# Prevalence Of Cigarette Smoking Phenomenon In Iraqi University Students And Factors Affecting Its Cessation An Observational Epidemiologic Study

### Wael Waleed Mustafa<sup>1</sup> and Samer Shukur Mohammed<sup>2</sup>

<sup>1-2</sup>Department of Pharmacology and Toxicology, Faculty of Pharmacy, Al-Rafidain University College, Baghdad, Iraq.
<sup>1</sup>wael.walid@ruc.edu.iq

### ABSTRACT

Smoking is one of the negative pests spread all over the world. The most valuable thing a person has is his health which is destroyed by smoking. Smoking results in many negative effects on society, so we must get rid of it so that we can live in a clean and vital environment. Programs designed to combat cigarette smoking should be targeted mainly to university students, males, heavy smokers and urban areas. More of cigarette smoking combating programs should be against manufactured cigarettes (for example, applying higher taxis). Efforts should be done to announce the problem of passive cigarette mainly in university community, among nonsmokers, females and urban areas. Enforcement of Anti-cigarette information came from health warnings on cigarette package followed by health care provider followed by the media (especially newspapers or magazines). Encouraging the smokers to consult the HCP should be considered. Attention should be paid to cigarette advertising sites specially advertisements in stores, Free samples Sale prices, noticed cigarette promotions, free gifts/discounts on other products, Clothing/item with brand name or logo, Coupons and Mail promoting cigarette. Encouraging the ways of high or moderate efficacy that help smoking cessation as the willpower, nicotine patch, changing habits, nicotine gum, cessation program, and exercise.

Keywords: cigarette, smoking phenomenon, Iraq, university students, cessation, epidemiology study

#### Correspondence: Wael Waleed Mustafa

<sup>1-2</sup>Department of Pharmacology and Toxicology, Faculty of Pharmacy, Al-Rafidain University College, Baghdad, Iraq.
 <sup>1</sup>wael.walid@ruc.edu.iq

### **INTRODUCTION**

It seems that the official and civil efforts made to combat smoking are still scattered, and that all facts confirm that the smoking phenomenon is expanding day by day, and that the danger lies in the young smoker generation and not in the elderly, or those who are more than forty years old. (Rae, Pettey, Aubry, & Stol, 2015). The results of scientific reports confirm the seriousness of smoking, and its negative effects on human health, so that a large percentage of people with lung cancer are smokers, and that many diseases have begun to indicate that smoke and smoking is one of the main causes. The problem with the matter is that the smoker knows exactly the danger of smoking, but he invokes weak wills, or individual cases of some people getting cancer or other diseases and they are non-smokers. It needs to raise the alarm, especially since field studies confirm that this epidemic is spreading rapidly among young people, and most of those who quit smoking were due to health symptoms behind which were smoking, such as heart disease, pulmonary embolism, nervous asthma, and high blood pressure. (Luo et al., 2020) The biological life of a smoker appears to be eight years older than the chronological age, while in a non-smoker, the age is identical. Students spend hundreds of millions annually on smoking, and the cigarette contains more than four thousand toxic substances, and more than 15 carcinogens. (Georgiadou et al., 2015) The matter is very dangerous: urgent measures must be taken, in the forefront of which are strictly prohibited smoking in all ministries, government departments and public institutions and under penalty of responsibility, as well as in shops and restaurants, and of course in all hospitals, health centers, cinemas, buses,

transportation, inside the campus, and of course in schools and that all the specialists are invited to set a national plan to fight smoking and activate the public health law, and benefit from the experiences of other countries in which the smoking rate has decreased, because this matter has become a danger to the health, social and economic status of citizens. It should occupy the first rank in the national priority agenda. (QOUTES).

#### **Literature Review**

### **Prevalence of Cigarette Smoking Phenomenon**

Smoking is one of the negative pests spread all over the world. The most valuable thing a person has is his health which is destroyed by smoking. Smoking results in many negative effects on society, so we must get rid of it so that we can live in a clean and vital environment. Smoking is a group of toxic gases produced via burning tobacco, which produces very dangerous substances, which leads to the destruction of the body and causing many diseases that destroy health. (Yanbaeva, Dentener, Creutzberg, Wesseling, & Wouters, 2007).

Causes of smoking include emptiness and lack of time being used in matters that benefit society, weak religious awareness among young people, lack of job opportunities, self-imitation by children for adults, easy access to cigarettes, lack of control by parents, bad friends, lack of awareness among people, promotion of smoking through the media and lastly young people believe that smoke is a sign of freedom, masculinity and strength. (Singh & Kathiresan, 2015).

Smoke and cigarette ingredients include: Nicotine which is a very dangerous substance in humans that causes poisoning and it is responsible for the addiction that

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happens to the smoker. Tar is a brown substance containing many toxic substances inside it, which causes pale face and affects the teeth and lung. Carbon monoxide is a toxic gas that affects health a lot and has the advantage of being odorless and tasteless, and this gas reduces the amount of oxygen in the blood, which leads to a state of suffocation. (Rodgman & Perfetti, 2013).

Health hazards of cigarette smoking include: Smoking destroys health and destroys it, as it causes many diseases that are very dangerous for the human body, and the most important of these diseases are; diseases of the respiratory system as lung cancer, gastrointestinal diseases as ulcers and acidity, dental and gum problems, apart from the unpleasant odor that comes out of the smoker's mouth, influence on the body's strength and immunity, hair loss and damage, atherosclerosis and impacts on the urinary tract (QOUTES). Religion forbids harming the body and the soul, and by smoking, man destroys himself and his health, and thus one will be held accountable for that. Social harms include negative impact on those around the smoker, other than the unpleasant smell of smoke that disturbs people everywhere. Economic damages include wasting a lot of money in buying this product, causes diseases that need to spend a lot of money in treating it, and high responsibility for fires. (Singh & Kathiresan, 2015).

### 1. Factors Affecting Cigarette Smoking Cessation

There are many methods to help cessation of cigarette smoking as; prevention of smoking in public places, designing programs to promote health education and the freedom from smoking, health education, through publicity, and awareness of the smoking harms and its consequences, working to support various media outlets, for their great role in spreading awareness among people, developing a strategy that encourages tobacco use, such as taxing the sale of tobacco and preventing all financial and social incentives that encourage smoking and help it to continue (Georgiadou et al., 2015). Also, it is important to work to prevent all direct and indirect tobacco advertisements, and to prevent all promotional methods, while preventing the commercial advertising of tobacco companies, encouraging and stimulating economic alternatives to tobacco growing and manufacturing and

imposing restrictions on tobacco products and placing warning advertisements on tobacco products (Rae et al., 2015).

The media can help to eliminate smoking, and get rid of this disturbing phenomenon, through several means, including: printed newspapers, websites, television and radio stations, where these methods have a significant impact on information delivery, guidance and health awareness, (Luo et al., 2020) and this is done through work programs aimed at educating and raising awareness among citizens of the danger of smoking, and providing an adequate explanation for this scourge, and the resulting diseases, and economic and social problems (Hong, Soh, Khan, Abdullah, & Teh, 2013).

Printing new warnings on every "cigarette" like "losing minutes of life" will help smokers break this habit. Although a large number in some countries in recent decades no longer smoked, current strategies including packaging to cigarette packs were less effective for smokers. Most smokers are not reacting to the warnings introduced in 2010 as part of national legislation on cigarette casings (Brewer, 1963). Although methods still encourage some people not to start smoking, most current smokers classify it as a low deterrent. This is simply because of repeated exposure, if you look at a disgusting picture, it will have an effect, but after seeing it several times it will not have the same effect. Warnings on cigarette packs have remained largely unchanged, things like warning about emphysema or gangrene, they are definitely graphics, but when exposed to that graphic image over and over again, they lose their effect (Blanton, Snyder, Strauts, & Larson, 2014).

### Methodology

This is an observational epidemiologic study that includes 400 Iraqi university students (300 are males, 100 are females) A written questionnaire about prevalence of cigarette smoking phenomenon and factors affecting cigarette smoking cessation.

### Result

Prevalence of Cigarette Smoking Phenomenon Results

Smoking Status	Smoking StatusSmoking(collective)Status(detailed)		Sex prevalence		Area prevalence	
(collective)			Female	Urban	Rural	
Current	Current Never smoker (140)	50	90			
nonsmokers (168)	Former daily smoker (23)	22	1			
	Former occasional smoker (5)	2	3			
	Total	74	94			
Current smokers	Daily smoker, Occasional smoker (112)	111	1			
(232)	Occasional smoker, formerly daily (32)	30	2			
(===)	Occasional smoker, never daily (88)	85	3			
	Total	226	6	218	14	
Total (400)		300	100			

### Table 1: Demographic distribution of smoking status

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### Table (1) shows:

- Current smokers were 58% while current nonsmokers were 42%.
- Most of current nonsmokers were females (94% of all females) compared by (23.7% of all males). Most of current nonsmokers never smoke (83.3%) compared by those who were former daily smokers (13.7%) compared by those who were former occasional smokers (3%).
- Most of current smokers were males (75.3% of all males) compared by (6% of all females). Most of current smokers were from urban areas (94% of all smokers) compared by those from rural areas (6% of all smokers).
- Most of current nonsmokers were daily smokers, occasional smokers never smoke (47.8%) compared by those who were occasional smokers, never daily former (36.6%) compared by those who were occasional smokers, formerly daily (15.6%)

Cigarette smokers'	Cigarette smokers'	Sex prevalence		Area pre	evalence
classifications (collective)	classifications (detailed)	Male	Female	Urban	Rural
Qualitative classification	Manufactured (216)	210	5	209	7
	Hand-rolled (16)	15	1	9	7
Total		226	6	218	14
	<5	22	4	22	4
Quantitative classification*	5 to 9	84	2	83	3
	10 to 14	46	0	43	3
	15 to 24	58	0	56	2
	>or = 25	16	0	14	2
Total		226	6	218	14

### Table 2: Demographic distribution of cigarette smokers' classifications

\* Number of cigarettes smoked on average per day

Table (2) shows:

 Most of cigarette smokers smoke manufactured cigarettes (93.1% of all smokers; 90.5% were males & 9.5% were females; 90.1% were from urban areas & 9.9% were from rural areas) compared by those who smoke hand-rolled cigarettes (6.9% of all smokers; 93.8% were males & 6.2% were females; 56.3% were from urban areas & 43.7% were from rural areas)

 Number of cigarettes smoked on average per day was 5 to 9/day (37.1% of all smokers), 15 to 24/day (25% of all smokers), 10 to 14/day (19.8% of all smokers), <5/day (11.2% of all smokers) and lastly >or = 25/day (6.9% of all smokers)

Exposure	Smoking status	Sex prev	Sex prevalence		Area prevalence	
Site		Male	Female	Urban	Rural	
Home Exposures	Smokers (55)	51	4	41	14	
(170)	Nonsmokers (115)	27	88	103	12	
		78	92	144	26	
University	Smokers (80)	76	4	71	9	
Exposures (262)	Nonsmokers (182)	87	95	167	15	
		163	99	238	24	

### Table 3: Demographic distribution of passive smoking

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Table (3) shows:

- More passive cigarette smokers were exposed to smoking in university (262) compared by those who were exposed to smoking in home (170) (*the ratio was 1.5:1*).
- More passive cigarette smokers were nonsmokers (297) compared by those who were already smokers (135) (*the ratio was 2.2:1*).
- More passive cigarette smokers were females compared by males (*the corresponding ratio was 2.4:1*).
- More passive cigarette smokers were from urban areas (382) compared by those who were from rural areas (50) (*the ratio was 7.6:1*).
- 1. Factors Affecting Cigarette Smoking Cessation Results

Information	Information	Smoking status	Sex pr	evalence	Area pre	valence
Source (collective)	Source (detailed)		Male	Female	Urban	Rural
	Newspapers or Magazines	Smokers (16)	7	9	13	3
Media	(36)	Nonsmokers (20)	13	7	17	3
(68)			20	16	30	6
	Television	Smokers (13)	1	12	12	1
	(32)	Nonsmokers (19)	9	10	16	3
			10	22	28	4
HCP (120)	Visited a HCP (72)		72	0	68	4
(1=0)	Advised to quit by HCP	(48)	48	0	44	4
			120	0	112	8
Health warnings	Just Noticed the warnin	gs (214)	208	6	202	12
on cigarette package (358)	Thought about quitting	because of warning (144)	140	4	134	10
			348	10	336	22

 Table 4: Anti-cigarette information

\* HCP = health care provider

Table (4) shows:

- More Anti-cigarette information came from health warnings on cigarette package (358) followed by health care provider (120) followed by the media (68) (*the ratio was 5.3:1.7:1*)
- More health warnings on cigarette package were noticed by (214) compared by those who thought about quitting because of warning (144) (*the ratio was 1.5:1*). More health warnings on cigarette package were noticed by males compared by females (*the corresponding ratio was 11.6:1*). More health warnings on cigarette package were from urban areas (336) compared by those who were from rural areas (22) (*the ratio was 15.3:1*).
- More Anti-cigarette information, came from health care provider, were through intended visited to HCP (72) compared by information from accidental advice by HCP (48) (*the ratio was 1.5:1*). All Anti-cigarette information, came

from health care provider, were obtained by males. More Anti-cigarette information, came from health care provider, were obtained in urban areas (112) compared by information were obtained in rural areas (8) (*the ratio was 14:1*)

More Anti-cigarette information, came from the media, were through newspapers or magazines (36) compared by information from television (32) (the ratio was 1.3:1). More Anti-cigarette information, came from the media, were noticed by nonsmokers (39) compared by smokers (29) (the ratio was 1.3:1). More Anti-cigarette information, came from the media, were noticed by females compared by males (the corresponding ratio was 3.8:1). More Anticigarette information, came from the media, were noticed from urban areas (58) compared by those who were from rural areas (10) (the ratio was 5.8:1).

Table 5: Noticing	g Cigarette Adve	rtising during the	e Last 30 Days
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	Sex prevalence		Area prevalence	
	Male	Female	Urban	Rural
Noticed advertisements in stores (140)	102	38	134	6
Free samples Sale prices (116)	98	18	114	2

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Noticed cigarette promotions (92)	88	4	90	2
Free gifts/discounts on other products (60)	36	24	58	2
Clothing/item with brand name or logo (52)	34	18	50	2
Coupons (46)	38	8	46	0
Mail promoting cigarettes (42)	30	12	42	0

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Table (5) shows: The order of cigarette advertising noticed during the last 30 days are; advertisements in stores (140), Free samples Sale prices (116), Noticed cigarette promotions (92), Free gifts/discounts on other products (60), Clothing/item with brand name or logo (52), Coupons (46) and Mail promoting cigarettes (42). All of them were noticed by males more than females. All of them were noticed more in urban areas more than rural areas.

**Table 6**: Ways that helped smoking cessation

The way	No.	%
Acupuncture	2	5%
Nicotine Patch	6	15%
Nicotine Gum	4	10%
Nicotine Nasal Spray	2	5%
Hypnosis	2	5%
Cessation Program	4	10%
Individual Counseling	2	5%
Group Counseling	0	0%
"Cold Turkey"	0	0%
Exercise	4	10%
Changing Habits	6	15%
Willpower	8	20%
Total	40	100%

Table (6) shows: The ways that helped smoking cessation were in order; Willpower (20%), Nicotine Patch (15%), Changing Habits (15%), Nicotine Gum (10%), Cessation Program (10%), Exercise (10%), Acupuncture (5%), Nicotine Nasal Spray (5%), Hypnosis (5%), Individual Counseling (5%), Group Counseling (0%) and "Cold Turkey"(0%)

Conclusion

### Prevalence of Cigarette Smoking Phenomenon Results

- Current smokers were more than half of the studied sample which reflects the danger of smoking phenomenon among Student University. Most of current smokers are males from urban areas.
- Most of cigarette smokers smoke manufactured cigarettes. This is more prominent among male smokers and among urban areas' smokers.
- Most of cigarette smokers are moderate to heavy smokers (5 to 15 cigarettes on average per day. This is a bad sign as the smokers are still young adults.
- More passive cigarette smokers were exposed to smoking in university which reflects the

synergistic effect of combating smoking in university community. More passive cigarette smokers were nonsmokers, females mostly from urban areas. So passive smoking leads to increase smoking risks as it extends the problem to others (nonsmokers and females)

### 1. Factors Affecting Cigarette Smoking Cessation Results

- More Anti-cigarette information came from health warnings on cigarette package followed by health care provider followed by the media. This arranges priorities during design of programmers helping cigarette smoking cessation.
- More Anti-cigarette information, came from health care provider, were through intended visited to HCP. So, encouraging the smokers to consult the HCP should be considered.
- More Anti-cigarette information, came from the media, were through newspapers or magazines. This arranges priorities during design of programmers helping cigarette smoking cessation.
- The order of cigarette advertising noticed during the last 30 days are advertisements in stores, Free samples Sale prices, noticed cigarette promotions, free gifts/discounts on other products, Clothing/item with brand name or logo, Coupons and Mail promoting cigarettes. This arranges priorities during design of programmers helping cigarette smoking cessation.
- The ways of high efficacy that helped smoking cessation are the willpower, nicotine patch and changing habits. The ways of moderate efficacy that helped smoking cessation are nicotine gum, cessation program, and exercise. The ways of mild efficacy that helped smoking cessation are acupuncture, nicotine nasal spray, hypnosis and individual counseling. The ways of no efficacy that helped smoking cessation are group counseling and "cold turkey"

### Recommendations

- 1. Programs designed to combat cigarette smoking should be targeted mainly to university students, males, heavy smokers and urban areas.
- 2. More of cigarette smoking combating programs should be against manufactured cigarettes (for example, applying higher taxis).
- 3. Efforts should be done to announce the problem of passive cigarette mainly in university community, among nonsmokers, females and urban areas.

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- 4. Enforcement of Anti-cigarette information came from health warnings on cigarette package followed by health care provider followed by the media (especially newspapers or magazines)
- 5. Encouraging the smokers to consult the HCP should be considered.
- 6. Attention should be paid to cigarette advertising sites specially advertisements in stores, Free samples Sale prices, noticed cigarette promotions, free gifts/discounts on other products, Clothing/item with brand name or logo, Coupons and Mail promoting cigarette.
- 7. Encouraging the ways of high or moderate efficacy that help smoking cessation as the willpower, nicotine patch, changing habits, nicotine gum, cessation program, and exercise.

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