

Active and Passive Tobacco Uses Among Population of Dubai, Reflections from Dubai Household Health Survey 2014

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Abstract

Background: Tobacco, the foremost public health enemy, is the single most preventable cause of morbidity and mortality around the world. Tobacco use is shifting from the developed world to developing countries, especially low- and middle-income Arab countries. **Objectives:** To study the prevalence rate of tobacco use and passive smoking among different age groups in Dubai, and identify determinants related to socio-demographic characteristics, duration of smoking, number of cigarette, nationality. **Methodology:** Dubai Household Health Survey was conducted in 2014 as a Cross-sectional, multistage, stratified, Cluster survey. Houses were visited to obtain detailed information on the different health-related issues. According to Dubai Statistical center, the total population of Dubai at the end of 2014 was 2327350 (males 1613175, females 714175) (UAE 212000, Expatriates 2115350). Individuals aged ≥ 18 years were investigated for the history of smoking in relation to socio demographic distribution and history of exposure to passive smoking. Tobacco use questions of the questionnaire were asked to 3716 persons. Data were entered to the computer using Excel sheet and analyzed using SPSS 21. **Results:** The study revealed that overall proportion of current smoker (daily and not daily) was 21.9% (it was 24.8% for males and 4.3% for females). Most current smokers were actually daily smoker and the proportion of non-daily smoker in men was only 7.8%. The study showed that the duration of smoking in the surveyed population was 20 years and more in 18.9% of cases. The use of manufactured cigarette in survey population was the dominant feature. 23% of the respondents smoke 20 cigarettes and more per day. Age of initiation of smoking in the adult population was less than 20 years in 59.4% of cases. The current study reflected that about 7% of the respondents were passive smokers. **Conclusion:** Tobacco use constituted a real public health problem as about one fifth of general population was current-users of tobacco. Tobacco use commonly initiated at earlier age groups early as 10 years and passive smoking were found to be not uncommon phenomena. Tobacco-use prevention national education program should be provided with especially focusing on earlier age groups and victims of passive. Tobacco use public health intervention strategy needs to be designed to handling risks at different levels. Policies, legislations and advocacy are significantly essential strategies.

Keywords

Tobacco Use, Dubai Population, Household Survey

Received: February 1, 2017 / Accepted: February 21, 2017 / Published online: June 15, 2017

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1. Background

Tobacco, the foremost public health enemy, is the single most preventable cause of morbidity and mortality around the world. [1, 2] Tobacco use is shifting from the developed world to developing countries, especially low- and middle-income Arab countries. [3] One such country, which has the highest rate of tobacco consumption in the Middle East and North Africa is Egypt. [4] It is estimated that 34% of Egyptians are daily smokers, with males having significantly higher daily smoking rates than females (43.4% males, 4.7% females). [5]

Tobacco smoking is a major worldwide public health problem. Each year, tobacco products kill some 3 million people worldwide and this number is increasing. WHO estimates that, unless current smoking patterns are reversed, by the decade 2020-2030 tobacco will be responsible for 10 million deaths per year, 70% of them occurring in developing countries. [6] Tobacco is a known cause of about 25 diseases and its impact on global disease burden is increasing continuously. [7] It is responsible for the half of malignant tumors, within this for the 90% of lung cancers, [8] for the 80% of chronic bronchitis-emphysemas (it also exacerbates asthmatic symptoms), for more than half of cardio-vascular diseases (e.g. heart attack, arteriosclerosis) and cerebral vascular diseases. [9] Smoking is not only a social problem, but also has enormous negative effects on human health.

It is believed that adolescents, who make up around 1.2 billion of the world's 6 billion inhabitants, face a form of tobacco intimidation at an early point in their lives. [10] Surveillance of tobacco use among youth in several countries has revealed that the problem is of equal concern in developed and developing countries. [11] Statistics reveal that the use of any form of tobacco by 13–15 year old students is greater than 10%. In addition, almost one in four students (13-15 years old) who ever smoked cigarettes smoked their first cigarette before the age of 10. [12]

Tobacco use is considered one of the urgent problems facing all countries in the region including the Gulf States, where the prevalence of smoking among the young people had already reached high levels. In the United Arab Emirates, tobacco is not cultivated but extensively traded. UAE used to be ranked in seventh place on the worldwide tobacco trade map; however, more than 80% of the tobacco imports are re-exported to neighbouring countries. [13] Recent increases in tobacco use among teenagers portend upcoming public health challenges as the majority of smokers initiate long-term addiction during youth, but experience major health

consequences later in life. [14]

A study in UAE (2003) revealed that, there were statistically significant higher symptoms of psychiatric morbidity among UAE youth who smoked than those who did not smoke. [15]

2. Objectives

To study the prevalence rate of tobacco use and passive smoking among different age groups in Dubai, and identify determinants related to socio-demographic characteristics, duration of smoking, number of cigarette, nationality.

3. Methodology

Dubai Household Health Survey was conducted in 2014 as a Cross-sectional, multistage, stratified, Cluster survey. Houses were visited to obtain detailed information on the different health-related issues. According to Dubai Statistical Center [16] the total population of Dubai at the end of 2014 was 2327350 (males 1613175, females 714175) (UAE 212000, Expatriates 2115350). Individuals aged ≥ 18 years were investigated for the history of smoking in relation to socio-demographic distribution and history of exposure to passive smoking. Tobacco use questions were one part of the household health survey questionnaire, which was composed of around 400 questions. Tobacco use questions of the questionnaire were asked to 3716 persons. Those questions intended to identify determinants related to socio-demographic characteristics, duration of smoking, number of cigarette, and nationality. Data were entered to the computer using Excel sheet and analyzed using SPSS 21.

4. Results

Participants in the Dubai population household health survey 2014 were asked if they are currently smoke, sniff or chew any of the tobacco products (cigarettes, shisha, rolled tobacco, tobacco without nicotine)? The smoking status of the participants were categorized into "daily smoker", "smoker but not daily" and "Not smoker". Categorization of smoking status in such groups actually facilitates the addictive characteristics of tobacco. Overall proportion of current smoker (daily and not daily) was 21.9% (it was 24.8% for males, and 4.3% for females) (Table 1 and figure 1). Most current smokers were actually daily smoker and the proportion of non-daily smoker in men was only 7.8%.

Table 1. Current smoking and tobacco use status among survey population.

		Yes, daily		Yes, not daily		No, at all		Total	
		No.	%	No.	%	No.	%	No.	%
Male	Emirati	6	14.0	1	2.3	36	83.7	43	100
	Non-Emirati	487	17.0	226	7.9	2144	75	2857	100
	Total	493	17.0	227	7.8	2180	75.2	2900	100
Female	Emirati	0	0	0	0	55	100	55	100
	Non-Emirati	13	3.1	7	1.7	398	95.2	418	100
	Total	13	2.7	7	1.5	453	95.70	473	100
Total	Emirati	6	6.1	1	1.0	91	92.8	98	100
	Non-Emirati	500	15.3	233	7.1	2542	77.6	3275	100
	Total	506	15.0	234	6.9	2633	78.1	3373	100

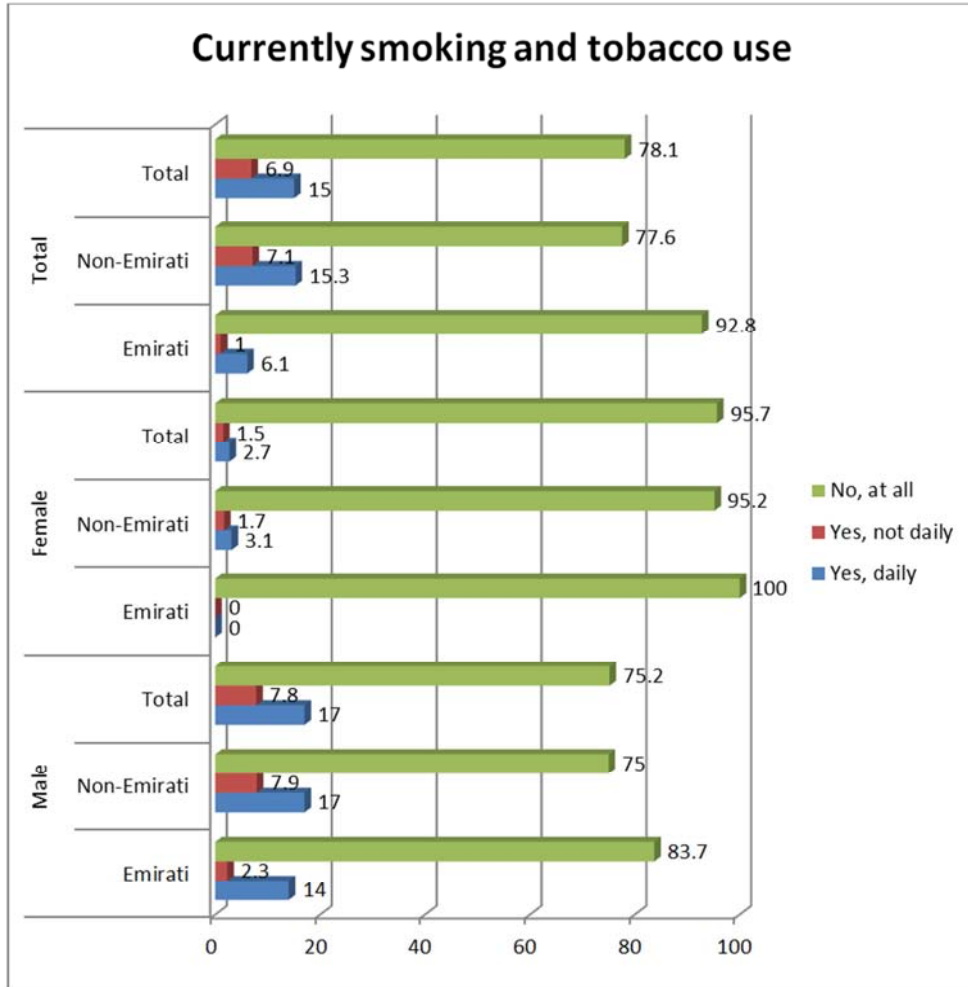


Figure 1. Current smokers among respondents.

Participants were asked also regarding how long they have been smoking or using tobacco daily? The duration of smoking in the survey population was 20 years and more in 18.9% of cases. (Table 2)

Table 2. Duration of smoking and tobacco use in years.

Number of years	%
0-	51.7
10-	29.4
20+	18.9
Total	100.0

Another question was asked in the survey as the following:

On average, how many of the manufactured cigarettes do they smoke or use each day? The use of manufactured cigarette in survey population was the dominant feature. 23% of the respondents smoke 20 cigarettes and more per day. (Table 3)

Table 3. Quantity of manufactured cigarettes they use each day.

Number of cigarettes	%
0-	48.9
10-	28.1
20+	23.0
Total	100.0

One important question was about the age of initiation of smoking in the adult population. It was less than 20 years in 59.4% of cases. (Table 4)

Table 4. Age when they started smoking or using tobacco daily.

Age group	%
0-	59.4
20-	32.6
30+	8.0
Total	100.0

Passive smoking was also investigated among the participants. They were asked if happen to stay in places where other individuals are smoking? Table 5 shows that 7% of the respondents were passive smokers.

Table 5. Passive smoking.

	%
No	93.0
Yes	7.0
Total	100.0

5. Discussion

Current study showed that Overall proportion of current smokers (daily and not daily) was 21.9% which was almost similar to other study in Saudi Arabia which showed that the prevalence of current smoking was 19.5% (31.2% of boys and 8.9% of girls). [17] Another study which showed The prevalence of smoking was 14.5% among students, 22.2% and 2.2% among fathers and mothers and 43.1% and 14.8% for male and female siblings; 15.0% reported all or most of their friends smoked. [18]

Another study in Kuwait showed much higher in prevalence of smoking comparing to UAE in the current study. The prevalence of smoking was 34.4% (95% confidence interval (CI) = 32.2–36.6) among men and 1.9% (95% CI = 1.3–2.5) among women. Among men, the highest prevalence (56.5%; 95% CI = 36.2–76.8) was observed in the youngest age group (420 years). Among women the highest prevalence was observed in one of the older age groups (46–50 years) (7.1%; 95% CI = 3.1–11.1). [19]

As for the passive smoking the current study showed about 7% of the study population have exposure to passive smoking. It is much less than another study conducted in Australia which showed that two-thirds of Aboriginal and Torres Strait Islander children aged under 15 years live in households with one or more regular smokers, and almost one-third (28%) live with at least one regular smoker who smokes indoors. [20]

6. Conclusion

Tobacco use constituted a real public health problem as about

one fifth of general population was current-users of tobacco. Tobacco use commonly initiated at earlier age groups early as 10 years and passive smoking were found to be not uncommon phenomena. Tobacco-use prevention national education program should be provided with especially focusing on earlier age groups and victims of passive. Tobacco use public health intervention strategy needs to be designed to handling risks at different levels. Policies, legislations and advocacy are significantly essential strategies.

Conflict of Interest

The authors declare that they do not have any conflict of interest.

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