

RESEARCH COMMUNICATION

Cigarette Dependence among Males and Females Aged 50+ Living in İzmir, Turkey

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Abstract

Background: Smoking, the most important preventable cause of death overall, is also the leading cause of cancer-related mortality. Tobacco consumption has a direct or indirect relationship with most types of cancer. In Turkey, the second leading cause of death is cancer, with lung cancer the most prevalent. **Objective:** The aim of this study was to determine the level of cigarette dependence among men and women aged 50+, living in İzmir. **Methods:** This research is a descriptive and cross-sectional field study, carried out with the participation of a total of 2,497 subjects. **Results:** It was found that 48.8% of the participants used to be smokers, and 95.5% of the smoking participants had been smoking for at least 11 years at the time of study. 36.1% of the participants were being exposed to secondhand smoke at home, and almost one third of the smokers (29%) had a moderate level of dependence. **Conclusions:** Continuing education may help high-risk groups develop good habits for a healthier lifestyle such as smoking less and quitting smoking, thereby reducing the level of morbidity and mortality of most common types of cancer.

Keywords: Cigarette dependence - prevalence - gender - 50+ - İzmir, Turkey

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Introduction

According to the statistical data provided by World Health Organization (WHO), almost 4.5 million people die from smoking-related causes every year. It is estimated that this number will reach 10 million in 20-30 years and that 7 million of it will come from developing or less developed countries (Mosavi-Jarrahi et al., 2004). It is asserted that smoking causes cancer as well as many cardiac, cerebrovascular and respiratory illnesses (Izumi et al., 2001; Çan et al., 2007).

Even though smoking is the most common preventable cause of death around the world, one person per eight seconds dies because of a smoking-related disease (Leung et al., 2003). According to a study conducted in 2008, 53.8% of males, and 41.3% of females are smokers in Turkey (Talay et al., 2008).

Lung cancer is the first type of cancer that was found to be associated with smoking. Many studies later showed that smoking increases the risk of occurrence for many types of cancer other than lung cancer (Moore & Tsuda, 2002). While some cases of cancer develop in organs that are in direct contact with smoke such as mouth, pharynx, larynx and lung (Kobayashi & Moore, 2000; Moore & Tsuda, 2002; Washio et al., 2003; Ozasa, 2007; Bilir, 2008), others develop in organs that are not in direct contact with smoke such as breast (Liu et al., 2000;

Bilir, 2008), bladder, and uterus (Moore & Tsuda, 2002; Washio et al., 2003; Ozasa, 2007). Cancer-causing agents (carcinogens) in tobacco smoke damage important genes that control the growth of cells, causing them to grow abnormally or to reproduce too rapidly. It is suggested that smoking is associated with more than 30% of all cases of cancer. Smoking is also responsible for around 80-90% of all lung cancer occurrences, the number of which is rapidly increasing all around the world (Terry, 2005).

While the number of smokers among adults in developed countries are decreasing due to awareness-raising campaigns, it continually increases in developing countries like Turkey (Kobayashi & Moore, 2000; Mosavi-Jarrahi et al., 2004; Çan et al., 2007). Determining the high-risk groups in advance could help to promote healthy life style behaviors among them, thereby reducing the overall rate of morbidity and mortality of common types of cancer.

Materials and Methods

Sampling

This research is a descriptive and cross-sectional study that was conducted on people above 50 years of age living in the Mansuroğlu district in İzmir in order to identify the effect of smoking status and cigarette dependence as risk factors for cancer. (This research is part of a study

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that examines the risk of cancer development (colorectal, breast, prostate) among 50+ aged people living in the Mansuroğlu district in İzmir.) The population of this study were all males and females aged 50+ living in the Mansuroğlu District. With a view to providing a basis for population-based cancer screening, no sampling was made, and the whole population (4815 individuals) were included in the study. After explaining the aim of this study to the participants, those who did not want to participate and those who were not home in all three visits made by the researchers were excluded from the study. Ultimately, this study included a total of 2497 individuals who gave oral consent to participate in the study (Participation rate: 51.9%).

The age, level of education, marital status, profession/job of the participants were selected as the independent variables, while smoking status (cigarette dependence) as a risk factor for cancer was taken as the dependent variable. Data Collection Tools: A survey form that consisted of questions about socio-demographic characteristics as well as a scale specifying smoking status and level of cigarette dependence was used to collect data.

The cigarette dependence scale (CDS-12) was first developed by Etter, Le Houezec and Perneger in 2003.

Table 1. Descriptive Characteristics with Cigarette Dependence Status of Individuals

Variables	Cigarette Dependence		χ^2	P		
	Mild	Moderate				
Age Groups						
50-54 ages	165	70.8	68	29.2	0.979	0.913
55-59 ages	120	69.4	53	30.6		
60-64 ages	76	73.1	28	26.9		
65-69 ages	34	75.6	11	24.4		
≥70	22	68.8	10	31.2		
Gender					2.247	0.134
Female	145	67.1	71	32.9		
Male	272	73.3	99	26.7		
Marital Status					3.994	0.414
Married	363	70.3	153	29.7		
Widow	33	78.6	9	21.4		
Separated	1	33.3	2	66.7		
Divorced	15	75.0	5	25.0		
Single	5	83.3	1	16.7		
Family Type					5.894	0.052
Large	61	80.3	15	19.7		
Nucleus	321	68.7	146	31.3		
Other	35	79.5	9	20.5		
Education					5.171	0.395
Not literate	9	81.8	2	18.2		
Reader-Writer	9	69.2	4	30.8		
Primary	158	74.5	54	25.5		
Secondary	52	75.4	17	24.6		
High school	94	65.3	50	34.7		
≥University	95	68.8	43	31.2		
Occupation					5.745	0.332
Housewife	80	70.8	33	29.2		
Officer	13	52.0	12	48.0		
Worker	11	84.6	2	15.4		
Retired	286	71.7	113	28.3		
Self-employed	17	73.9	6	26.1		
Other	10	71.4	4	28.6		
Total	417	100.0	170	100.0		

The Cronbach's alpha coefficient of the original scale was found to be 0.90. The developers of this scale were contacted via e-mail to get permission for translating the scale into Turkish and using it in the studies conducted in Turkey. The validity and reliability of the scale in Turkish were tested by Turgay et al. (2007), before the data were collected (Cronbach's alpha coefficient: 0.94). The scale consisted of 12 items, 2 of which (3rd and 4th items) were negative. Using a 5-point Likert scale for each item, the CDS-12 is used to assess the level of cigarette dependence. High scores and low scores indicate high and low dependence respectively. Based on their scores on the CDS-12, the participants were divided into three groups: mild dependence (below 24), moderate dependence (between 25 and 44) and heavy dependence (above 45). In the end, a single score was obtained for each smoking participant.

Results

Of all participants, 23.5% were smokers and 48.8% used to be smokers, while 95.1% of present smokers had been smoking for at least 11 years at the time of study. It was found that 36.1% of the participants were being exposed to smoke at home, while 3.7% were being exposed to secondhand smoke at work. One third of the participants (29%) were determined to have a moderate level of dependence.

Table 1 shows the cigarette dependence status of the participants along with descriptive characteristics. Some descriptive characteristics, namely age, gender, marital status, family type and level of education indicated no statistically significant difference in whether the level of cigarette dependence was low or moderate ($p > 0.05$).

Discussion

Compared to other studies previously conducted in Turkey, the smoking rate (23.5%) was lower, while the smoking quit rate (48.8%) was higher in the Mansuroğlu district in İzmir (PIAR, 1988; Talay et al., 2008; Bozkurt et al., 2006). This could be viewed as a result of the fact that the neighborhood where the study was conducted (Mansuroğlu) is in the vicinity of what was formerly known as Bornova Training and Education Health Group Directorate which had provided preventive health services to the area with the physicians, nurses, midwives and health officers employed in the health center. It should also be noted that the public health centers, which were established as part of the family practice program, as well as Ege University provided health services to the area. It could also be said that campaigns against smoking and certain legal reforms proved effective and risen awareness among the people living in the Mansuroğlu district.

The results of this study resemble those reported by Okutan et al. (2007) insofar as no statistically significant difference was found between the level of cigarette dependence and some descriptive characteristics. Smoking at home (36.1%) is a risky behavior not only because the smoke itself is detrimental to children's health but also because it may encourage the children to develop a

smoking habit. This rate is still high, although the results of this study lower those reported by van der Wal. Since one third of the participants (29%) had a moderate level of cigarette dependence, it is more likely that the attempts to change smoking behavior and make them quit smoking could prove effective. The rate of cigarette dependence was found to be lower in research group in the study conducted by Okutan et al. (2007).

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