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# "ASSESS THE EFFECTIVENESS OF STP ON KNOWLEDGE REGARDING SIDE EFFECTS OF TOBACCO CHEWING AMONG HEALTH WORKERS"

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## ABSTRACT

The study on "effectiveness of structured teaching programme on knowledge regarding side effect of tobacco chewing among health workers in NMCH, Jamuhar, Sasaram, Rohtas was undertaken by the year 2018-22 in partial fulfillment of the requirement for the degree of B.Sc in Narayan nursing college, Jamuhar, Sasaram.

## The objective of the study was:

- To assess the pre-test knowledge regarding the effect of tobacco chewing among Health workers in NMCH.
- To provide the STP regarding tobacco chewing among health workers in NMCH.
- To assess the post-test knowledge regarding the effect of tobacco chewing among Health workers in NMCH.
- To compare the association between the pre-test & post-test score regarding tobacco chewing among health workers with socio demographic variables.

## **Conceptual frame work:**

**Approach:** Quantitative approach was adopted for this study. **Design:** Research design used in this study will be descriptive design. **Setting**: The study was conducted at Narayan medical college and hospital , Jamuhar at Rohtas. **Sample size:** The sample size was 60 Health Workers. **Sampling Technique:** The non probability sampling method: Convenient sampling technique was used. **Methods of data collection procedure:** Data were collected from the health workers to assess the level of knowledge by using structured knowledge questionnaire before and after the implementation of structured teaching programme. The collected data were tabulated and analyzed by descriptive and inferential statistics. **Results:** The result shows, there was a significant difference between pre test and post test level of knowledge regarding side effects of tobacco chewing.

## **INTRODUCTION**

Many people believe, wrongly, that chewing tobacco is a safe alternative to smoking. However this is hardly the case as the body suffers from multiple adverse health effects of tobacco.

Chewing tobacco is a type of <u>smokeless tobacco product</u>, which is available as loose leaves, plugs (bricks) or twist of rope, consumed by placing a portion of the tobacco between the cheek and gum or teeth and chewing. Unlike dipping tobacco, it is not ground and must be mechanically crushed with the teeth to release flavour and <u>nicotine</u>. Unwanted juices are then expectorated. Saliva is spit or swallowed.

Chewing tobacco, also called smokeless tobacco or snuff, contains over 25 carcinogens or cancer causing agents .Chewing or smokeless tobacco contains nicotine a very addictive substance. Chewing allows nicotine, which is a drug you can become addicted to, to be absorbed into the bloodstream through the tissues in your mouth. You don't even need to swallow.

Chewing tobacco increases the risk of oral cancers, throat and pharynx cancers. Oral cancers include those of the lips, mouth, gums, cheeks and tongue. Many times these cancers develop as unsightly tumos that need to be surgically removed. Chewing tobacco users may develop a condition called Leukoplakia. Leukoplakia is a condition which results from continued irritation of the gums, tongue, and the insides of the cheeks.

Users of chewing tobacco are at an increased risk of cardiovascular disease. Nicotine constricts blood vessels, raises blood pressure and reduces the amount of oxygen in the blood stream, all of which has an effect on the heart and can contribute to cardiovascular disease. Chewing tobacco permanently discolors teeth and users suffer from halitosis, constant bad breath.

Chewing tobacco increases the risk of oral health problems such as periodontal disease, mouth ulcers, candidacies, oral lesions, oral leukoplakia, <u>gingivitis</u>, brown staining and sticky tar deposits in teeth, tooth decay, tooth abrasion, altered taste and bad breath. It can also lead to lip cancer, sore throat as well as a burning sensation on the tongue and lips.

Chewing of tobacco is in different forms such as, Loose leaf tobacco is sweetened and packaged loose in aluminum-lined pouches. The chewer simply takes a portion directly from the pouch. This is the most widely available .Plug tobacco is press formed into sheets, with the aid of a little syrup, mostly molasses, which helps maintain form as well as sweeten. The sheets are then cut into individual plugs, wrapped with fine tobacco and then packaged. Individual servings must be cut or bitten directly from the plug. Twist tobacco is spun and rolled into large rope-like strands and then twisted into a knot. The final product is much lower in moisture than plug or loose leaf tobacco, and historic varieties could be smoked in a pipe as well as chewed. This was the most common form of chewing tobacco in the 18th and 19th centuries. Tobacco bits are formed by rolling sweetened and typically flavored tobacco into small pieces which are consumed individually. These are typically packaged in small tins like mints.

## **NEED FOR THE STUDY**

If we lose the battle against tobacco, we will lose the war against cancer

## - John Arradondo

Tobacco chewing are becoming more prevalent in India. Tobacco use is the single largest cause of preventable death in the world today. The WHO report on the global tobacco epidemic, 2008 provides a comprehensive analysis, based on data from 135 countries, of patterns of tobacco use, the deaths that result and the measures to reduce deaths.

The World Health Organization 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 non-representative sample surveys or have been conducted in localised—mostly urban—geographical areas as reviewed. WHO estimated a prevalence of tobacco consumption of all forms at 65% and 33%, respectively, among men and women, based on small scale studies conducted in the past.

In America, each year about 30,000 are diagnosed with oral and pharyngeal cancers, and more than 8,000 people die of these diseases. Despite the health risks associated with tobacco use, consumers continue to demand the product. In 2001, the five largest tobacco manufacturers spent \$236.7 million on smokeless tobacco advertising and promotion.

Tobacco kills a third to a half of all those who use it. On average, every user of tobacco loses 15 years of life. Total tobacco-attributable deaths from ischemic heart disease, cerebrovascular disease (stroke), chronic obstructive pulmonary disease and other diseases are projected to rise from 5.4 million in 2004 to 8.3 million in 2030, almost 10% of all deaths worldwide. More than 80% of these deaths will occur in developing countries.

In India, about 35–40% of tobacco consumption is in smokeless forms, mostly of the species Nicotiana rustica, while most smoking tobacco is N. tabacum. Samples of N. rustica have been found to contain higher concentrations of tobacco-specific nitrosamines than N. tabacum. In India, the number of newly diagnosed tobacco-related cancers has been estimated at approximately 250 000 out of a total of 700 000–900 000 new cancers diagnosed each year. Tobacco-related cancers account for about one-third of all cancers in Bangladesh, India and Sri Lanka.

In the study of tobacco habits in India by Bhonsle, etal the overall prevalence rates among men varied from 61% in Maharashtra to 86% in Andhra Pradesh; among women it ranged from 15% in Bhavnagar (Gujarat) to 67% in Andhra Pradesh.4 Men preferred smoking and chewing and women chewing with some regional variations in their study. Our study is comparable to this.

Smokeless tobacco use varied from 7.2% to 59.4% in different states of India 44,111. In J & K, Goa, Himachal Pradesh, Haryana, Punjab, Kerala, Andhra Pradesh, Tamil Nadu, Delhi, Karnataka.

A large cohort study showed elevated relative risks of death for both male and female users of smokeless tobacco (mainly in the forms of misery and betel quid). The results were based on 5–6 years of follow-up of 52 000 persons, with 114 980 person years for female and 57 890 for male smokeless tobacco users. The age-adjusted relative risk for smokeless tobacco users compared with non-tobacco users among men was 1.22, and for women it was 1.35, with a suggestion of a dose–response relationship for daily frequency of use.30.

There is growing evidence of the tobacco chewing in senior citizen which can lead to health problems. This study helps to assess the knowledge and practice of tobacco chewing among senior citizen.

Summary: The chapter has dealt with background and need for undertaking this study.

## PROBLEM STATEMENT

A study to assess the effectiveness of STP (structured teaching programme) on knowledge regarding side effect of tobacco chewing among health workers in NMCH, Jamuhar, Sasaram, Rohtas"

## **OBJECTIVES**

- 1. To assess the pre-test knowledge regarding the effect of tobacco chewing among Health workers in NMCH.
- 2. To provide the STP regarding tobacco chewing among health workers in NMCH.
- 3. To assess the post-test knowledge regarding the effect of tobacco chewing among Health workers in NMCH.
- 4. To compare the association between the pre-test & post-test score regarding tobacco chewing among health workers with socio demographic variables.

## **RESEARCH METHODOLOGY**

## **Research Design**

Research design used in this study will be descriptive design.

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## Setting of the study

Narayan Medical College and Hospital (NMCH), Jamuhar, Sasaram

- NMCH has more than 650 beds hospitals
- The hospitals also have its own transportation services to cater the need of patients.
- The institute has an objective to provide affordable medical facilities to the needy and poor masses of in and around nearby districts of Bihar.
- There is approx. 9km distance from the railway station to the NMCH.

## Study population:

- Target population: The target population of the study was the Health Workers who are working in the NMCH Hospital.
- Accessible population: The accessible population of the study was the Health Workers who are working in Narayan Medical College and Hospital.

#### Sample

Sample were taken from Narayan Medical College and Hospital college. In this study the sample consists of health workers who met the inclusion criteria.

#### Sample size

Sample size consisted of 60 health workers

### Sampling technique

In this study Non – probability (convenience) sampling method was used for selection of the study subjects.

### Criteria for sample selection

- Inclusion Criteria: The study includes,
- Age group of the health workers must be in between 22-49 years.
- Health workers participating in the study.
- Subject must be willing to participate in the study.
- Subject should present during data collection.
- **Exclusion criteria:** The study excludes,
- Not willing to participate.
- Age group of worker should not be more then 49 years of age.

## **DESCRIPTION OF THE TOOL**

The tool consisted of two sections

Section – A: Demographic data consisted of following: Age, educational status, religion, occupational status, marital status, job category, Practice of tobacco chewing.

Section – B: Structured knowledge questionnaire regarding the side effects of Tobacco chewing. The structured questionnaire contains [20 questions].

Every correct answer was awarded a score of one (1) and every incorrect answer question was accorded as Zero (0). The maximum score on structured knowledge questionnaire was 20.

The different level of knowledge is categorized as follows.

- Very good More than 75%
- Good Between 45 -74%
- Poor -Less than 44%

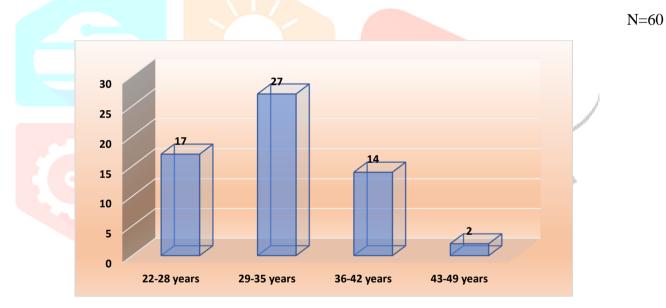
## **MAJOR FINDINGS OF THE STUDY**

## **Distribution of sample according to their Demographic variables**

Demographical variables	NO	Percentage (%)
1. AGE (IN YEAR)	1	1
22-28 years	17	28.33%
29-35 years	27	45%
36-42 years	14	23.33%
43-49 years	2	3.33%
2. GENDER		
Male	47	78.33%
Female	13	21.66%
Others	0	0%
3. EDUCATION		1
Driverour		46.660/
Primary	28	46.66%
Senior secondary	23	38.33%
Graduate	9	15%
Others	0	0%
4. MARITAL STATUS		
Married	52	86.66%
Unmarried	6	10%
Widow		1.66%
Divorce	1	1.66%
5. JOB CATEGORY		
Ward attendants	8	13.33%
Ward boy	23	38.33%
Security Gard	18	30%
Sweepers	11	18.33%
6. INCOME		
≥10000-15000	60	100%
15001-20000	0	0%
20001-25000	0	0%
≥25000	0	0%
7. DO YOU USE ANY TO	BACCO SUBSTANCE	1
Yes	43	71.66%
No	17	28.33%

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8. PREVIOUS KNOWLEDGE ABOUT SIDE EFFECTS OF TOBACCO CHEWING.											
Yes	29	48.33%									
No	31	51.66%									
9. PRACTICE OF TOBA	CCO CHEWING										
≥lyears	10	16.66%									
1 years- 3 years	12	20%									
4 years- 5 years	13	21.66%									
Above 5 years	14	23.66%									
Not use tobacco	11	18.33%									





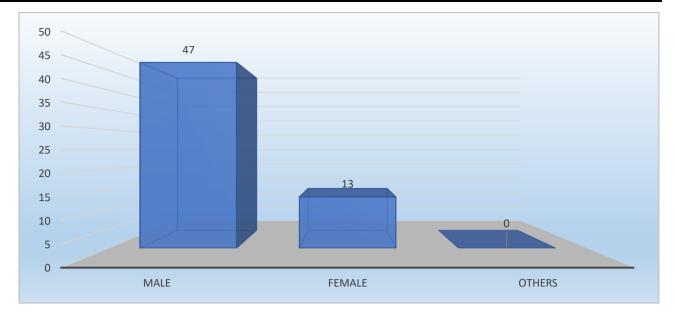


FIG:4.2 GENDER DISTRIBUTION OF HEALTH WORKERS

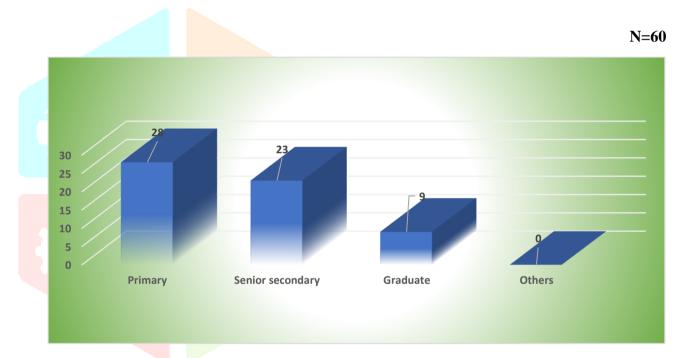


FIG:4.3 EDUCATION DISTRIBUTION OF HEALTH WORKERS

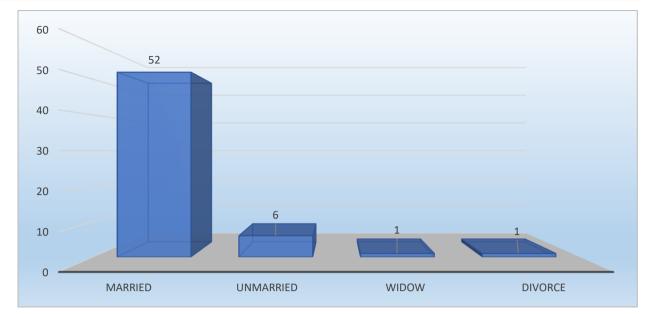


FIG:4.4 MARITAL STATUS DISTRIBUTION OF HEALTH WORKERS



FIG:4.5 JOB CATEGORY DISTRIBUTION OF HEALTH WORKERS

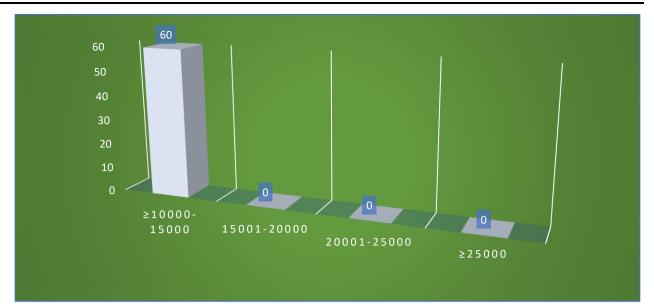
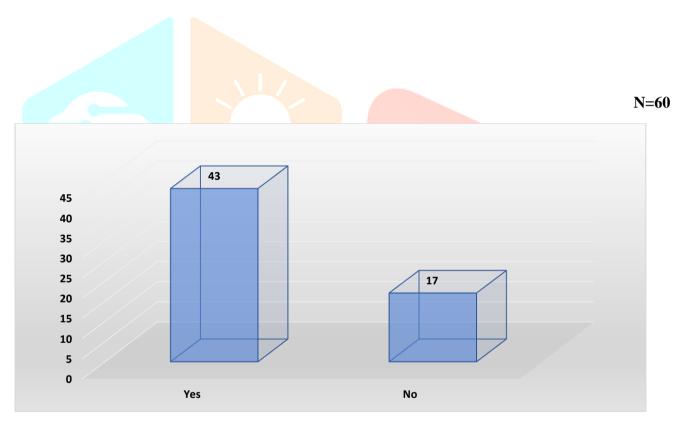


FIG:4.6 INCOME DISTRIBUTION OF HEALTH WORKERS





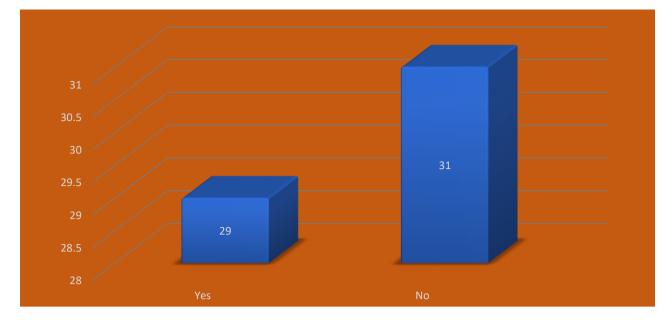


FIG.4.8 PREVIOUS KNOWLEDGE ABOUT SIDE EFFECTS OF TOBACCO CHEWING DISTRIBUTION OF HEALTH WORKERS

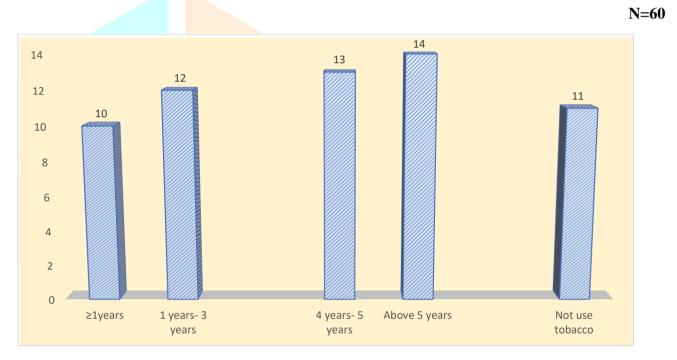
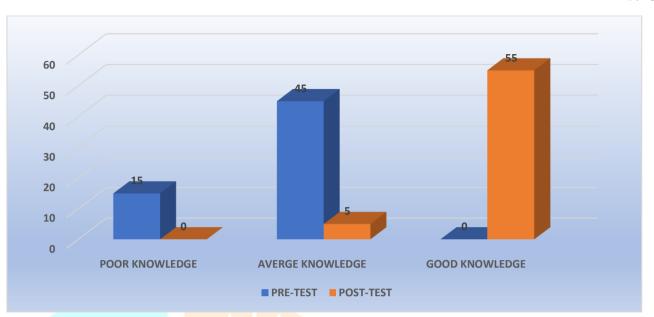


FIG. NO 4.9 PRACTICE OF TOBACCO CHEWING DISTRIBUTION OF HEALTH WORKERS

## **SECTION -B**

## ASSESS THE PRE-TEST & POST-TEST KNOWLEDGE REGARDING THE EFFECT OF TOBACCO CHEWING AMONG HEALTH WORKERS

N=60



## FIG. NO. 4.10 PRE-TEST & POST-TEST KNOWLEDGE TOBACCO CHEWING DISTRIBUTION OF HEALTH WORKERS

S. N	LEVEL OF	FREQ	UENCY	PERCEN	ENTAGE (%)		
	KNOWLEDGE	Pre-test	Post-test	Pre-test	Post-test		
1	GOOD	0	55	0%	91.66%		
2	AVERAGE	45	5	75%	8.33%		
3	POOR	15	0	25%	0%		

Show the knowledge of regarding the effect of tobacco chewing, pre-test 0% and post-test 91.66% have good knowledge, pre-test 75% post-test 8.33% average knowledge and pre-test 25% and post-test 0% have poor knowledge.

## **SECTION-C**

## Association between the pre-test score regarding tobacco chewing among health workers with socio demographic variables.

Demographical data	cal Good knowledge			Average I			<b>X</b> <sup>2</sup>	Df	p value	Inference
uata	KIIO	wieuge	kn	owledge	kn	owledge				
	F	%	F	%	F	%				
Q1. AGE (IN YEARS)							3.3501	6	0.7637	NS
22-28 years	0	0%	15	88.23%	2	11.76%				
29-35 years	0	0%	18	66.66%	9	33.33%	-			
36-42 years	0	0%	10	71.42%	4	28.57%				
43-49 years	0	0%	2	100%	0	0%				
Q2. GENDER								~	31	
Male	0	0%	38	80.85%	9	19.14%	3.9607	4	0.1380	NS
Female	0	0%	7	53.84%	6	46.15%				
Others	0	0%	0	0%	0	0%				
Q3. EDUCATION		<u> </u>								
Primary	0	0%	22	78.57%	6	21.42%	2.1357	6	0.7108	NS

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Senior secondary	0	0%	18	78.26%	5	21.73%				
Graduate	0	0%	5	55.55%	4	44.44v				
Others	0	0%	0	0%	0	0%				
Q4. MARITAL STATUS										
Married	0	0%	38	73.07%	14	26.92%	0.9914	6	0.9859	NS
				1						
Unmarried	0	0%	5	83.3 <mark>3%</mark>	1	16.66%				
							1			
Window	0	0%	1	100%	0	0%				1
									<	ſ
Divorce	0	0%	1	100%	0	0%	13	C		
Q5. JOB CATEGORY										
Ward attendants	0	0%	6	75%	2	25%	0.2142	6	0.9998	NS
Ward boy	0	0%	17	73.91%	6	26.08%				
Security Gard	0	0%	14	77.77%	4	22.22%				

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Sweepers	0	0%	8	72.72v	2	18.18%				
Q6. INCOME										
≥10000-15000	0	0%	45	75%	15	25%	1.6440	6	0.4395	NS
15001-20000	0	0%	0	0%	0	0%				
20001-25000	0	0%	0	0%	0	0%				
≥25000	0	0%	-0	0%	0	0%				
Q7. DO YOU USE ANY TOBACCO SUBSTANCE								/		/
YES	0	0%	36	83.72%	7	16.27%	6.1559	°,	0.0460	S
NO	0	0%	9	92.94%	8	47.05%				
Q8. PREVIOUS KNOWLEDGE ABOUT SIDE EFFECTS OF TOBACCO CHEWING				1		1				
YES	0	0%	23	79.31%	6	2078%	0.5561	2	0.7572	NS
NO	0	0%	22	70.96%	9	29.09%				

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Q9. PRACTICE OF TOBACCO CHEWING										
≥1years	0	0%	8	80%	2	20%	8.1202	8	0.4218	NS
1 years- 3 years	0	0%	11	91.66%	1	8.33%				
4 years- 5 years	0	0%	9	69.23%	4	30.76%				
Above 5 years	0	0%	12	85.71%	2	14.28%				
Not use tobacco	0	0%	-5	45.45%	6	54.54%				

## **SECTION-D**

## Association between the post-test score regarding tobacco chewing among health workers with socio demographic variables.

Demographical data	Good knowledge		Average knowledge		Poor knowledge		X <sup>2</sup>	Df	p value	Inference
	F	%	F	%	F	%				
Q1. AGE (IN YEARS)		<u> </u>					0.50012	6	0.9978	NS
22-28 years	15	88.23%	2	11.76%	0	0%				
29-35 years	25	92.59%	2	7.40%	0	0%	-			
36-42 years	13	92.85%	1	7.14%	0	0%				
43-49 years	2	100%	0	0%	0	0%				

									<u>VA M</u>	
Q2. GENDER	50	2						C		
Male	43	91.48%	4	8.51%	0	0%	0.0089	2	0.9955	NS
Female	12	92.30%	1	7.69%	0	0%				
Others	0	0%	0	0%	0	0%				
Q3. EDUCATION										

Primary	24	85.71%	4	8.51%	0	0%	3.4805	6	0.4808	NS
Senior secondary	23	100%	0	0%	0	0%	-			
Graduate	8	8.88%	1	11.11%	0	0%	-			
Others	0	0%	0	0%	0	0%	-			

Q4. MARITAL STATUS				K						
Married	48	92.30%	4	7.69%	0	0%	0.7552	6	0.9932	NS
Unmarried	5	83.33%	1	16.66%	0	0%			RI	
Window	1	100%	0	0%	0	0%	19			
Divorce	1	100%	0	0%	0	0%				
Q5. JOB CATEGORY										
Ward attendants	7	87.50%	1	12.50%	0	0%	7.6198	6	0.2672	NS
Ward boy	23	100v	0	0%	0	0%				

Security Gard	17	94.44%	1	5.55%	0	0%				
Sweepers	8	72.72%	3	27.27%	0	0%				
Q6. INCOME										
<u>≥10000-15000</u>	55	91.66%	5	8.33%	0	0%	0.0907	6	0.9556	NS
15001-20000	0	0%	0	0%	0	0%				
20001-25000	0	0%	0	0%	0	0%				
	Ū			0,0	Ū	0,0				
<u>&gt;25000</u>	0	0%	0	0%	0	0%				
									1	
Q7. DO YOU USE ANY TOBACCO SUBSTANCE	10						13	C		
YES	38	88.37%	5	11.62%	0	0%	2.1564	2	0.3401	NS
NO	17	100%	0	0%	0	0%				
L	I	L	I	I	L	1	l	I	L	1

Q8. PREVIOUS KNOWLEDGE ABOUT SIDE EFFECTS OF TOBACCO CHEWING YES	28	96.55%	1	3.44%	0	0%	1.7534	2	0.4161	NS
	-0		•		Ū	0,0	1	-		
NO	27	87.09%	4	12.90%	0	0%				
Q9. PRACTICE OF TOBACCO CHEWING										
≥1years	10	100%	0	0%	0	0%	11.5924	8	0.1703	NS
1 years- 3 years	12	100%	0	0%	0	0%				)
4 years- 5 years	9	69.23%	4	30.76%	0	0%			RI	
Above 5 years	13	92.85%	1	7.14%	0	0%	12			
Not use tobacco	11	100%	0	0%	0	0%				

- To find out and test the significance association of knowledge regarding side effect of tobacco chewing with selected demographical variable following research hypothesis and null hypothesis aretested.
- $H0_1$  There is no significant association between of the health workers with demographic variable.
- $H_1$  There is significant association between tobacco chewing of the health workers with demographic variable.

1. Table no 2. Shows that the research hypothesis H1 is accepted for tobacco chewing of the health workers and null hypothesis is accepted for the age, gender, education, marital status, job category income, do you use any tobacco substance, previous knowledge about side effects of tobacco chewing, practice of tobacco chewing. it represents the chi squire association of tobacco chewing statistically no significant as the calculated value of behaviour changes is 0.00, which is more than tabulated value at p-0.05.

## SUMMARY OF DATA ANALYSIS

The section is organized under 4 sections, 5 table and 10 diagrams which are description of sample according to demographic variable by using frequency and percentage, comparison of tobacco chewing of the health workers. There was distribution of subject according to demographic variables by using frequency and percentage analysis of mean & standard deviation tobacco chewing and association of selected demographic variables with tobacco chewing of the health workers using chi - square formula, findings show that by using self-structured questionnaire tool assess the behaviour changes of the health workers.

## DISCUSSION

The findings of the study have been discussed based on objectives.

## First objectives:

To assess the pre-test knowledge regarding the effect of tobacco chewing among Health workers in NMCH.

Show the knowledge of regarding the effect of tobacco chewing, (0%) have good knowledge, (75%) average knowledge and (25%) have poor knowledge.

## Second objective:

To provide the STP regarding tobacco chewing among health workers in NMCH.

A study was conducted "A study to assess the effectiveness of structured teaching programme on knowledge regarding side effect of tobacco chewing among health workers in NMCH, Jamuhar, Sasaram, rohtas.

A study was conducted on provide the knowledge on tabacco chewing among health workers. The study is to provide a structured teaching programme on knowledge regarding side effect of tobacco chewing. The design used is non experimental qualitative study period. Two times STP session were conducted for 60 health workers. Before, the structured teaching programme health workers were lack of knowledge about tabacco chewing, after the structured teaching programme the knowledge were improve.

## Third objective:

To assess the post-test knowledge regarding the effect of tobacco chewing among Health workers in NMCH.

Show the knowledge of regarding the effect of tobacco chewing, (91.66%) have good knowledge, (8.33%) average knowledge and (0%) have poor knowledge.

## Forth objective:

To compare the association between the pre-test & post-test score regarding tobacco chewing among health workers with socio demographic variables.

Show the knowledge of regarding the effect of tobacco chewing, pre-test 0% and post-test 91.66% have good knowledge, pre-test 75% post-test 8.33% average knowledge and pre-test 25% and post-test 0% have poor knowledge.

## Major findings of the study

- 1. Revels that the Majority of sample (91.67%) health workers were having mild knowledge change, (8.33%) health workers were having moderate knowledge change and (0%) health workers were having severe knowledge change. Due to excessive time spent on the tobacco chewing. Found that those participants who spent more time with tobacco chewing among health workers.
- 2. Major findings of the study are summarized as follows, findings related demographic characteristics in the present study all select variable ware not statistically significant with tobacco chewing among health workers, hypothesis H1 is related in this area.

## CONCLUSION

The present study was aimed at assessing the effectiveness of STP on knowledge regarding side effect of tobacco chewing among health workers. The relevant data was collected statistically based on objectives of the study. Out of 60 health care workers, 53 (91.66%) had good knowledge, 7(8.33%) had average knowledge and none had poor knowledge regarding side effect of tobacco chewing. This shows that these variables had influenced level of knowledge in this study. The association between the variables is to provide knowledge regarding side effect of tobacco chewing among health workers working in NMCH.

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