



Research Article

Knowledge and Attitude towards Smoking among University Students in Lahore

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Abstract

Background: Smoking is the major health problem all over the world and now it's become trend in university students to have smoking behavior because they believed that due to smoking they will be more acceptable in friends group. The most prevalence of smoking among university students is due to the attitude of students that it could enhance their personal attributes and make a positive change in their personality. The most provoking factor in the students to start smoking was the lack of knowledge regarding the harmful effect of smoking and also the students believed that smoking can reduce stress. **Objective:** To assess knowledge and attitude of university students towards smoking. **Methodology:** A cross sectional descriptive study design was used to assess the knowledge and attitude of university students towards smoking. Sample size of 222 students were taken from three departments of The University of Lahore, in which 80 students were from Nursing, 82 from Biotechnology(IMBB) and 60 physiotherapy students were included in this study. **Results:** Out of 222 students 32% were current smokers while 68% were nonsmokers, 70% students believed that Nicotine in Cigarette is not addictive to human, 83% of the respondents believed that smoking is a disgusting behavior and 85% of the respondents believed that smoking should be banned in Universities significant amount of students. **Conclusion:** there is strong link between the students' attitude and smoking behavior and it is important for parents and teachers to supervise their student's behavior.

Keywords: Knowledge; Attitude; Students; Smoking; University

Introduction

Smoking is one of the most treatable health hazards for the smokers and for passive smokers also which can be preventable. Smoking behavior is developing day by day in young generation and the attitude of students towards smoking is changed, most of the students believed that smoking may add a positive attributes in their personality instead of having enough knowledge that smoking cause serious diseases (Oort, 2006).

According to Rozi (2005) university students play a vital role in the development of any nations if they utilize their energy on positive activities instead of involving in a bad activities and companies which destroy their lives

According to Akram *et al.* (2014) smoking can be defined as burning of tobacco substance via cigarette and then the smoke of tobacco is inhaled, tested and taking puff through mouth. Cigarette smoking will be accountable for many of the heart, brain and lungs related disease due to

which multiple morbidity and mortality of the smokers occurs.

According to Sharif, 2012 smoking is the leading health hazards and causes of deaths in all over the world which can be preventable if sufficient steps were taken for the prevention and ban smoking in universities and colleges. Smoking is the single most preventable reason for death worldwide, tobacco utilization result in the death of millions of people every year. And if current patterns continue, the deaths from tobacco will be increase to more than 8 Million if current situation continue by the 2030 with the majority of the tobacco-related morbidity and mortality happening disproportionately in low and middle income countries.

According to Gajalakshmi *et al.* (2004), the World Health Organization (WHO) (2009) has estimated that that 5 million of death happen annually due to tobacco use and this number of deaths is expected to reach more than 8 Million by the year 2030.

According to WHO (2011) in Pakistan the prevalence rate of smoking is very high which is almost exist thirty two percent in males while a little portion of female smokers are also exist who are practice smoking in daily life which cause very serious and injurious health problems like lung cancer is the top number of cancers among Pakistani men and it is portrayed from various studies that there is a strong link between lung cancer and smoking

According to Maula *et al.*(2012) there are several factors which were associated with the greatest frequency and acceptance of cigarette smoking behavior in Pakistan, in which the most leading factors were smokers friend and the pressure of friends and stress which enhance the prevalence of cigarette smoking behavior in Pakistan.

According to El Ansari, (2002) is a major health concern for the smokers but it also can cause very serious threat for the passive smokers also and can affect children and women's especially pregnant women's. Smoking has also environmental influence and can hurt passive smokers

According to Abu-Baker (2010) when exposure of the pregnant women's towards smoking remains for long time then it cause a serious threat for her baby. The impact of smoking is not limited on the smokers, but it can spread to affect the non-smokers as well. Second hand smoking has an impact on both outcomes represented in low birth weight

According to Hsieh (1996) various studies shows that there is strong link between smoking behavior and knowledge regarding smoking effects. Knowledge towards smoking play a vital and significant role to start smoking or cease smoking.

According to Ashley et al, (2000) this is portrayed from various studies that knowledge and attitude have a significant relation with smoking behavior and suggesting that sufficient amount of knowledge can minimize the chances for a person to become addicted towards smoking

According to Ajzen (1991) attitude is the learned predisposition and act towards anything while in the context of smoking any mental and psychological force which push the person to start smoke, attitudes are reflected to be Important precursors of behavior, Attitude is directly link with smoking because many of the students start smoking while they think that smoking play a vital role to fit in group and can add a positive attributes in their personality

Purpose of the Study

Cigarette smoking is major health hazard in various educational and non-educational institutes in Pakistan which can cause various health problems and influence the universities environment. The aim of this cross sectional study was exploring the university student's knowledge

and attitude toward smoking among university students in Lahore.

Significance

This study was very significant from all points of view the first significance was for those participants from whom the data were collected, many of fresh students suffered from the bad company of their friends and start smoking as they think that smoking could bring a positive change in their personality so by reading and understanding the questionnaire they were aware from the negative effects of smoking and the participants who are already smoking have the possibilities to minimize practice of smoking as much as possible. This study was also very important in research point of view because it will play a vital role for the development of rules against cigarette smoking in universities. This study was also very significant for me because knowledge is the ultimate product of the study and the understanding of various factors form which students start smoking will be learned Smoking is a major health hazards in many of university and this study will also play a vital role for banning smoking in university areas and make the university environment smoke free.

Objectives

1. To assess the knowledge of university students regarding cigarette smoking
2. To assess the attitude of university students regarding cigarette smoking

Research Questions

1. What is the knowledge of university students towards cigarette smoking?
2. What is the attitude of university students towards cigarette smoking?

Variable

Dependent variable

Dependent variable for the study was **Smoking habit**

Independent variable

Independent variable of this study was **Knowledge and attitude**

Literature Review

According to Abu-Baker (2010) when viewing the health concerns of the public health then Smoking are considered is the major one in all over the world, while if this problem arise from the educational institutions then it became a great concern for the country and the community as well and will required enough steps to be taken by the stake holders.

According to Brown *et al.* (2003) tobacco is the reason of massive amount of deaths in all over the world, it is revealed from various studies that three millions of people are suffered from deaths each year worldwide and these deaths is going up day by day. The estimation of world

Health Organization shows that if the current pattern of smoking is persist then these deaths will be reached to an amplified amount by the year 2030.

According to (Oort, 2006) who investigate the knowledge of students regarding smoking stated that Smoking shows its ultimate results and exceed the number of deaths which occur by the disease and accidents due to smoking behavior round about thousands of people died each year in which one in six death occur in the USA, looking to existing figure of deaths which occur due to smoking proving that smoking is more dangerous and fetal then AIDS, car accidents, killings, suicides, drug overreats and fires combined.

According to Akram *et al.* (2014) conducting a study on students attitude it is portrayed from his study that if smokers were aware of the dangerous effects of smoking then they will refrain from smoking habit, The main reason for practicing cigarette smoking behavior among students in Pakistan is the exam stress and friends pressure which pursue students to get addicted of smoking.

According to Akram *et al.* (2014) who conducting a study on knowledge of students regarding cigarette smoking find that there is no big difference between male and female students in their knowledge and attitude but a large difference in their practices exist. A massive amount of students believed that smoking is not good while very few students claimed that it is not bad, many of the students got idea to start smoking from their parents significant amount of students get idea of smoking from their teachers and environment of the educational institutions

According to Jajja (2013) who conducted a study in Bahria University and Ziaudin Medical University stated that medical students have more awareness regarding the negative effects of smoking behavior while non-medical students have no such a knowledge. The study portrayed that peer pressure and media play an important role via enhancing the cigarette smoking behavior in young adults.

According to Sharif (2013) who conducted study in Irbid, Jordan find out that Most of the university students, regardless of their smoking status, have sufficient knowledge about the negative effects of smoking, however, students had a lesser extent of that knowledge than non-smoking students. Some smokers thought that smoking helps they fit in with their peers; this was more pronounced among females. This may be because they feel that they are more accepted as smokers within their friends who are in most cases smokers as well. About half the smokers believe that smoking helps them concentrate while studying.

According to Sharif (2013) student's grades and passing university examinations are some of the most important factors in building their future careers at this stage of a

student's life. In other words, the core of the student's focus is to succeed and obtain high grades. They may take the risk of smoking for the sake of concentrating while studying. This negative attitude might be the most important factor to be considered in any smoking control program for university students. The number of cigarettes smoked per day was associated with the time the student first started smoking. The students who start to smoke before enrollment in a university usually smoke more cigarettes than those who start after being enrolled. This can be explained by the fact that smokers are becoming more addicted to nicotine

According to Lecacheux *et al.* (2009) knowledge and attitude play an important role while starting smoking several studies shows that lack of knowledge and negative attitude might be the most important factor to be considered in any smoking control program for university students. This wrong attitude and belief is contrary to the scientific fact that some of the substances included in cigarettes cause confusion and cognitive modifications

Methodology

A descriptive cross sectional cross sectional study was carried out in the University of Lahore to assess the knowledge and attitude of the students towards smoking from March 2016 To April 2016. The 222 participants was selected through simple random sampling method from three departments Nursing, IMBB and DPT from different semesters. The students outside from university of Lahore and above mentioned departments were excluded from this study. A self-administered and modified version of questionnaire which was adopted from the article "influence of Knowledge and Attitudes on Smoking Habits Among Young Military Conscripts in Taiwan" written by (Lin, Wu, Lai, Shi, and Chu 2010) which is developed by the writer himself, was used to collect data from the participants.

Questionnaire were consist of three sections, (Section A) composed of demographic data which include Name (optional) Age, Gender, institute, department, semester and smoker or nonsmoker information about the participant. (Section B) composed of the questions regarding the assessment of knowledge which include 10 questions, the participants can answer these questions through likert scale from strongly agree to strongly disagree. And the last (section C) include 10 questions regarding the assessment of attitude and the participants were answered to these questions according to 5 likert scale. After floating Questionnaire among the participants the data was analyzed through SPSS version 21 for Descriptive statistics and finding mean, frequencies, validity and reliability. Consent was taken from all the participants and free hand were given to the participants to take part in the study or refused to participate, the privacy

of the participants were also considered and the choice were given to the participants to mentioned name or not.

Data Analysis

This chapter includes 3 portions of analysis. First analysis was demographic analysis. It gives us details of 4 demographic questions which is gender, Age, Department and Smoking Habit Descriptive analysis was used for assessment of knowledge and attitude of the students towards smoking which include 10 questions of knowledge and 10 questions of attitude

Reliability of the scale was measured through Cronbach’s alpha value while the validity is measured through KMO value.4.2

Demographic analysis

Gender

Fig. 1 shows that Data was collected from both genders. Statistics shows that 81.53% responses were taken from the male students and 18.47% of respondents were female.

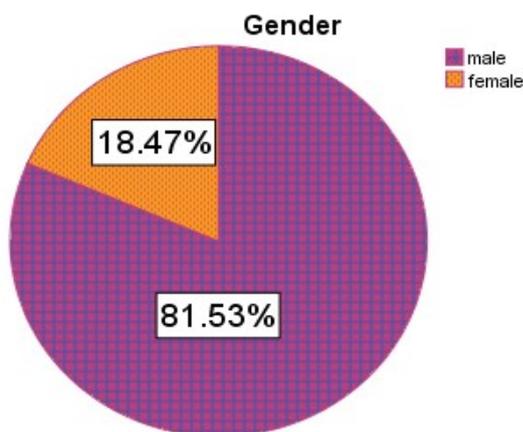


Fig. 1: Gender of respondent

Age

Fig. 2 shows that 41.89% of respondents belong to 18-23 age group. 50 % of respondents belong to 23-27 age group. 5.41% of respondents belong to 28 to 32 age group and 2.7% of respondents belongs to 33-37 age group

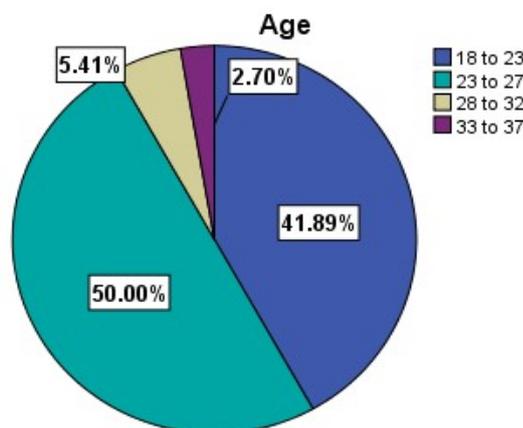


Fig. 2: Age of respondent

Department

The participants of the study were randomly selected from different department of University of Lahore which are (n=80, 36%) student belong to Nursing department, (n= 82, 36.9%) students belong to IMBB department and (n=60, 27%) of the students were selected from DPT department of UOL. More details are given in Table 1.

Table 1: Departments of respondents

		Frequency	%	Valid %	Cumulative %
Valid	Nursing	80	36.0	36.0	36.0
	IMBB	82	36.9	36.9	73.0
	DPT	60	27.0	27.0	100.0
	Total	222	100.0	100.0	

Smoking Habit

Table 2 shows that among 222 students (n=71, 31.9%) of students were smokers while (n= 151, 68%) of the students were Non Smokers.

Table 2: Smoking habit of respondents

		Frequency	%	Valid %	Cumulative %
Valid	Smoker	71	31.9	32.0	32.0
	Non smoker	151	68.0	68.0	100.0
	Total	222	100.0	100.0	

Descriptive and Normality Statistics

Normality Tests

At first data was analyzed for missing values and other typing errors were also analyzed so that errors could rectify. Value of the data was assessed by analyzing normality. Normality was examined through skewness, kurtosis and histograms (Munro, 2005). Scores of knowledge and attitude were normally distributed and were well in range +1 to -1 hence findings indicated normality of the data (Table 3).

Table 3: Summary of skewness and kurtosis results

	Knowledge	Attitude
Kurtosis	-.124	.544
Std. Error of Kurtosis	.325	.325
Skewness	-.202	.053
Std. Error of Skewness	.163	.163

Descriptive Analysis Independent Variable

Knowledge

Summed scores were used to calculate means range, median and standard deviation with the purpose of conducting descriptive analysis of knowledge. Sample of 222 students was used for analysis purpose range of score was 32 as our mean and standard deviation are (M = 28, SD = 5.66) (Table 4).

Attitude

Table 4 shows summed scores which were used to calculate means range, median and standard deviation with the purpose of conducting descriptive analysis of Attitude. Sample of 222 students was used for analysis purpose range of score was 29 as our mean and standard deviation are (M =25, SD =5.09).

Table 4: Summary of Descriptive Analysis

Variable	Range	S.D.	Mean	Median
Knowledge	32	5.66	28	29
Attitude	29	5.09	25	26

Validity and Reliability Assessment

Table 5 presents Cronbach's alpha for two scales used in the study. Cronbach alpha is the most commonly used measure of scale reliability (Cortina, 1993).

Cronbach alpha above 0.70 is considered to be the acceptable indicator of internal consistency reliability (Santos, 1999; Bryman& Cramer, 2005; Pallant, 2007; Hair et al., 2006).

The alpha values of Knowledge is 0.73 which is above from 0.70 indicate that the scale which is used are reliable. However alpha value for Attitude was well which was 0.69 which is just a point below from 0.7 which are acceptable according to (Nunnally, 1978).

Table 5: Summary of Reliability analysis

	Cronbach alpha
Knowledge	.73
Attitude	.69

Convergent Validity

Convergent was established by applying factor analysis. Factor analysis was performed by using principle component analysis with varimax rotation. Each of the dimensions was analyzed by performing factor analysis.

At start complete instrument was consisted on total 2 items. Instrument was consisting of 2 independent variables. After applying factor analysis no items were dropped and the number of items was remaining 33. Criteria for factor loading were .50 and items below that

set criteria were dropped from analysis. More over all assumption of factor analysis was fulfilled .assumptions imply that KMO value must be above .60 and Bartlett's test must be significant so whole set criteria was fulfilled (Table 6).

Table 6: Summary of KMO Bartlett's assumptions

Independent variable	KMO	Bartlett's Test		
		Approx	df	Sig
Knowledge	.723	388.768	45	.000**
Attitude	.651	167.289	45	.000**

Findings of the Study

The participants of the study were asked about different questions to assess knowledge and attitude of the participants towards smoking, the participants answered to these questions from strongly agree to strongly disagree, the result of the participants response are given in Table 7 to 26. .

Research Question 1:

Does nicotine in cigarettes not addictive to humans?

Table 7 shows that for the first question n= 92(41.4%) of the participant were strongly agree, n=64 (28.8%) were agree, n=27 (12.2%) were Neutral, n=27(12.2%) were disagree and n=12 (5.4%) were strongly disagree to this statement.

Table 7: Does nicotine in cigarettes not addictive to humans?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	92	41.4	41.4	41.4
	Agree	64	28.8	28.8	70.3
	Not Sure	27	12.2	12.2	82.4
	Disagree	27	12.2	12.2	94.6
	Strongly Disagree	12	5.4	5.4	100.0
	Total	222	100.0	100.0	

Research Question 2:

Are smokers more prone to lung cancer than non-smokers?

Table 8 shows the response of the participants toward second questions which was about the likeliness of the smokers towards lungs cancer n=125(56.3%) of the respondents were strongly agree, n=68(30.6%) were agree,

n=17(7.7%) were Not Sure, n=6(2.7%) were Disagree while n=6(2.7%) were strongly disagree to this statement.

Table 8: Are smokers more prone to lung cancer than non-smokers?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	125	56.3	56.3	56.3
	Agree	68	30.6	30.6	86.9
	Not Sure	17	7.7	7.7	94.6
	Disagree	6	2.7	2.7	97.3
	Strongly Disagree	6	2.7	2.7	100.0
	Total	222	100.0	100.0	

Research Question 3:

Does smoking in pregnancy harms only maternal health, not on the fetus?

The participants were also asked about the statement that Smoking in pregnancy only harms maternal health, but has no effect on the fetus. For which the response of n=82(36.9%) were strongly agree, n=52(23.4%) were agree, n=43(19.4%) were Not sure, n=18(12.2%) were disagree and n=27(12.2%) were strongly disagree to this statement (Table 9).

Table 9: Does smoking in pregnancy harms only maternal health, not on the fetus?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	82	36.9	36.9	36.9
	Agree	52	23.4	23.4	60.4
	Not Sure	43	19.4	19.4	79.7
	Disagree	18	8.1	8.1	87.8
	Strongly Disagree	27	12.2	12.2	100.0
	Total	222	100.0	100.0	

Research Question 4:

Does health of second-hand smokers not affected?

The Table 10 shows the answers of fourth question that was asked to the participants that does health of second-hand smokers is affected are not from the smoking of other person? For this statement n=92(41.4%) respondents were strongly agree, n=39(17.6%) were agree, n=24(10.8%) were Not sure, n=32(14.4%) were Disagree and n=36(15.8%) were strongly disagree to this statement.

Table 10: Does health of second-hand smokers not affected?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	92	41.4	41.4	41.4
	Agree	39	17.6	17.6	59.0
	Not Sure	24	10.8	10.8	69.8
	Disagree	32	14.4	14.4	84.2
	Strongly Disagree	35	15.8	15.8	100.0
	Total	222	100.0	100.0	

Research Question 5:

Can smoking relieve stress and lower blood pressure?

Participants of the study were also assessed about the knowledge that can smoking relieve stress and lower blood pressure? For which n=79 (35.6%) were strongly Agree, n= 64(28.8%) were Agree, n=37(16.7%) were Not sure, n=34(15.3%) were Disagree and n=8 (3.6%) were strongly disagree to this statement (Table 11).

Table 11: Does smoking relieve stress and lower blood pressure?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	79	35.6	35.6	35.6
	Agree	64	28.8	28.8	64.4
	Not Sure	37	16.7	16.7	81.1
	Disagree	34	15.3	15.3	96.4
	Strongly Disagree	8	3.6	3.6	100.0
	Total	222	100.0	100.0	

Research Question 6:

Can smoking make you feel fatigued easily?

The Sixth question asked to participants in the study that can smoking make you feel fatigued easily? For which n=110 (49.5%) were strongly agree, n=42 (18.9%) were Agree, n=32(14.54%) were Not Sure. n=21(9.5%) were Disagree and n=17 (7.7%) were strongly disagree to this statement. The details are given in Fig. 3.

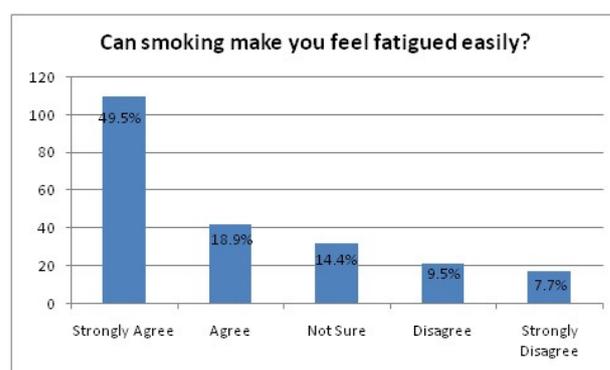


Fig 3: Can smoking make you feel fatigued easily?

Research Question 7:

Does nicotine stimulates first the human nervous system, and then inhibits it?

The participants' knowledge was assessed about the statement that does nicotine first stimulates the human nervous system, and then inhibits it? The response of the participants shows that n=89 (40.1%) were strongly disagree, n=47(21.2%) were agree, n=64 (28.8%) were Not sure, n=17 (7.7%) were disagree and n=5 (2.3%) were strongly disagree to this statement. The data is given in Table 12.

Table 12: Does nicotine stimulates first the human nervous system, and then inhibits it?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	89	40.1	40.1	40.1
	Agree	47	21.2	21.2	61.3
	Not Sure	64	28.8	28.8	90.1
	Disagree	17	7.7	7.7	97.7
	Strongly Disagree	5	2.3	2.3	100.0
	Total	222	100.0	100.0	

Research Question 8:

Does smoking increase the air exchange capacity of the lungs?

The participants were also asked to answered the question which was about the knowledge that “Does smoking increases the air exchange capacity of the lungs?” for which n=79 (35.6%) of the respondents were strongly agree, n=48 (21.6%) were agree, n=53 (23.9%) were Not sure, n=15 (6.8%) were agree and n=27 (12.2%) of the respondents stated that they are strongly disagree to this statement (Fig 4).

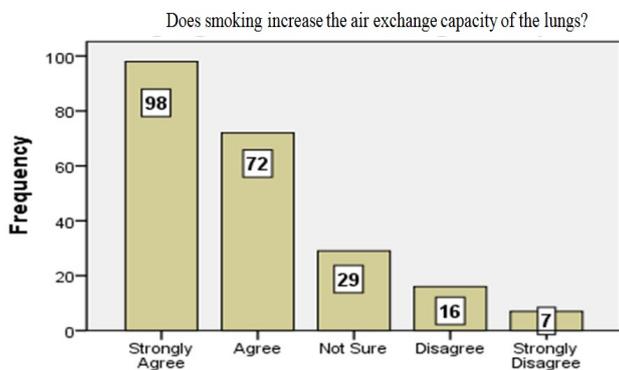


Fig 4: Does smoking increase the air exchange capacity of the lungs?

Research Question 9:

Do you know that long-term smoking causes respiratory mucosa cilia to atrophy?

Table 13 shows the answer of the ninth question which were asked form the participants that “ Do you know that long-term smoking causes respiratory mucosa cilia to atrophy?” for which n=86 (38.7%) of the participants were strongly agree, n=84 (37.8%) were agree, n=39 (17.6%) were Not sure, n=7 (3.2%) were disagree and n=6 (2.7%) were strongly disagree to this statement.

Table 13: Do you know that long-term smoking causes respiratory mucosa cilia to atrophy?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	86	38.7	38.7	38.7
	Agree	84	37.8	37.8	76.6
	Not Sure	39	17.6	17.6	94.1
	Disagree	7	3.2	3.2	97.3
	Strongly Disagree	6	2.7	2.7	100.0
	Total	222	100.0	100.0	

Research Question 10:

Does carbon monoxide in cigarettes decrease the binding ability between hemoglobin and oxygen in red blood cells?

Table 14 shows the last question about the knowledge asked to participants, “Does carbon monoxide in cigarettes decreases the binding ability between hemoglobin and oxygen in red blood cells?” where n=125 (56.3%) of the respondents were strongly agree, n= 54 (24.3%) were agree, n=31 (14%) were Not sure, n=5 (2.3%) were disagree and n=7 (3.2%) of the participants were strongly disagree to this statement.

Table 14: Does carbon monoxide in cigarettes decrease the binding ability between hemoglobin and oxygen in red blood cells?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	125	56.3	56.3	56.3
	Agree	54	24.3	24.3	80.6
	Not Sure	31	14.0	14.0	94.6
	Disagree	5	2.3	2.3	96.8
	Strongly Disagree	7	3.2	3.2	100.0
	Total	222	100.0	100.0	

Response of the Participants to Attitude Questions

Question 1:

Does smoking signify that one is a grown-up?

The attitude of the study participants were also determined through a self-administered questionnaire the first question which was asked from the participants about their attitude towards smoking was “Smoking signifies that one is a grown-up” for which n=98(44.1%) of the respondents were strongly agree, n=72 (32.4%) were agree, n=29(13.1%) were Not sure, n=16 (7.2%) were disagree and n=7 (3.2%) were strongly disagree to this statement. The details are given in Table 15.

Table 15: Does smoking signify that one is a grown-up?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	98	44.1	44.1	44.1
	Agree	72	32.4	32.4	76.6
	Not Sure	29	13.1	13.1	89.6
	Disagree	16	7.2	7.2	96.8
	Strongly Disagree	7	3.2	3.2	100.0
	Total	222	100.0	100.0	

Question 2:

Does smoking relax body and reduces stress?

The second question which was asked to the participants was “Does smoking relax body and reduces stress?” for which n= 76(34.2%) of the participants were strongly agree, n= 90(40.5%) were agree, n=36 (16.2%) were not sure, n=10(4.5%) were disagree while n=10 (4.5%) of the participants were strongly disagree to this statement. The details are given in Table 16.

Table 16: Does smoking relax body and reduces stress?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	76	34.2	34.2	34.2
	Agree	90	40.5	40.5	74.8
	Not Sure	36	16.2	16.2	91.0
	Disagree	10	4.5	4.5	95.5
	Strongly Disagree	10	4.5	4.5	100.0
	Total	222	100.0	100.0	

Question 3:

Does smoking cause disgusting behavior?

The participants were also given a chance to answer the question that “Does smoking cause disgusting behavior?” for which n=105 (47.3%) of the participants were strongly agree, n=80 (36%) were agree, n=13 (5.9%) were Not sure, n=13 (5.9%) were disagree and n=11 (5%) were strongly disagree to this statement (Table 17).

Table 17: Does smoking cause disgusting behavior?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	105	47.3	47.3	47.3
	Agree	80	36.0	36.0	83.3
	Not Sure	13	5.9	5.9	89.2
	Disagree	13	5.9	5.9	95.0
	Strongly Disagree	11	5.0	5.0	100.0
	Total	222	100.0	100.0	

Question 4:

Is Smoking hazardous to the health of others?

Answer of fourth question received by respondents is shown in Table 18. Where, n=81 (36.5%) were strongly agree, n=90 (40.5%) were agree, n=26 (11.7%) were neutral, n=13 (5.9%) were disagree and n=12 (5.4%) were strongly disagree to this statement.

Table 18: Is Smoking hazardous to the health of others?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	81	36.5	36.5	36.5
	Agree	90	40.5	40.5	77.0
	Not Sure	26	11.7	11.7	88.7
	Disagree	13	5.9	5.9	94.6
	Strongly Disagree	12	5.4	5.4	100.0
	Total	222	100.0	100.0	

Question 5:

Does smoking help thinking?

Participants attitudes were also determined by asking this question “Does smoking help thinking?”. The result showed n=135 (60.8%) of the participants were strongly agree, n=42 (18.9%) were agree, n= 31 (14%) were

neutral, n=9 (4.1%) were disagree and n= 5 (2.3%) were strongly disagree to this statement (Table 19).

Table 19: Does smoking help thinking?

		Frequency	%	Valid Percent	Cumulative Percent
Valid	Strongly Agree	135	60.8	60.8	60.8
	Agree	42	18.9	18.9	79.7
	Not Sure	31	14.0	14.0	93.7
	Disagree	9	4.1	4.1	97.7
	Strongly Disagree	5	2.3	2.3	100.0
	Total	222	100.0	100.0	

Question 6:

Does accepting a friend's offered cigarette give more acceptance among the friends?

The sixth question which were asked from the participants was "Does accepting a friend's offered cigarette give more acceptance among the friends?" which showed n=120 (54.1%) of the respondents were strongly agree, n=64 (28.8%) were agree, n=18 (8.1%) were not sure, n= 10 (4.5%) were disagree and n=10 (4.5%) were strongly disagree to this statement. The data is given in the Table 20.

Table 20: Does accepting a friend's offered cigarette give more acceptance among the friends?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	120	54.1	54.1	54.1
	Agree	64	28.8	28.8	82.9
	Not Sure	18	8.1	8.1	91.0
	Disagree	10	4.5	4.5	95.5
	Strongly Disagree	10	4.5	4.5	100.0
	Total	222	100.0	100.0	

Question 7:

Does smoking should be strictly prohibited in universities for better public health?

The seventh question for the assessing the attitude of the participants was "Does smoking should be strictly prohibited in universities for better public health?" for which, Table 21 shows that n=122 (55%) were strongly agree, n= 77 (34.7%) were agree, n= 10 (4.5%) were neutral, n=5 (2.3%) were disagree and n=8 (3.6%) were strongly disagree to this statement.

Table 21: Does smoking should be strictly prohibited in universities for better public health?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	122	55.0	55.0	55.0
	Agree	77	34.7	34.7	89.6
	Not Sure	10	4.5	4.5	94.1
	Disagree	5	2.3	2.3	96.4
	Strongly Disagree	8	3.6	3.6	100.0
	Total	222	100.0	100.0	

Question 8:

Does smoking is a personal freedom and others have no right to interfere?

Attitude of the participants were also assessed by asking this question that "Does smoking is a personal freedom and others have no right to interfere?" for which n=102 (45.9%) of participants were strongly agree, n=79 (35.6%) were agree, n=11 (5%) were neutral response, n=20 (9%) were disagree and n=10 (4.5%) were strongly disagree to this statement. Details are shown in Table 22.

Table 22: Does smoking is a personal freedom and others have no right to interfere?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	102	45.9	45.9	45.9
	Agree	79	35.6	35.6	81.5
	Not Sure	11	5.0	5.0	86.5
	Disagree	20	9.0	9.0	95.5
	Strongly Disagree	10	4.5	4.5	100.0
	Total	222	100.0	100.0	

Question 9:

Do you prefer being with friends who do not smoke?

The ninth question which was asked from the participants to determine the attitude was "Do you prefer being with friends who do not smoke?" where, n=87 (39.2%) were strongly agree, n=89 (40.1%) were agree, n=37 (16.7%) were neutral, n=1 (0.5%) were disagree and n=8 (3.6%) were strongly disagree to this statement (Table 23).

Table 23: Do you prefer being with friends who do not smoke?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	87	39.2	39.2	39.2
	Agree	89	40.1	40.1	79.3
	Not Sure	37	16.7	16.7	95.9
	Disagree	1	.5	.5	96.4
	Strongly Disagree	8	3.6	3.6	100.0
	Total	222	100.0	100.0	

Question 10:

Do you hope that your children will not smoke?

The last question for determining the attitude of the participants toward smoking was “Do you hope that your children will not smoke?” for which n=140 (63.1%) of the participants were strongly agree, n= 67 (30.2%) were agree, n=7 (3.2%) were neutral, n=3 (1.4%) were disagree and n=5 (2.3%) were strongly agree to this statement. Details are tabulated in Table 24.

Table 24: Do you hope that your children will not smoke?

		Frequency	%	Valid %	Cumulative %
Valid	Strongly Agree	140	63.1	63.1	63.1
	Agree	67	30.2	30.2	93.2
	Not Sure	7	3.2	3.2	96.4
	Disagree	3	1.4	1.4	97.7
	Strongly Disagree	5	2.3	2.3	100.0
	Total	222	100.0	100.0	

Discussion

This cross-sectional research design was used to assess the knowledge and attitude of university students towards smoking in Lahore for which total of 222 participants were studied, the overall knowledge of the students were good and they were aware about the dangerous effect of smoking but instead of this knowledge 32% of the respondents were involved in smoking habit which was a great concern for the stake holders of the university.

According to Khader (2008) who conduct a study in Ibrid Jordan it is portrayed from his study that 29.3% of the students were involved in smoking in University of Jordan. The World Health Organization WHO (2009) has estimated that 5.4 millions of deaths happen annually due

to tobacco use and this number of deaths is expected to reach more than 10 million by the year 2030 (Gajalakshmi et al.2004)

It was evident from this study that 87% of the respondents believed that Smoking was the major cause of lungs cancer and smokers are more likely to get lungs cancer. According to WHO (2011) smoking in daily life which cause very serious and injurious health problems like lung cancer is the top number of cancers among Pakistani men and it is portrayed from various studies that there is a strong link between lung cancer and smoking.

It was also portrayed from this study that 59% of the respondents believed that smoking has no effect on second hand smoker or passive smoker which was a flaws in the knowledge of students because smoking can also effect passive smokers. According to El-Ansari (2002) Smoking is a major health concern for the smokers but it also can cause very serious threat for the passive smokers also.

The other significant point in assessing knowledge of the students was 65% of the respondents believed that smoking could relieve stress and lower blood pressure According to Jajja, N (2013) there is no link between smoking and lowering blood pressure.

Despite of enough knowledge regarding the harmful effect of smoking the prevalence of smoking were also high in university students.

It was evident from this study that 68% of the students believed in the attitude that smoking signifies that one is grown up According to Rozi (2005) it is evident from his study that many of the university students adopt smoking behavior because of their attitude towards smoking that it can add a positive attribute in their life.

This was also evident from the study that 85% of the students were agreed that smoking should be banned in universities, this can play a vital role for developing rules and laws about prohibition of smoking in educational institutions.

According to Lin, Wu, (2010) smoking should be strictly prohibited in universities and college premises to promote proper educational environment and minimize hazardous environment for students.

Conclusion

This study indicate that there was a growing number of smokers in university because of their thinking that smoking could add a positive attribute in their life and students were also suffered from the bad company of their friend. Many of students believed that they would be more acceptable in a group of friends when they smoke. Students have enough knowledge regarding the harmful effect of smoking but behavior modification is very hard in this innovative world. The findings of this study is not more different from the study conducted abroad.

Limitations

The present study design was cross sectional and just give a snapshot about situation the sample size was small which cannot be generalized for all the Universities of Pakistan.

Recommendations

- 1) Smoking should be strictly prohibited in Universities
- 2) Workshop should be arrange for the students regarding the harmful effects of smoking
- 3) Application of existing rules should be carried out to minimize the prevalence of smoking in universities
- 4) Students should be fine when they were found to smoking in University premises
- 5) Parents should keep deep focus on their child attitude
- 6) Smoking is a major health hazards which should be highlighted by the print and electronic media

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Dedication

I humbly dedicate this piece of work to my family members; particularly, my parents who offered me unconditional love and support me throughout my life.

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