A study to assess the knowledge regarding harmful effect of smoking on health among young adult at Jodhpur urban area of Ahmedabad city, Gujarat.

RIYA PATEL

(M.Sc Nursing Student at PP Savani University, Surat)

ABSTRACT: The present study was undertaken by the investigator to assess the knowledge regarding harmful effect of smoking among young adult at Jodhpur urban area, Ahmedabad city, Gujarat. The objectives of the study were to assess the knowledge of young adult regarding harmful effect of smoking and to determine the association between the knowledge of young adult regarding harmful effect of smoking with selected demographic variables. Quantitative approach and non-experimental descriptive research design was used in the study. Subjects were choosen by non- probability convenience sampling. Pilot study was conducted among 10 adults to check reliability and feasibility of the study. Main study was conducted among 100 adults living at Jodhpur Area, Ahmedabad in two weeks. Data was collected by structured questionnaire which included 32 items. The data was analyzed using descriptive and inferential statistics. Pie, column, line and bar diagram were used to depict the findings. Result showed that 2% of the respondents have good knowledge regarding harmful effect of smoking, 67% of respondents have average knowledge regarding harmful effect of smoking. There is significant association between the knowledge of young adults regarding harmful effects of smoking and level of education of young adults. Study concluded that concerned efforts must be made by nurse to increase knowledge and awareness regarding harmful effect of smoking.

Keywords: Knowledge; Harmful effect; health; smoking; young adults.

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I. SIGNIFICANCE OF THE STUDY:

However smoking during childhood and adolescence also causes a range of immediate health problems, as lying the foundation of development of serious disease in adulthood.⁴

Most of the risk of dying prematurely due to smoking is reversed if people quit smoking before age of 30.5

The majority of people who begin to use tobacco products regularly have great trouble breaking this addiction. Cigarette smokers have a lower level of lung function than those persons who never smoked. Smoking reduces the growth of lung functions.⁶

Smoking hurts young people's physical fitness in terms of both performance and endurance, even among young people trained in competitive running. The resting heart rates of young adult smokers are two or three beats per minute faster than non-smokers. Smoking in early age increase the risk of lung cancer. For most smoking related cancers, the risk rises as the individual continues to smoke.⁷

Among young people, the short-term health consequences of smoking include respiratory and non-respiratory effects, addiction to nicotine, and the associated risk of the other drug use. Long-term health consequences of youth smoking are reinforcement by the fact that most young people who smoke regularly continue to smoke throughout adulthood.⁷

On average, someone who smokes a pack or more of cigarettes each day lives 7 years less than someone who never smoke.⁸

Active smoking is associated with an increased risk for developing asthma and exacerbating existing asthma in adolescents. Active smoking causes respiratory symptoms including shortness of breath, coughing, phlegm production. 9

Other health effects among young adult associated with current smoking; these including significantly reduced taste sensitivity and atrophic papillary structures compared with non-smokers, as well as an association between an increase in sleep disorders and current smoking in adult.¹⁰

Based on World Wide statistics by 120 million smokers in India. According to WHO, India is home to 12% of the world's smokers. More than 1 million people die every year due to tobacco related illness. ¹¹

As of 2015, the number of men smoking tobacco in india rise to 108 million, an increase of 36%, between 1998 and 2015. 12

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So, the researchers felt that this study is necessary to be conducted and to assess the knowledge regarding harmful effects of smoking among young adults of Ahmedabad city.

Cigarette smoking during young adulthood begins the damaging process that lead to cardiovascular disease, lung disease, etc.

OBJECTIVES:

- 1. To assess the knowledge of young adult regarding harmful effect of smoking.
- 2. To determine the association between the knowledge of young adult regarding harmful effect of smoking with selected demographic variables.

ASSUMPTION:

The study assumes that:

- 1. Young adult may not have an adequate knowledge regarding hazards of smoking.
- 2. Young adults are high prone for hazards of smoking.

II. MATERIALS AND METHODS:

Research design: Descriptive research design

Variables:

Research variable: knowledge regarding harmful effect of smoking on health among young adults.

Demographic variable: Age, Gender, Level of education, Family income, Type of family, Area of living, Education of parents.

Sampling:

- Sample size: 100 Young Adults
- Sampling technique: Non probability convenient sampling technique

Sampling criteria:

INCLUSIVE CRITERIA:

Young adult who are,

- 1. Willing to participate in the study.
- 2. Available at the time of data collection.

EXCLUSION CRITERIA:

Young adult who are,

1. Not able to read & understand Gujarati or English.

III. RESULT:

Table: 1

Frequency and Percentage distribution of respondents according to age of Young Adult

ľ	N =1	100

Age of Young Adult	Frequency	Percentage
	(f)	(%)
19-21 Years	37	37.0
22-24 Years	30	30.0
25-27 Years	15	15.0
28-30 Years	18	18.0

FIGURE: 2
Bar diagram showing Frequency distribution of respondents according to age

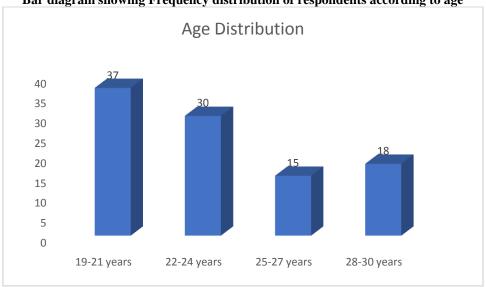


Table 1 & Fig. 2: From the above frequency distribution chart of age, it can be seen that 37% respondents are between age group of 19-21 years, 30% respondents are between age group of 22-24 years, 15% respondents are between age group of 25-27 years, 18% respondents are 28-30 years age group.

Table : 2
Frequency & percentage distribution of respondents according to gender of young Adult

N=100

Gender of Young Adult	Frequency	Percentage	-
9	(f)	(%)	
Female	9	9.0	
Male	91	91.0	

Figure: 3
Pie diagram showing Frequency distribution of respondents according to gender

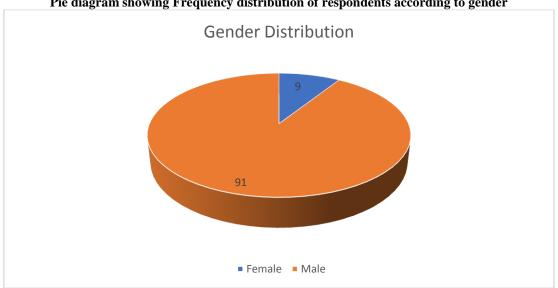


Table 2 & Fig. 3: From the above frequency distribution chart of gender, it can be seen that 91% respondents are Male and 9% respondents are Female.

Table :3
Frequency & percentage distribution of respondents according to level of education of young adult

Level of Education of young Adult	Frequency (f)	Percentage (%)
Primary education	31	31.0
Secondary education	32	32.0
Higher secondary education	21	21.0
Graduate	16	16.0

FIGURE: 4
Bar diagram showing Frequency distribution of respondents according to level of education

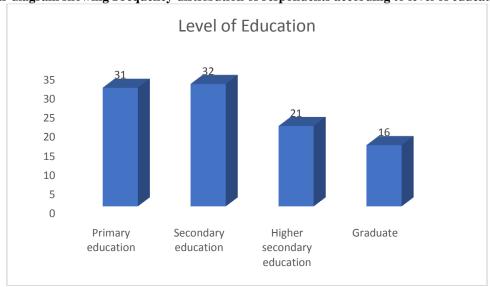


Table 3 & Fig. 4: From the above frequency distribution chart of level of education, it can be seen that 31% respondents have Primary education, 32% respondents have Secondary education, 21% respondents have Higher secondary education, 16% respondents have Graduate.

Table : 4
Frequency & percentage distribution of respondents according to family income

N=100

Family income of Young Adult	Frequency (f)	Percentage (%)
5001-6000 6001-10000	3 14	3.0
10001-15000 >15000	35 48	14.0
		35.0
		48.0

Figure: 5
Bar diagram showing Frequency distribution of respondents according to family income

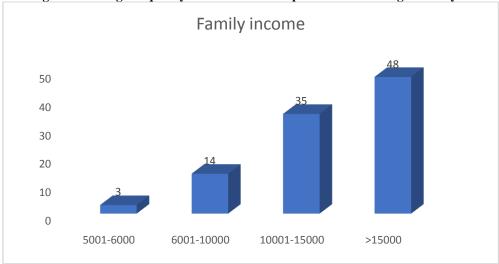


Table 4 & Fig. 5. From the above frequency distribution chart of family income, it can be seen that 3% of respondents have from 5001-6000 family income, 14% of respondents have 6001-10000 family income, 35% of respondents have 10001-15000 family income and 48% respondents have more than 15000 family income.

Table : 5
Frequency& percentage distribution of respondents according to type of family of young adult

equency a percentage distribution of respondents according to type of family of young addit			
Type of family of young adult	Frequency	Percentage	
	(f)	(%)	
Nuclear	36	36.0	
Joint	64	64.0	
Total	100	100.0	

Figure: 6
Pie diagram showing Frequency distribution of respondents according to type of family

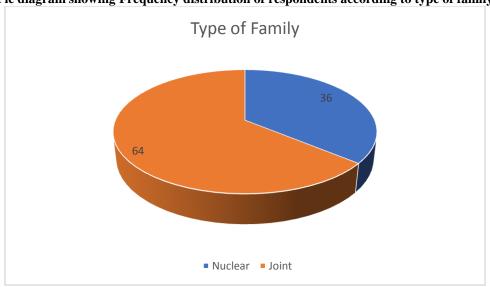


Table 5 & Fig. 6: From the above frequency distribution chart of type of family, it can be seen that 36% of respondents have Nuclear Family and 64% respondents have Joint Family.

Education of parents of Young Adult	Frequency	Percentage
	(f)	(%)
Primary education Secondary education	21	21.0
Higher secondary	50	50.0
Graduate	19	19.0
	10	10.0

Figure: 7
Bar diagram showing Frequency distribution of respondents according to Education of Parents

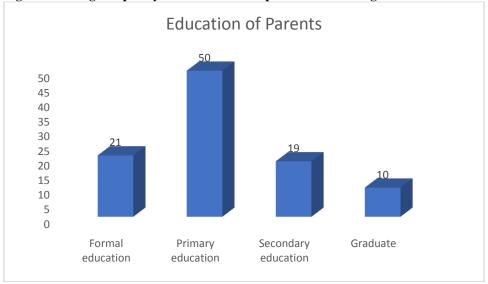


Table 6 & Fig. 7: From the above frequency distribution chart of Education of Parents, it can be seen that 21% of respondents parent's education is Formal education, 50% of respondents parent's education is Primary education, 19% respondents parent's education is Secondary education and 10% respondents parent's education is Graduate.

Table: 7
Frequency& percentage distribution of respondents according to smoking

		N=100
Do You smoke?	Frequency	Percentage
	(f)	(%)
Yes	68	68.0
No	32	32.0

Pie diagram showing Frequency distribution of respondents according to smoking Do you Smoke? 32 ■ Yes ■ No

Figure: 8

Table 7 & Fig. 8: From the above frequency distribution chart of smoking, it can be seen that 68% of respondents are smoking and 32% of respondents are not smoking.

Table: 8 Frequency& percentage distribution of respondents according to Period of smoking

Since How long?	Frequency	Percentage
_	(f)	(%)
<6 months	8	8.0
Between 6 months – 1 year	16	16.0
More than 1 year	44	44.0

Figure: 9 Bar diagram showing Frequency distribution of respondents according to Period of smoking

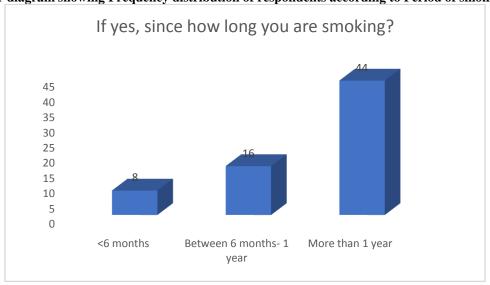


Table 8 & Fig. 9. From the above frequency distribution chart of period of smoking, it can be seen that 8% of respondents are smoking <6months, 16% respondents are smoking between 6 months-1year, 44% of responders are smoking more than 1 year.

Table : 9
Frequency& percentage distribution of respondents according to Previous source of knowledge regarding to harmful effect of smoking

Sources of Knowledge	Frequency	N=100 Percentage	
	(f)	(%)	
Yes	53	53.0	
No	47	47.0	

Figure: 10
Pie diagram showing Frequency distribution of respondents according to Previoussource of knowledge regarding to harmful effect of smoking

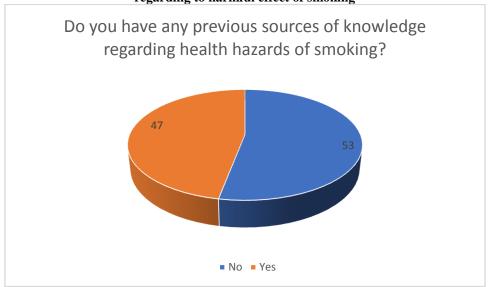


Table 9 & Fig. 10: From the above frequency distribution chart of previous source of knowledge regarding harmful effect of smoking, it can be seen that 47% respondents have knowledge regarding to harmful effect of smoking and 53% respondents have no knowledge regarding harmful effect of smoking.

 $Table: 10 \\ Frequency \& \ percentage \ distribution \ of \ respondents \ according \ to \ Source \ of \ knowledge \\ N=100$

Sources of Knowledge	Frequency	Percentage	
	(f)	(%)	
Newspaper	4	8.5	
Television	7	14.9	
Radio	2	4.3	
All of above	34	72.3	

If yes, specify the sources of knowledge?

35
30
25
20
15

Figure: 11
Bar diagram showing Frequency distribution of respondents according to Source of knowledge

Table 10 & Fig. 11. From the above frequency distribution chart of source of knowledge, it can be seen that 4% of respondent gained knowledge from Newspaper, 7% of respondents gained knowledge from Television, 2% of respondents have knowledge from Radio and 34% of respondents gained knowledge from Newspaper, Television & Radio.

Radio

All of Above

Television

TABLE: 11
Over all Frequency & percentage distribution of young adult according to level of knowledge regarding harmful effect of smoking

			N=100
Level Of Knowledge Of Young Adult	Score	Frequency (f)	Percentage (%)
Good	(15-22)	2	2
Average	(8-14)	67	67
Poor	(1-7)	31	31

Maximum Score=44 Minimum Score=0

10 5 0

News paper

FIGURE: 12 Bar diagram showing Frequency distribution of level of knowledge regarding harmful effect of smoking among young adult

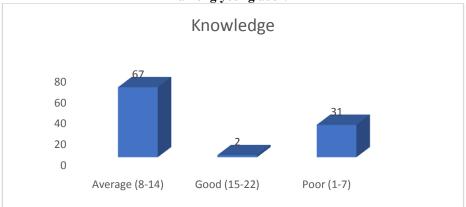


Table 11 & Fig. 12. From the above frequency distribution chart of level of knowledge, it can be seen that 67% of Young adults have average knowledge regarding harmful effect of smoking while 31% of the Young adults have poor knowledge regarding harmful effect of smoking and 2% of Young adults have good knowledge regarding harmful effect of smoking.

TABLE: 12 Mean Knowledge Score of Young Adult regarding harmful effect of smoking Mean Knowledge Score

100 8.78

Table 12. Depicts that the mean knowledge score of young adult regarding harmful effect of smoking among is

TABLE: 13 Association between the demographic variable and level of knowledge

8.78.

Demographic Variables		Level of Knowledge					
		Average (8-14)	Good (15- 22)	Poor (1-7)	Total	Chi Square	DF
Age	19-21 years	24	0	13	37	3.947 NS	6
	22-24 years	20	1	9	30		
	25-27 years	11	1	3	15		
	28-30 years	12	0	6	18		
Gender	Female	5	0	4	9	0.968 Ns	2
	Male	62	2	27	91		
Level of Education	Primary education	20	0	11	31		6
	Secondary education	16	1	15	32	14.127*	
	Higher secondary education	15	1	5	21		
	Graduate	16	0	0	16		
Family income	5001-6000	2	0	1	3	6.517 NS	6
	6001-10000	7	0	7	14		
	10001-15000	23	2	10	35		
	>15000	35	0	13	48		
Type of Family	Nuclear	23	1	12	36	0.35 NS	2
	Joint	44	1	19	64		
Education of Parents	Formal education	14	0	7	21	2.085 NS	6
	Primary education	33	2	15	50		

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Secondary education	13	0	6	19	
Graduate	7	0	3	10	

NS=Non Significant at p<0.05 level *= Significant at p<0.05 level

Table 13: Depicts that, According to age of young adult, calculated value of chi square (3.947) is less than tabled value(12.59), hence it shows that the age of young adult has no significant association with the level of knowledge of young adult regarding harmful effects of smoking.

According to gender of young adult, calculated value of chi square (0.968) is less than tabled value(5.99), hence it shows that the gender of young adult has no significant association with the level of knowledge of young adult regarding harmful effects of smoking.

According to level of education of young adult, calculated value of chi square (14.127) is less than tabled value (12.59), hence it show that the level of education of young adult has significant association with the level of knowledge of young adult regarding harmful effects of smoking.

According to family income of young adult, calculated value of chi square (6.517) is less than tabled value(12.59), hence it shoes that family income of young adult has no significant association with the level of knowledge of young adult regarding harmful effects of smoking.

According to type of family of young adult, calculated value of chi square (0.35) is less than tabled value (5.99), hence it shows that family income of young adult has no significant association with the level of knowledge of young adult regarding harmful effects of smoking.

According to education of parents of young adult, calculated value of chi square (2.085) is less than tabled value (12.99), hence it shows that education of young adult has no significant association with the level of knowledge of young adult regarding harmful effects of smoking.

IV. Discussion:

This chapter deals with the discussion of the findings of present study in accordance with the objectives of the research problem. The findings of the study are discussed with reference to the result observed by investigators.

The analysis of data according to first objective that is to assess the knowledge of young adults regarding harmful effect of smoking on health concluded that 67% of young adults had average knowledge, 31% of young adult had good knowledge and 2% had poor knowledge regarding harmful effect of smoking on health.

The analysis of data according to second objective that is to determine association between the knowledge of smoking with selected demographic variables, the tabled value of level of education of young adult is less than the calculated value. Hence the level of education has significant association between level of knowledge of young adult regarding harmful effect of smoking.

The above findings were supported by below mentioned studies.

A cross sectional study was conducted to assess the knowledge and attitude regarding ill effects of smoking among college students of selected colleges of Vadodra district, Gujarat. The sample is 500 college students of age group 18-25 years. The survey was conducted by employing self-structured questionnaire. These findings of the study reported that 56% of the students have poor knowledge regarding ill effects of smoking.

V. Conclusion:

Majority 67% were having average level of knowledge on harmful effect of smoking, 31% are having poor level of knowledge and only 2% were having goodlevel of knowledge. Hence the present study concluded that the very important risk factor for teenage, cancer, acute respiratory infection, coronary heart disease, etc. Therefore it is vital aspect of health education for young adults. Hence conducting awareness through the educational way like television, programmes, radio, newspaper, trained school nurses health personnel and knowledgeable parents can play a very important role in transmitting the vital message of correct education on prevention of harmful effect of smoking among young adults.

PRACTICAL IMPLICATION:

The findings of this study are important for the nursing profession i.e. clinical practice, nursing education, nursing administration, nursing research. In all the areas, the role of nurse is to improve the knowledge of young adult by providing them information about health hazards of smoking . Nurse acts as educator, organizer, leader, counsellor and motivator.

In the view of the results obtained from the study, several implications are made which are discussed in four areas.

- Nursing Education
- Nursing Practice
- Nursing Administrator/ service
- Nursing Research

Nursing Education

Students nursing can be taught regardinh the health effects of smoking in their ist year of degree program. Students can taught about the ways of communication with the community and patients to impart knowledge regarding health hazards of smoking, so that they can make the community aware regarding the health effects of smoking.

Nursing Practice

As the study reveals that majority of the first-time fathers (67%) average level of knowledge regarding health hazards of smoking, therefore it has its implication for enhancement of communication skills of the staff nurses, so that they can communicate with young adults and encourage them toquite smoking. Nurses working in Community areas must arrange informal and formal teaching programs e.g. Role play, counselling sessions for young adults regarding knowledge of health hazards of smoking.

Nursing Administration

Nursing has become a complex and highly practice discipline with a rapidly growing, well developed, well documented and humanistic knowledge base. Nursing administration needs to take initiative in developing communication skills, knowledge by workshop, conferences, seminars for providing education to the young adults regarding health hazards of smoking by firstly educating the health professional. Literature in the form of pamphlet can be provided to the young adults and parents regarding health hazards of smoking.

Nursing Research

• The findings of the study will act as catalyst to carry out more extensive research on a large population sample in different setting. Very few studies of this kind have been done in Indian setting. The findings of the study can serve as basis for the professional and student nurses for further studies on knowledge of adult regarding health effects of smoking and the information contained in the study can be source of data for future researches. Nursing personnel can take initiatives in conducting the research as well as discussing the findings of the research study among nurses and to encourage them to implement the findings. Through publication of research findings, average level of knowledge of young adult can be promoted to good level of perception knowledge by the nurse researcher.

Reference:

- [1]. Reitsma, Marissa B; Fullman, Nancy; Ng, Marie; Salama, Josheph S; Abajobir, Amanuel (April 2017) "Smoking prevalence and attributable disease burden in 195 countries and territories, 1990-2015: a systematic analysis from the global burden study 2015" (https://en.m.wikipedia.org>smoking)
- [2]. Allan Hackshaw et al. low cigarette consumption and risk of coronary heart disease and stroke: meta analysis of 141 cohort studies in 55 study. (https://doi.org/10.1136/bmj.j5855)
- [3]. "WHO/WPRO- Tobacco Fact sheet" World health organization Regional Office for the wastern Pacific. 2007-05-29. Archived from the original on 2009-02-07. Retrieved 2009-01-01. (en.m.wikipedia.org/wiki/Prevalence_of_tobacco_use)
- [4]. US Department of Health and Human Services. Preventing tobacco use among young people. A report of the Surgeon General, 1994. Atlanta, Georgia: Public Health Service, Centers for disease control and prevention, office on smoking and health, 1994. (https://www.cdc.gov/tobacco/data_statistics/sgr/sgr_1994/index.htm)
- [5]. Doll R et al. Mortality in relation to smoking: 50years observations on male british doctors. British Medical Journal (clinical Research Ed.) 2004. (https://www.bmj.com/cgi/content/abstract/328/7455/1519)
- [6]. US department of Health and human services. How tobacco cause disease: the biology and behavioural basis for smoking-attributable disease. A report of the US Surgeon General. Atlanta, Georgia: US department of health and human services, centers for disease control and prevention, National Center for chronic disease prevention and promotion, office on Smoking and Health, 2010 (https://www.surgeongeneral.gov/library/tobaccosmoke/report/index.html)
- [7]. Lew EA, Garfinkel L. Differences in Mortality and Longevity by Sex, Smoking Habits and Health status, Society of Actuaries Transactions, 1987.
- [8]. CDC, Preventing Tobacco Use Among Young People- A Report of the Surgeon General, 1994
- [9]. US department of Health and human services. The health consequences of smoking: A report of the US Surgeon General. Atlanta, Georgia: US department of health and human services, centers for disease control and prevention, National Center for chronic disease prevention and promotion, office on Smoking and Health, 2004 (https://www.cdc.gov/tobacco/data_statistics/sgr/index.htm)
- [10]. Pavlos P et al, Evaluation of young smokers and non smokers with electrogustometry and contact endoscopy. BMC Ear, Nose and Throat Disorders 2009 (https://www.biomedcentral.com/content/pdf/1472-6815-9-9.pdf)
- [11]. Chandrupatla, Siddardha G; Tavares, Mary; Natto, Zuhair s. (27 july 2017) "Tobacco use and effects of professional Advice on smoking Cessation among Youth in india" Asian Pacific journal of cancer Prevalence (https://www.ncbi.nim.nih.gov/pmc/articles/PMC5648391)

- [12]. Dr. Prabhat Jha "since 1998, number of Indian male smokers increased by 36% (www.dnaindia.com retrieved 27 February 2016)
- [13]. Samal Rabindra Kumar, Sagar Broker "Knowledge and attitude regarding ill effects of smoking among current male smokers in cochin" (https://www.atmph.org/article)
- [14]. Paul Y, Soni N, Vaid R, Basavaraj P, Khuller N, "ill effect of smoking on general and oral health awareness among college going students" (www.jiaphd.org)
- [15]. Soni N "ill effect of smoking on general and oral health awareness among college going students" (www.jiaphd.org)
- [16]. Basavaraj P "ill effect of smoking on general and oral health awareness among college going students" (www.jiaphd.org)
- [17]. Indo-european Journal Of Dental therapy and Research (www.ijddmr.org)
- [18]. Shilpi Singh "Knowledge and attitude regarding ill effects of smoking among college students" (www.ijddmr.org)
- [19]. Omar Thanoon Dawood, Mohammad Abd Ahmed Rashan, Mohamed Azmi Hassali& Fahad saleem "knowledge & perception about health risks of cigarette smoking" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4832906)
- [20]. Maria Caterina Grassi, Massimo Baraldo, Christian chiamulera "knowledge about health effects of cigarette smoking & quitting" (https://www.hindawi.com/journals/bmri/2014/321657/)
- [21]. Rosmi Raina, Madhusudan Krishna, R Murli "knowledge, attitude & behavioural determinants of tobacco use among 13-15 years old school children" (https://www.jispcd.org/article)
- [22]. Jobran Miree Alqahtani "knowledge, attitude & practice of tobacco smoking among health college students" (https://www.thejhs.org/article)
- [23]. Dinesh Singh Dhadwal, Kanica Kausal" Knowledge about the ill effect of tobacco use and cigarettes and other tobacco products" (https://www.cihr.org/article)
- [24]. Robot west "Tobacco smoking: Health impact, prevalence, correlates and interventions" (https://scholar.google.com/scholar)
- [25]. Richard Polosa, Jaymin Morjaria, Massimo Caruso, Simona strano, Eliana Battasglia, Cristina Russo "Effects of smoking abstinence and reduction in asthmatic smokers switching to electronic cigarettes: evidence for harm reversal" (https://www.mdpi.com/1660-4601/11/5/4965/htm)
- [26]. Nilay Bagchi, Samrat Ganguly, Sumita Pal, Sukanta Chatterjee "smoking and associated psychological factors among adolescent students" (https://www.ijph.in/article.asp)
- [27]. Krishna Dere, Prashant Chaudhary, Vijay Bhaskar Mahadevan, Ganesh Karthik "Prevalence and characteristics of chewing habits of areca nut, gutka & tobacco" (https://scholar.google.co.in/scholar)
- [28]. Ifeanyichukwuo, Onar, Danial L. Strling& Daniel Sarpong "Clinical effects of smoking: epidemiological impact and review of pharmacotherapy options" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5664648)
- [29]. Suresh K. Sharma "NURSING RESEARCH & STATISTICS" 3rd edition, elsvier publication pvt(ltd)

RIYA PATEL. "A study to assess the knowledge regarding harmful effect of smoking on health among young adult at Jodhpur urban area of Ahmedabad city, Gujarat." *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, 11(5), 2022, pp. 50-62.