



Effect of smoking cessation measure on self-efficacy to resist temptation

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Abstract

A study to an experimental study to evaluate the effect of smoking cessation measure on self-efficacy to resist temptation, among smokers admitted in Rajah Muthiah Medical College Hospital, Chidambaram. The quantitative research approach- A Pre-experimental one group pretest-posttest design was adopted and conducted at Rajah Muthiah Medical College Hospital among 55 samples, Chidambaram. The target population refers to patients who have the habit of smoking. Smokers, aged 20 years and above, who fulfilled the inclusion criteria were the subjects selected for the study. Simple random sample technique was used in selecting samples from the smokers admitted in medical, surgical, and orthopedic wards. After assessing their smoking behavior, the participants were advised to quit smoking. Self-instructional module focusing on smoking cessation was briefed and handed over to them. For Phase II, 6 participants from Phase I came for follow up. After making the decision to quit, on that day, 1st month, 3rd month, and 6th month later, they were followed up. Each visit took about 45 minutes to discuss regarding the quit attempt and to collect data to validate their quit attempt. The statistical tests, both descriptive and inferential, were used for analyzing the data.

The One way ANOVA repeated measure revealed that clinical intervention is effective as improvement in the self-efficacy to resist temptation to smoke during overall situation was achieved and the finding was found to be statistically significant at $p < 0.001$. The study results revealed that the level of temptation showed extreme temptation to smoke due to various situations. Most of the subjects were in contemplation and preparation stage of readiness to quit.

Keywords: smoking cessation measures; self-efficacy; temptations

Introduction

They are able who Think they are able- Virgil

Cigarette smoking is the leading cause of preventable morbidity and mortality in the United States. Each year, an estimated 443,000 people die from smoking related diseases. Smoking can contribute to the progression of diseases like coronary artery disease, chronic obstructive pulmonary disease, and lung cancer and result in poorer health outcomes^[1]. Self-efficacy is the belief that one has the ability to implement the behaviours needed to produce a desired effect. There has been growing interest in the role of self-efficacy as a predictor and/or mediator of treatment outcome in a number of domains. The present paper reviews the recent literature on self - efficacy in the substance abuse field^[2]. Research in tobacco control has examined the relationship of the self -concept to smoking initiation and smoking cessation. The vast majority of research conducted to date has taken one of two approaches, depending on the population being studied and whether the research focuses on smoking initiation or smoking cessation. Initial smoking episodes occur in specific, well-defined contexts primarily out of social pressures that are conducive to smoking (eg: peers). Although maintenance of the habit is, in part, regulated by physiological processes that reflect nicotine dependence in established adult smokers (eg: withdrawal, tolerance), specific situations (eg: alcohol consumption) can trigger smoking behavior. After

smokers quit, relapse is more likely in some situations (eg: with other smokers) compared to other situations. The self-concept is composed of multiple self-relevant descriptive attributes and these attributes are organized according to context. For example, self-complexity theory posits that individuals possess an associative cognitive network of self-attributes organized by the different social roles that they assume in life (eg: self as mother, wife, and prevention specialist). Self-complexity is the degree to which these selves are semantically differentiated from one another. Showers has evaluated the compartmentalization of self-attributes into positive and negative evaluative categories. Compartmentalization is the degree to which self-attributes are isolated in particular social roles. Integration is the degree to which both positive and negative self-attributes is dispersed among social roles. The self-concept could have relevance for understanding smoking (and not smoking) in context^[3]. While numerous studies show that higher levels of smoking cessation self-efficacy predicts motivation to quit smoking and successful smoking cessation, few studies have evaluated factors related to smoking cessation self- efficacy that could be targets of behavioural interventions to promote greater confidence to quit smoking^[4].

Hence, the researcher decided to focus “An experimental study to evaluate the effect of smoking cessation measure on self-efficacy to resist temptation among smokers admitted in Rajah Muthiah Medical College Hospital, Chidambaram”.

Objective

To evaluate the effect of smoking cessation measure on self-efficacy to resist temptation.

Materials and Methods

The quantitative research approach was to evaluate the effectiveness of smoking cessation measure in terms of level of quitting were used among the 55 smokers. A Pre-experimental one group pretest posttest design was adopted and conducted at Rajah Muthiah Medical College Hospital, Chidambaram. The target population refers to patients who have the habit of smoking. Smokers, aged 20 years and above, who fulfilled the inclusion criteria were the subjects selected for the study. Simple random sample technique was used in selecting samples from the smokers admitted in medical, surgical, and orthopedic wards. The study subjects were interviewed regarding their smoking

behavior, their readiness to quit etc., and data were collected using structured interview schedule from June 2009 to March 2010. After assessing their smoking behavior, the participants were advised to quit smoking. Self-instructional module focusing on smoking cessation was briefed and handed over to them. For Phase II, 6 participants from Phase I came for follow up. After making the decision to quit, on that day, 1st month, 3rd month, and 6th month later, they were followed up. Each visit took about 45 minutes to discuss regarding the quit attempt and to collect data to validate their quit attempt. The statistical tests, descriptive statistics used were mean, standard deviation, and percentage and Inferential statistics such as chi-square, one way ANOVA, Comparison Test Contrast Difference Method, Kruskal Wallis Test, and Comparative Test Tukey Honestly Significant Difference Test, were used for data analysis.

Results

Table 1: Effectiveness of 5A’s clinical intervention on mean score of self-efficacy to resist smoking during social situations among subjects in pretest and posttests (N=55)

Self-Efficacy to Resist Smoking During Social Situations	Mean	Standard Deviation	One Way Anova Repeated Measures		Contrast Difference Method
			F value	P value	
Pretest	15.27	5.33	109.721	P<0.001 (S)	Pretest Vs
Posttest I	19.27	5.4			Posttest I Vs
Posttest II	21.67	6.01			Posttest II Vs
Posttest III	24.47	6.85			Posttest III

(S)-Significant

This Table 1 shows the effectiveness of the 5A’s clinical intervention on mean self-efficacy to resist smoking during social situations from first visit to 6th month. The self-efficacy was less with mean value of 15.27 with standard deviation of 5.33 at pretest. During the posttest III, after the interventions, the mean score of 24.47 with standard deviation of 6.85 indicated

improvement in self-efficacy to resist smoking during social situations. One way ANOVA repeated measure revealed that clinical intervention was effective as improvement in the self-efficacy to resist smoking during social situation was achieved and the finding was found to be statistically significant at p <0.001.

Table 2: Effectiveness of the 5A’s clinical intervention on mean score of self-efficacy to resist temptation to smoke due to craving situations among the subjects in pretest and posttests (N=55)

Self-Efficacy To Resist Smoking Due To Craving Situations	Mean	Standard Deviation	One Way ANOVA Repeated Measures		Contrast Difference Method
			F Value	P Value	
Pretest	15.84	5.58	33.16	P<0.001 (S)	Pretest Vs
Posttest I	16.91	5.95			Posttest II Vs
Posttest II	17.75	6.43			Posttest III
Posttest III	18.55	6.83			

(S) – Significant

This Table 2 shows the effectiveness of 5A’s clinical intervention on mean self-efficacy score to resist smoking in craving situations from pretest to posttest III. In the pretest the mean value for self-efficacy to resist temptation to smoke during craving situations was 15.84 with standard deviation of 5.58. With intervention, self- efficacy to resist temptation to smoke during

craving situations has improved to mean score of 18.55 with standard deviation of 6.83. One way ANOVA repeated measure revealed that clinical intervention was effective as improvement in the self-efficacy to resist temptation to smoke during craving situations was achieved and the finding was found to be statistically significant at p<0.001.

Table 3: Effectiveness of 5A’s clinical intervention on mean score of self-efficacy to resist smoking during negative situations among the subjects in pretest and posttests (N = 55)

Self-Efficacy To Resist Smoking During Social Situations	Mean	Standard Deviation	One Way Anova Repeated Measures		Contrast Difference Method
			F value	P value	
Pretest	17.2	6.43	66.03	P<0.001 (S)	Pretest I Vs
Posttest I	19.31	6.45			Posttest I Vs
Posttest II	20.67	6.85			Posttest II Vs
Posttest III	22.33	7.81			Posttest III

(S) – Significant

This Table 3 shows the effectiveness of 5A's clinical intervention on mean self-efficacy to resist smoking in negative situations during the pretest and posttests. The pretest mean value of 17.20 with standard deviation of 6.43 showed that the subjects had low self-efficacy at pretest when compared with mean value of 22.33 with standard deviation of 7.81 during posttest III after 6 months. The improvement in self efficacy was further tested for its significance using One way ANOVA repeated measure which revealed that clinical intervention was effective as improvement in the self-efficacy to resist temptation to smoke during negative situations was achieved and the finding was found to be statistically significant at $p < 0.001$.

Table 4: Effectiveness of the 5A's clinical intervention on mean score of self-efficacy to resist temptation to smoke in over overall situations in pretest and posttests (N = 55)

Self-Efficacy To Resist Smoking During Social Situations	Mean	SD	One Way ANOVA Repeated Measure		Comparison Test Contrast Difference Method
			F value	P value	
Pretest	47.73	15.76	133.57	<0.001(S)	Pretest Vs
Posttest I	54.78	15.8			Posttest I Vs
Posttest II	59.76	16.74			Posttest II Vs
Posttest III	64.87	17.65			Posttest III

(S) – Significant

Discussion

The above Tables showed the study to evaluate the effect of smoking cessation measure on self-efficacy to resist temptation to smoke due to Social, craving and negative situations. The findings revealed that the One way ANOVA repeated measure revealed that clinical intervention is effective as improvement in the self- efficacy to resist temptation to smoke during overall situation was achieved and the finding was found to be statistically significant at $p < 0.001$.

This Finding is supported by the Following Studies

Ergul and Tamel findings on effect of Nurse led smoking cessation intervention based on the transtheoretical model of change revealed that there was significant change in the stage of change and self-efficacy mean score at $P < 0.01$. The quit rate of programme was 8.3% at the 6th month follow-up [5]. Wang, Hamell, and Funk conducted a research study using longitudinal correlational design to find out the factors associated with smoking cessation. The results suggested that self-efficacy and family support should be addressed in any intervention programme targeting smoking cessation in male patients with coronary heart diseases [6]. Park, Kang, and Kim conducted a study to evaluate the effects of a smoking cessation programme. The results showed a significantly decreased amount of smoking, a decreased nicotine dependency, and increased self-efficacy compared to control group [7].

Conclusion

Thus smoking cessation measure which includes health education module on quitting and 5A's clinical intervention were provided to the subjects. The effectiveness of the programme is tested, and it was found to give significant results statistically. Out of 55 smokers, 14(25%) of them stopped smoking. The number of cigarettes smoked/day was reduced by 34 (62%) subjects, and 7(13%) remained in the same stage. The above result was achieved by providing assistance to the smokers to handle the barriers such as nicotine dependency and temptation to smoke on

Below Table 4 shows the effectiveness of 5A's clinical intervention on mean self-efficacy to resist temptation to smoke in overall situations. The findings showed that the self-efficacy was less with mean score of 47.73 with standard deviation of 15.76 during pretest and it has increased to mean score of 64.87 with standard deviation 10.65 at the 6th month with clinical intervention. The One way ANOVA repeated measure revealed that clinical intervention is effective as improvement in the self-efficacy to resist temptation to smoke during overall situation was achieved and the finding was found to be statistically significant at $p < 0.001$.

various situations through 5A's clinical intervention. Thus smoking cessation measure in the form of health education and 5A's approach was found to be effective in enabling the smokers to quit smoking.

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