of FACIT Sp-12 scale was 36±5.2. This indicates that patients had more spiritual belief in faith and meaning subscales, whereas low belief in peace subscale.

Negative effect, social/positive, physical and other concerns and

craving and urges subscales values are shown in [Table/Fig-3]. The total score of AASE scale was 78.2±17.2. This showed that patients had more abstinence self-efficacy.

Socio-demographic variable	N=50
Age (In years) Mean±SD	36.96±6.957
<b>Marital status N(%)</b>	
Married	38 (76%)
Others	12 (24%)
<b>Level of education</b>	
High school	5 (10%)
Intermediate	15 (30%)
Graduate	21 (42%)
Postgraduate	9 (18%)
<b>Socio-economic class</b>	
Upper	3 (6%)
Upper middle	2 (4%)
Middle	27 (54%)
Lower middle	10 (20%)
Lower	8 (16%)
<b>Employed</b>	
Yes	38 (76%)
No	12 (24%)
<b>Locality (Residence)</b>	
Urban	36 (72%)
Rural	14 (28%)

[Table/Fig-1]: Socio-demographic variables.

Sl. no.	FACIT Sp-12 subscales	N=50
		Mean±SD
1	Meaning	12±2.3
2	Faith	14.5±2.8
3	Peace	9.4±1.3
	Total	36±5.2

[Table/Fig-2]: The functional assessment of chronic illness therapy: spiritual well-being scale (FACIT Sp- 12).

Sl. no.	AASE subscales	N=50
		Mean±SD
1	Negative affect	16.9±3.8
2	Social/Positive	18.9±4.2
3	Physical and other concerns	20.5±4.8
4	Craving and urges	21.5±4.7
	Total	78.2±17.2

[Table/Fig-3]: Alcohol Abstinence Self-Efficacy scale (AASE).

As shown in [Table/Fig-4], there was a positive correlation between meaning and faith subscales of FACIT Sp-12 scale with AASE scale at r-value 0.799 and 0.825, respectively. There was negative correlation between peace subscale of FACIT Sp-12 scale with AASE scale at r-value - 0.026.

## DISCUSSION

The current study aimed at correlating FACIT Sp-12 scale with AASE scale in alcohol dependent patients. Majority of the patients in present study were middle aged males, married, had completed their graduation, belonged to middle socio-economic class and resided in urban localities. In a study done by Martins ME et al., patients were middle aged males, studied upto high school, married and active workers [15]. This can be compared with present study except that patients were well educated.

Sl. no.	Parameters	Meaning	Faith	Peace
1	Negative affect	r=0.685 p<0.001**	r=0.675 p<0.001**	r=-0.038 p=0.767
2	Social/Positive	r=0.778 p<0.001**	r=0.823 p<0.001**	r=-0.003 p=0.965
3	Physical and other concerns	r=0.739 p<0.001**	r=0.788 p<0.001**	r=-0.067 p=0.616
4	Craving and urges	r=0.789 p<0.001**	r=0.809 p<0.001**	r=-0.034 p=0.789
	Total	r=0.799 p<0.001**	r=0.825 p<0.001**	r=-0.026 p=0.852

**[Table/Fig-4]:** Correlation between subscales of AASE and FACIT Sp-12.

\*p<0.05 statistically significant; \*\*p<0.001 statistically highly significant

In present study, we found that Meaning and Faith subscales of FACIT Sp-12 scale had higher mean scores 12 and 14.5, respectively whereas Peace subscale which had a lower mean score of 9.4. In a study done by Jafari N et al., Meaning and Faith subscales had higher scores 10.97, 11.03 respectively, whereas peace subscale had a lower score 10.30 [16]. In another study done by Fradelos EC et al., Meaning and Faith subscales had higher scores 12.49, 9.49, respectively, whereas Peace subscale had lower score 8.64 [17]. This shows that present study can be comparable to previous studies which had similar results. This indicates that spirituality has positive role in maintaining abstinence in alcohol dependent patients. Similarly, in a study conducted by Miller WR, there was a strong evidence of spiritual involvement as a protective factor against alcohol abuse [18]. Vice versa, a study by Robinson EA et al., showed that alcohol abuse can have negative effect on spirituality [19]. So, it clearly indicates that spirituality plays a role in maintaining abstinence in alcohol dependence patients.

In present study, the total AASE score was 78.2±17.2, this higher score indicates that patients had more efficacy to remain abstinent from alcohol. Similar study in the past has shown that self-efficacy has been found to predict the alcohol use [20]. However, in a study done by Stephens RS et al., they found that self-efficacy was related to occurrence or frequency of drinking or drug use [21]. They observed Predictive validity was stronger for frequency of post-treatment substance use than for abstinence [21]. From this, it is clear that, self-efficacy helps in abstinence in alcohol dependence patients.

In present study, we found a positive correlation of Meaning and Faith subscales of FACIT Sp-12 scale with subscales of AASE scale, Pearson's correlation values (r) 0.799 and 0.825 respectively. There was a negative correlation with Peace component of FACIT Sp-12 scale with components of AASE scale r-value -0.026. This clearly indicates that patients with greater spiritual beliefs will have more self-efficacy to remain abstinent from alcohol. Similar to present study results, a study done by Piderman KM et al., concluded that significant association exists between spiritual well-being and alcohol abstinence self-efficacy (r=0.56) [10]. In another study done by Kim MY and Byun EK a positive correlation (r=0.23) was observed between spiritual well-being with abstinence self-efficacy and it was statistically significant [22]. However, in a study conducted by Bluma L, there were no significant differences in scores obtained for FACIT Sp-12 and AASE scales with p value being 0.74 [23]. There was no difference in high or low spiritual beliefs and their abilities to remain abstinent from alcohol.

Strengths of this study included the subject's common diagnosis of alcohol dependence, power of spirituality to remain abstinent and instruments used in the study have been used in published research. However, similar studies must be carried out for further replication and to comprehend its significance.

## Limitation(s)

The sample size was relatively small. The study sample had no control group to find the impact of spiritual variables. Depressive and anxiety symptoms were not measured which are the diagnostic indicators of a mental health disorder.

## CONCLUSION(S)

Spiritual belief and AASE were found to be higher in index study. Also, spiritual variables (Meaning and Faith) had a positive correlation with AASE, which suggests that patients with high spiritual belief may have better capability to remain abstinent from alcohol and good long term recovery.

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