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A STUDY OF DEPRESSION AMONG TOBACCO USERS AND NON-USERS

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ABSTRACT

Tobacco destroy mankind among the adults is reaching pandemic levels. Countries undergoing epidemiological transition of chronic diseases caused by tobacco are rapidly overtaking the more traditional causes of mortality. Tobacco addiction in large number of adults has been initiated during the adolescents and children's often get attracted to tobacco products because of such propaganda. There has been a rapid increase in trade and use of smokeless tobacco products in recent years in the country, which is a matter of serious concern to the health planners. It is important to understand various factors that influence and encourage young teenagers to start use tobacco products. The Study samples (300) were consisting of tobacco users who attend the drug deaddiction centers, located at Jaipur at least for one year. Tobacco problem is a major concern of humanity in the world. The practices of tobacco consumption have been predicted to cause a rapid rise in disease burden, health care costs and other fiscal losses. The study revealed that there is higher level of depression among tobacco users than tobacco non users.

Keywords: Tobacco users, Non-users, Depression.

INTRODUCTION

Cigarette/ tobacco smoking is a major health problem and considered one of the leading causes of preventable diseases and death worldwide.¹ Depression is a common mental disorder characterized by sadness, loss of interest in activities and by decreased energy. Depression is differentiated from normal mood changes by the extent of its severity, the symptoms and the duration of the disorder. Suicide remains one of the common and often unavoidable outcomes of depression. If depressive episodes alternate with exaggerated elation or irritability they are known as bipolar disorder & depressive disorders and schizophrenia are responsible for 60% of all suicides. The causes of depression can vary. Psychosocial factors, such as adverse living conditions, can influence the onset and persistence of depressive episodes.²

In India, tobacco consumption is responsible for many psychiatric disorders, in addition to being a risk factor for cardiovascular diseases and chronic obstructive pulmonary diseases. India also has

one of the highest rates of psychiatric disorder in the world, partly attributed to high prevalence of tobacco chewing in user. The tobacco chewing occurs in different form & that include pan (piper betel leaf filled with sliced areca nut, lime, catechu, and other spices chewed with or without tobacco), pan-masala or gutkha (a chewable tobacco containing areca nut), and mishri (a powdered tobacco rubbed on the gums as toothpaste).³ The WHO predicts that tobacco deaths in India may exceed 1.5 million annually by 2020. However, considerable research is required to comprehend the actual trends. Nationally representative and reliable prevalence data on tobacco consumption are scarce. Similarly, the socio-demographic predictors of tobacco smoking and chewing are poorly understood. The existing studies on prevalence of tobacco use are based on representative sample surveys which have been conducted locally from most urban geographical areas. The WHO estimated a prevalence of tobacco consumption of

all forms at 65% and 33%, among men and women respectively, based on small scale study.⁴ Understandings of the previous papers examined the biological basis of this behavior and seek to integrate this insight into a rational approach to the problem in practice. Smoking is reexamined within the framework of an irrational compulsion to seek nicotine, despite a rational desire to stop. Control over the compulsion to smoke is established as an important clinical outcome, and the rationale for treating tobacco dependence as a chronic illness is examined. Finally, practical insights into managing ambivalence, including an aggressive pharmacotherapeutic approach based on the neurobiology, are presented.

MATERIALS AND METHODS

It deals the study to investigate the assessment of knowledge and practice of tobacco among tobacco users and non-users in deaddiction centres in selected hospitals at Jaipur in Rajasthan. It includes research approach, research design, sample, sampling technique, development of tools, pilot study, procedure of data collection and plan for the data analysis.

Research Approach

The research approach was chosen to study depression among tobacco users and non-users of age 20-40 years in deaddiction centres in selected hospitals at Jaipur in Rajasthan.

Research Design

Research design is structural framework for the study implementation, including selection of design, data collection methods, sampling framework and data entry analysis plan. The research design spells out the strategies the researchers adopt to develop information that is accurate, objective and meaningful. For the present study, non-experimental descriptive research design was used to achieve the objectives.

The proposed investigation was planned to see if level of depression is correlated to tobacco users and non-users. Therefore, there is a correlation between independent variables (users and non users) and dependent variables (depression), hence a correlation design was used.

Setting of the Study

The setting is the physical location and condition in which data collection takes place in the study. The study was conducted on adults in deaddiction centres in selected hospitals at Jaipur City in Rajasthan.

Population

It is entire set of individuals or objects having some common characteristics. In present study, it refers to adults in residential areas of Jaipur city in Rajasthan.

Sampling Technique

In this study, purposive sampling technique was used.

Sample Size

A total number of 300 tobacco users and nonusers. The total sample were divided into two groups as tobacco users (n=150) and non users (n=150) male adults between age range of 20-40 years.

- The groups were matched in terms of sex, age, socio economic status and domicile.
- Equal number of tobacco users and normal subjects (non user group) will be randomly.
- Varying degree of tobacco user factor limited the inclusion of only male tobacco users.
- Subjects who indulged in regular intake of tobacco at least for one year in the form of bidi, cigarette, chutta, choorut, hukkan, dhumti, chilam, cigar, chunna, supari with paan, dantmanjan and massahari to clean teeth, snuffing of naswar.
- The non users group will consist of subject between the same age ranges of 20-40 years.
- Subjects were mentally and physically healthy adults.
- The test was administered individually as it requires rapport and time for interrogation.
- The selected samples were consisting of tobacco users who attend the drug deaddiction centers, located at Jaipur at least for one year.

Data Collection Tools

Paper and pencil method for collecting data.

Following psychological tools were used to achieve the objectives:

- (1) Beck's Depression Inventory (BDI)^{5,6}
- (2) Socio-demographic Questionnaire: Age, Marital status, Education, Employment status, Current Living arrangement, Tobacco use

Beck's Depression Inventory (BDI)

The BDI is items test presented in multiple choice format which purports to measure presence of degree of depression in adolescents and adults.

Reliability

Retest reliability was studied in the subjects who were given the BDI on two occasions. It was discovered that the change in BDI scores tended to parallel changes in the clinical reading of the depth of depression indicating a consistent relationship between BDI scores and the patient's clinical state.

Validity

Content validity would seem to be quite high since the BDI appears to evaluate well a wide variety of symptom and attitude associated with depression.

Scoring

The score for each item is the highest number that is being circled for any of the statement within that group; that is, if 1 is circled for group "A" the score for "A" would be one point. If more than statement in a group is circled, the score for that item would be only the highest number circled, for example if for "B" Pessimism both statements 1 and 26 are circled, scores for the item B would be two points. To get the total scores for the test, add up the points for each item. Thus total score is made up to 21 individual items scores and can range from 0 to 63 points.

Beck's Depression Inventory includes the following interpretation:

Total	Level of Depression
1-10	These ups and down are considered normal
11-16	Indicate mild mood disturbance
17-20	Indicate borderline clinical depression
21-30	Indicate moderate depression
31-40	Indicate severe depression
Over 40	Indicate extreme depression

A persistent score of 17 or above indicates need for professional treatment

Procedure

The purpose of present investigation was explained to the subjects. Subjects were individually administered all the tests in the same order as per manual of the test. The proposed study was conducted in phased manner observing ethics of voluntary participation and informed consent of human participants. Various standardized measures were administered on individual or group basis randomly so to minimize "The order effect" care and caution was observed to control systematic errors and response biases /sets requisite rapport was established and ethico moral code was observed on testing as per APA's prescriptions. The purposive sampling technique was used in study to collect the data. The investigator explained the purpose of the study to the adults prior to the study to get their full co-operation and assured about the confidentiality of the data. The informed consent was provided to the subjects prior to the study. The questionnaire was provided to the adults. The demographic and knowledge questionnaire was self administered to the adolescents. The investigator used interview schedule for the practice questionnaire and checklist. The data were collected from 400 adults (200 Tobacco users and 200 Non-tobacco users) who fulfilled the inclusion criteria. All subjects cooperated well with the investigator during the data collection.

Data Analysis

The master data sheet prepared by the investigator was used to analyze the data. The data were analyzed by using descriptive and inferential statistics as per procedure:

- The demographical variables were analyzed in terms of frequency and percentage.
- The knowledge and practices among the adults regarding tobacco users and non-users chewing were analyzed in terms of

frequency, frequency percentage, mean, median, mode standard deviation.

- The relation between the knowledge and practices and correlation between demographic and knowledge was analyzed by t-test.

The checklist was analyzed according to terms of frequency and percentage.

Statistical Treatment

Mean, standard deviation, standard error, and t-test were computed on collected data.

RESULTS AND DISCUSSION

Table 1: Frequency and percentage depression of Tobacco users by their characteristics Age, Marital Status, Education, Employment status and Current living Arrangement

S. No.	Variables	F	%	Chi.Sq. Value	Table Value	Df	Result
1.	Age:			5.7838	5.991	2	Null Hypothesis Accepted
	1.1. 20- 26 years	70	46.67				
	1.2. 27-33 years	49	32.67				
	1.3. 34-40 years	31	20.66				
2.	Marital Status:			1.03693	3.841	1	Null Hypothesis Accepted
	2.1 Never Married	57	38				
	2.2 Married	93	62				
3.	Education:			2.1044	3.841	1	Null Hypothesis Accepted
	3.1 Under Graduation	72	48				
	3.2. Graduate/P.G./tech/Prof.	78	52				
4.	Employment Status			0.6666	3.841	1	Null Hypothesis Accepted
	4.1. Employed	99	66				
	4.2. Unemployed	51	34				
5.	Current Living Arrangement			0.1586	3.841	1	Null Hypothesis Accepted
	5.1. Joint Family	103	68.66				
	5.2. Nuclear Family & Others	47	31.34				
6.	Substance of Abuse			1.1938	3.841	1	Null Hypothesis Accepted
	6.1. Current Use	117	78				
	6.2. Ever Use	33	22				

(n=150)

Table 2: Frequency and percentage depression of Tobacco Non-users by their characteristics age, Marital Status, Education, employment status, Current living Arrangement

S. No.	Variables	F	%	Chi.Sq. Value	Table Value	Df	Result
1.	Age:						Null Hypothesis Accepted
	1.1. 20- 26 years	97	64.66	1.1947	5.991	2	
	1.2. 27-33 years	36	24				
1.3. 34-40 years	17	11.34					
2.	Marital Status:						Null Hypothesis Accepted
	2.1. Never Married	84	56	3.0736	3.841	1	
	2.2. Married	66	44				
3.	Education:						Null Hypothesis Accepted
	3.1.Under Graduation	23	15.33	3.2551	3.841	1	
	3.2.Graduate/P.G./tech/Prof.	12	84.67				
	7						
4.	Employment Status :						Null Hypothesis Rejected
	4.1. Employed	88	58.66	7.437	3.841	1	
	4.2.Unemployed	62	41.34				
5.	Current Living Arrangement:						Null Hypothesis Accepted
	5.1 Joint Family	92	61.33	4.9305	5.991	2	
	5.2 Nuclear Family	33	22				
5.3 Others	25	16.67					

(n=150)

CONCLUSION

Table 1 reveals that majority of Tobacco users, **70 [46.67 %]** was in the age group 20-26 years. Out of total of 150 Tobacco users under study, **93 [62%]** were married. Majority of the Tobacco users, **78 [52%]** have education at the level of Graduate/Post graduate/Technical. As regard of employment, majority of the Tobacco users, **99 [66 %]** were employed. Majority of Tobacco users, **103 [68.66%]** have joint family as their current living arrangement. As regard of Substance of Abuse, **117 [78%]** was found as current user.

Table 2 reveals that majority of Tobacco users, **97 [64.66 %]** was in the age group 20-26 years. Out of total of 150 Tobacco users under study, **84 [56%]** were married. Majority of the Tobacco users, **127 [84.67%]** have education at the level of Graduate/Post graduate/Technical. As regard of employment, majority of the Tobacco users, **88**

[58.66 %] were employed. Majority of Tobacco users, **92 [61.33%]** have joint family as their current living arrangement. As regard of Substance of Abuse, **117 [78%]** was found as current user.

The study revealed that there is higher level of depression among tobacco users than tobacco non users. There is no association between the levels of depression among selected socio-demographic variables of tobacco users. There is no association between the levels of depression with tobacco users by age, marital status, education and current living arrangement. There is association between the levels of depression with employment status of tobacco non users.

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