Research Article

The Experiences of Smokers Admitted to a Smoking Cessation Center in Samsun Regarding their Addiction: A Qualitative Study

Bektas Murat Yalcin[1,*], Gokce Celik Kara[2], Muge Ustaoglu[3]

[1]*Department of Family Practice, Faculty of Medicine, Ondokuz Mayis University, Samsun, Turkey.*
[2]*KETEM, Ikhadim District Health Directorate, Turkish Ministry of Health, lkadim Town Administration, Samsun, Turkey.*
[3]*Department of Gastroenterology, Faculty of Medicine, Ondokuz Mayis University, Samsun, Turkey.*

Abstract: Background: Primary care physicians have a vital opportunity to help their patients quit smoking. They need to provide an individualized approach to them while in the cessation process in order to help them understand.

Objective: The aim of this study is to investigate the individualized interacting factors and principles of starting, maintaining, quitting, and relapse of tobacco addiction among smokers.

Materials and Methods: This qualitative research performed between March and December 2015 involved 331 smokers who had applied to the Ondokuz Mayis University, Medical Faculty Family Medicine Cessation Clinic, Türkiye. In the first meeting, a workshop (lasting approximately 1 hour) was held for all the participants (31) and recorded. In this workshop the participants discussed how they started smoking and why they wanted to quit. They reported examples of successful quitting with which they were familiar, together with any precautions they took in order to protect themselves and the people around them. Every workshop was decoded and analyzed by the researchers.

Result: One hundred nineteen (35.7%) of the participants were women, and the mean age of the study group was 37.75 ± 12.41 years. Most of the participants (n=280, 85%) began smoking under the age of 18, with a close friend providing the cigarettes in the majority of cases (n=212, 64%). The main motivation differed between younger and older participants. In order to protect themselves, participants used external tar filters, smoked 'light' cigarettes, and refrained from smoking after eating or before sleeping. They also tended to smoke in the kitchen or on the balcony to protect other household members from their smoke. In addition, the participants increased their physical activity levels, requested more laboratory or screening tests from their physicians, and consumed healthier diets (honey, vitamin pills, and water).

Conclusion: The addiction dynamics of cigarette addicts differ very widely.

Keywords: Smoking cessation, Primary care, Belief, Experience, Counseling, Qualitative.

INTRODUCTION

Smoking is the leading cause of preventable death in the world [1]. Tobacco kills more than 8 million people each year. More than 7 million of those deaths are caused by direct tobacco use, while some 1.2 million are the result of non-smokers being exposed to second-hand smoke [2]. Smoking cessation counseling is therefore one of the most important lifestyle changes in primary health care [3]. Three important strategies should be followed in combatting smoking in primary care medicine. The first is to ensure that non-smokers never start. This is the most effective approach because the treatment for smoking addiction is expensive and difficult, and life-long success rates are lower than desired [4]. The second strategy is to ensure that individuals who have quit smoking stay that way. If these lack sufficiently good adaptation skills in the face of any life stress, they may become addicted again [5]. Studies show that appropriate methods can effectively prevent these ex-smokers resuming active smoking [6]. The third strategy is to motivate current smokers to quit and provide a practical program which they can implement. In primary health care, the 5 R (relevance, risks, rewards, roadblocks, and repetition) methods were designed for patients who do not wish to quit smoking immediately, and the 5 A (Ask, Advice, Assess, Assist, and Arrange) methods for others [7, 8].

Whichever of these three important strategies is applied, it is essential for success that the clinician be experienced and knowledgeable concerning how cigarette addiction begins and is maintained, and the elements that shape its other dynamics. The aim of this study is to investigate the experiences and common beliefs and misbeliefs of smokers in a selected population concerning their addiction and quitting.

MATERIALS AND METHODS

This quasi-experimental, qualitative study was performed among 523 smokers who had been admitted to the Smoking Cessation Clinic of the Ondokuz Mayis University Medical School Department of Family Practice between March and December 2015. Of these, 331 volunteers with no psychiatric disease and equipped with full information about smoking constituted the study group. A standard approach is applied to all

*Address correspondence to this author at the Department of Family Practice, Faculty of Medicine, Ondokuz Mayis University, Samsun, Turkey. Email: myalcin@omu.edu.tr

participants on their first day in the clinic. All participants are asked to come to the clinic on the morning of the appointment date, at which time they join a one-hour group workshop. After the workshop, their smoking features and other medical history are discussed while they undergo a physical examination. Their initial lifestyle modifications are discussed, and an initial therapy to be initiated after the patient's quit day is planned. The three-month program consists of a total of eight sessions, one a week in the first month, two in the second, and two in the third. We analyzed a total of 29 initial workshops in terms of discussions and experiences by applying the principles of qualitative research [9].

The Workshop

In the initial workshop, all group members are encouraged to share their experiences. These groups usually consist of 20 individuals and a researcher/counselor. Voice and video recording is performed once consent has been given. Four major topics are discussed in these meetings

- How and when did you start smoking, and who supplied your initial cigarette?
- Why do you want to quit smoking? What is your main motivation and what benefits do you expect from quitting?
- Do you have any relatives or close friends who successfully quit smoking? How did they manage it?
- Do you take any precautions to protect yourself and the people around you from the dangers of smoking?

Procedure

The interview questions were developed in the light of the previous literature. Before the data collection process, semi-structured and open-ended questions were tested with two counselors working in the smoking cessation unit with experience in the area. Some changes were made to the questions in the light of the experts' opinions. As described by Guest *et al.* [10], the researchers were assured of saturation when new information produced little or no change in the code list, and no new theme emerged from the data.

Trustworthiness

Every workshop was organized by one of the researchers. The first researcher aimed to elicit the participant's experiences in the same way by examining the questions before the interview in the data collection process. Participants' demographic information was hidden in the transcripts to prevent any other bias. The researchers provided details about the participants, the data collection methods, the number and length of the data collection sessions, and the duration of all the data collection processes in order to show the transferability of the results. Experiences received from the participants were evaluated by two experts in counseling and qualitative research at the research question preparation, method determination, and data analysis and reporting stages.

Analysis

A qualitative approach was favored in this study in order to elucidate the essence of lived experience and develop composite descriptions thereof [11]. Deductive thematic analysis was employed to examine participants' experiences and to highlight differences and similarities.

The researchers re-read and listened to all the data sets in order to improve their understanding and familiarize themselves with all aspects of the data. Consensus regarding the coding categories and a final list of key themes were established iteratively through discussion and re-reading of the transcripts. During this step, some themes collapsed into each other, and the researchers merged the themes into three main groups. All these answers were interpreted and investigated. All the meetings were decoded and analyzed, and the most common responses were noted, as well as the peak and particularly interesting answers are also noted.

STATISTICAL ANALYSIS

All the quantitative study data were uploaded onto SSPS-22 (Statistical Package for Social Sciences version 22) software. Statistical relationships between these variables were investigated using the Chi-square test, bivariate correlation, and the Independent-Samples t-test. A p-value <0.05 was regarded as statistically significant.

Approval for the study was obtained from the Ondokuz Mayis University Ethical Committee (OMU KAEK-2015/35).

RESULT

The socio-demographic, smoking characteristics, and cessation attempt features of the study population by gender are presented in Table **1**.

Table 1. The comparison of socio-demographic, smoking characteristics, and cessation attempt features of participants by gender.

Variables	**Men n, %**	**Women n, %**	**p**
Gender	212, (64.3%)	119, (35.7%)	
Age (mean) (min=18, max=71)	30.50±13.66	29.22±11.6	t=0.54 p=0.562

Continued...

Continued...

Mean time spent in education (year) (min=0, max=22)	14.40±1.17	11.78±3.3	t=1.214 p=0.004
Occupation			
Housewife		18, (15%)	
Student	110, (52%)	41, (35%)	
Farmer	12, (6%)	5, (4%)	x^2=0.265 p=0.658
Worker	12, (6%)	6, (5%)	
White collar (teacher etc.)	41, (20%)	29, (24%)	
Others	35, (16%)	20, (17%)	
Age at starting to smoke (year) (min=6, max=41)	17.09±3.6	20.70±9.7	t=2.058 p<0.001
Package/year (mean) (min=2, max=64)	15±1.2	5.1±2.2	t=6.897 p<0.001
Mean FNDT* score (min=1, max=10)	4.9±1.7	2.5±0.8	t=3.154 p<0.01
Number of quit attempts (mean) (min=0, max=12)	2.1±1.4	1.8±1.8	t=0.874 p=0.987
Methods used in earlier quit attempts*			
No particular method	57, (41.6%)	24, (33.8%)	
Cold turkey	2, (1.4%)	1, (1.4%)	
Reduction of daily consumption	62, (45.2%)	22, (830.9%)	
Special over-the-counter products for stopping smoking	12, (88.7%)	8, (811.2%)	x^2=0.452 p=0.587
Acupuncture	0, 0%	4, (5.6%)	
NRT alone	1, (0.7%)	2, (2.8%)	
Pharmacotherapy alone	2, (1.4%)	6, (8.4%)	
Combination of drugs and NRT	1, (0.7%)	2, (2.8%)	
Specialized counselor or clinic	0, (0%)	2, (2.8%)	
The longest mean duration of cessation (mean days) (min=0, max=700)	1.8±2.1	2.1±1.4	t=0.965 p=0,547

*This item reflects the cumulative methods used previously (a smoker may have tried more than one particular method).

THE WORKSHOP ITEMS

How and When Did You Start Smoking, and Who Gave You Your First Cigarette?

This question was designed for participants to share their memories and experiences about the period when their addiction first developed. It is already known from previous studies that the family and social environment have a very strong effect on the onset of cigarette addiction. Very few of the participants reported starting smoking in adulthood, with many (n=280, 85%) starting before the age of 18. Women began smoking regularly two years later than men. The youngest age at which any patient started smoking regularly was six. There were two common important providers of cigarettes for the participants' first smoking experience. The first of these was a close circle of friends and the other an elder sibling. However, the friend effect was more dominant in our sample.

"We admired our smoking friends. We even begged them to let us try. They would show off to us while blowing smoke into the air..."

"My sister used to smoke. I wanted to try it one day while I was sitting with her. She smiled at me, handed me her cigarette, and said, "Have you grown up that much?"

"There was a place at school where we met with older boys. The same cigarette would be passed around there..."

Most of the participants' first cigarettes were provided by a friend of the same age (n=212, 64%). However, those friends did not provide cigarettes on a regular basis for our participants, many of whom regularly obtained cigarettes from home if their father or mother were smokers. At first, they stole or borrowed these without their parent's consent and knowledge. After a period during which they smoked regularly, this situation was eventually accepted by at least one family member (mostly mothers),

who would share their own cigarettes or supply cash.

"My mother used to smoke, but she never wanted us to smoke. My father and she were always arguing about her smoking. One day I took one of my mom's cigarettes and smoked my first cigarette in the backyard. My mother noticed that her cigarettes were constantly running low, and she was horrified after she found out that I had started to smoke. After a while, she got used to it, and we even started smoking together, keeping it secret from my father. I was happy as I was closer to my mother than ever…"

"My father always left his pack of cigarettes in his jacket pocket. I used to take four or five cigarettes while he was sleeping. These were my reward for the next day. I thought that my father was aware of this and condoned it. One day he pulled me over and said that if I wanted to smoke, I had to do it with my own money. However, I felt that he was proud of me in a strange way…"

"I was six when I started smoking. At first, we used to burn corn tassel wraps as a game. Then we would collect discarded butts in the streets. Tobacco was grown in our field. We used to wrap dried tobacco leaves in a paper when we were in the village…"

Based on the statements of the participants, family members or the social environment constituted the source for the supply of the first cigarettes. While this situation is mostly due to the fact that the sale of cigarettes under the age of 18 is not legal, it seems that our participants easily reached cigarettes from someone who smoked in home. One of the best measures to prevent this situation is to increase the family's knowledge about the harms of smoking on health and to be alerted of their child's smoking status.

Why Do You Want to Quit Smoking, and Which Benefits Will You Enjoy if You Do So?

This question is aimed at understanding the main motivation of people who want to quit smoking. Motivational differences generally become evident between younger and older participants. For young participants, their personal health, the risks of smoking for their families, and the financial difficulties of smoking were particularly important.

"My husband and I are considering having a baby. We experienced difficulties having one and went to a gynecologist. Our doctor told us that I should quit in order to increase our chances of having a child. Also, I do not want my child to be born in a smoking household…"

"I work all day. I find it emotionally hard to spend the money I earn on cigarettes. It costs so much. I can't buy toys for my child, and I economize on food, but I can't stop buying cigarettes. I feel selfish…"

"In the past, I used to play football with no problems. But last week, I was out of breath as I climbed up three flights of stairs. I'm always short of breath and my chest hurts. I said 'Enough is enough'..."

"My son wanted to play catch with me the other day. I was out of breath after two minutes. I can't forget the way he looked at me with fear in his eyes as I was coughing..."

"A younger cousin of mine had a heart attack recently and was taken to intensive care. Despite being discharged, he is not the same as he was before. I don't want the same thing to happen to me..."

Obligations and expectations regarding their health were particularly important for older patients;

"My doctor explained that I had to quit smoking for my thyroid cancer treatment…"

"I was diagnosed with lung cancer last week. My doctor told me that even at this stage it will be beneficial for me to quit smoking…"

"I have COPD. Now I want to sleep comfortably without being short of breath and coughing…"

"I had two myocardial infarctions in the last two years. In the last one, I was resuscitated with CPR in an emergency unit. I have had two or three angioplasties and stents so far. I love smoking very much. There was only one thing that was burning for me in life. (He was using the burning tip of a cigarette as a metaphor). However, my doctor told me that there is only a very slim possibility that I can survive a third myocardial infarction…."

"I don't want to get sick and be a burden to anyone. I know my kids will have to take care of me if I keep smoking…"

In addition, and interestingly, family-related reasons, especially experiences with grandchildren, made smokers decide to quit. Some participants' motivation was triggered by one specific occasion, while others decided to quit due to constant pressure from loved ones.

"I loved smoking, but I promised my daughter that I would quit …"

"My granddaughter hid my cigarettes. When I asked where they were, she burst into tears and said 'I don't want you to die'…"

"I picked my grandson up to give him a hug the other day. He said, "Grandpa you smell really bad" and ran away. I've never been so upset."

It is important to know these motivational reasons stated by smokers who want to quit smoking. Physicians can use these reasons to change the minds of smokers who do not want to quit smoking. For these reasons, some addicts who resist trying to quit smoking can be persuaded.

Have Any of Your Relatives or Close Friends Successfully Quit Smoking? How did they Manage it?

A successful quit story from family (mostly a partner) or friends had encouraged nearly all of the smokers admitted to our work-

shops to quit smoking. A few of them received scientific and professional help.

"A friend of mine took XXX (the name of a drug). He quit very easily. I believe it can work just as well on me as him…"

"I heard that there is a drug that makes you quit smoking. I think I could quit smoking very easily with the help of medication..."

"I remember my uncle. He decided to quit one day and never smoked again…"

"One of my friends tried everything from gums to herbals. She didn't quit until she tried XX (drug name provided) …"

"A close friend of mine received acupuncture treatment. The number of cigarettes he smoked decreased significantly, but after a while I learned that his smoking had gone up again…"

Many participants tried to quit smoking with at least one over-the-counter or herbal product available on the Internet. The most common scientific method used was nicotine replacement therapy, although they initiated this therapy by themselves without consulting their physician.

"I bought a nicotine patch from the pharmacy to quit smoking. However, they did not tell me how to use it. Since I stuck it on the same place over and over, my skin started to get irritated and I didn't see much of an effect…"

"I was very motivated to quit smoking. I bought nicotine gum at the pharmacy and started chewing it occasionally. But I experienced serious hiccups. No one told me I shouldn't chew it when smoking…"

Are there any Precautions that You Take to Protect Yourself and the People around You from Smoke?

The most common precaution that smokers adopted to protect people around them was smoking out on a balcony or in a specific room (mostly the kitchen) at home.

"My wife and I take care not to smoke inside the house. When we smoke out on the balcony, our child looks at us as if watching the fish in an aquarium…"

"My cigarette place is in the kitchen at home. Unless it's very cold, I smoke by opening the windows and closing the door. However, my child always asks if I have been smoking inside again…"

Most stated that they did not smoke anywhere near their children.

"I don't like my child seeing me smoking."

"OK, I smoke, but I don't want my daughter to be affected by the smoke, so I take care not to smoke near her …"

The participants ate or consumed several items or products that they thought were healthy in order to compensate for the harm caused by smoking. Several smokers avoided smoking when hungry, out of a belief that this exacerbates the damage caused.

"I never smoke when hungry. I know that is very harmful to one's health..."

"I save my first cigarette for after breakfast. At least that is how I reduce the bad effects of smoking…"

"I take multivitamins daily to keep healthy..."

"I smoke, so I have a higher chance of contracting cancer than other people. I learned from the internet that Vitamin D prevents cancer. So I take Vitamin D supplements every day..."

Other participants increased their daily water and yogurt intake, believing that this is an antidote for many poisons. They also took vitamin pills and ate garlic. Others refrained from smoking before going to sleep, used external filters, and avoid smoking while eating honey, chocolate, or any sweet things, out of a belief that this also exacerbates the damage caused.

"Doesn't anyone know the health benefits of yogurt and garlic …?"

"I have heard that eating honey and sugar increases the harmful effects of smoking. I usually try not to smoke when I eat something sweet…"

In order to protect themselves, participants used external tar filters, smoked 'light' cigarettes, or refrain from smoking after eating or before sleeping. Some also increased their physical activity levels and requested more laboratory or screening tests from their physicians.

"Ever since I switched to 'light' cigarettes, I feel more at peace. 'Light' cigarettes should cause less cancer…"

"I always have an annual check-up because I smoke…"

DISCUSSION

In contrast to classic qualitative studies, this study involved a very large group of participants who described their experiences, emotions, and knowledge during the workshop sessions. The advantage of such a compilation is that it can capture extreme samples more easily. This is important when organizing individual behavioral treatment, as it makes invaluable contributions to the required level of knowledge. Although our study was conducted among smokers who were willing to quit and ready to receive the requisite therapy, they nevertheless provided data of value to planning strategies essential for non-smokers, smokers, and current smokers.

Our first question in the workshop involved how the participants' started smoking. The results confirmed that adolescence is a critical time period for various health risk behaviors, including cigarette smoking [12]. In addition, it has been shown that the friend factor is important to initiate smoking addiction. In order to support our data in a large study conducted among university stu-

dents in the USA, it was understood that a great majority (60.7%) of the students who smoked obtained their first cigarette from a friend [13]. Women participants started smoking nearly five years later than men. Although several of our participants first experienced smoking at very early ages, as low as six, serious addiction patterns such as buying a whole pack emerged toward 16 to 17 years. Starting to smoke during adolescence is known to cause various additional problems. It also predicts later respiratory system problems (such as COPD) and may serve as an independent lifetime risk factor for lung cancer [14]. Cigarette smoking before junior high school has also been linked to psychological problems, especially among girls [15]. Catalano and Hawkins [16] proposed a social development theory suggesting that adolescents learn socializing behaviors from family, school, community, and peers with different development phases. The importance of family for the individual decreases toward the middle developmental stages of adolescence, while the influence of friends increases. Peer influence increases during this time as adolescents begin the process of individuation from the family. Hierarchical family relationships become more egalitarian in high school, and peer influence continues to increase in importance [17]. The fact that the majority of the first cigarettes in this study were provided by a friend is therefore consistent with this theory. Participants whose parents smoked stated that when they were children their families often expressed disapproval of smoking and did not want their children to start. However, these participants described this negative approach as ineffective, as their parents continued to smoke in sight of them. Our data reveal a positive interaction between siblings in terms of smoking behavior. For example, adolescents with a smoking sibling were more than twice more likely to start smoking than those without a smoking sibling [18].

Major changes have taken place in the social family structure and the role of family members in Türkiye in the last 40 years, as indeed in the rest of the world. The proportion of women who meet the classic definition of the housewife has decreased with the increased participation of women in the workplace [19]. The classic division of duties in the family (women being responsible for housework and children) has changed, and the two sexes have begun to effectively share their duties [20]. The fact that the average age of our participants was approximately 36 indicates a high probability that the majority had grown up within that earlier family structure. Thirty years ago, most fathers were more isolated from emotional family issues compared to the present day, and mothers were more aware of what was taking place at home. Mothers witness the physical and psychological development of children more closely than fathers. In those times fathers tended not to communicate directly with their children on some issues, while mothers acted as mediators. From that perspective, the childhood emotional relationship between some participants and their mothers may have fallen outside the definition of a modern democratic and equalitarian family. In some of our cases, a sort of secret pact was formed between the mother and child on the subject of smoking in order to conceal it from the father. One interesting point is that this effect of the mother figure is supportive for male participants but inhibitory for females. This can be explained by the more disapproving attitude of society to single smoker women compared to the present [21]. We observed that our participants had no difficulty in finding cigarettes for their first experience. Friends, siblings, and smoking parents can easily provide cigarettes for individuals who do not buy them for themselves. In addition, significant tobacco plant cultivation takes place in our region, and this once constituted an important part of the income of the inhabitants. Addicts from rural areas can smoke very easily by wrapping a piece of paper around the tobacco leaves once they have dried.

RESULTS

The results of this study also show that addicts from different age groups use different sources of motivation to quit smoking. Analysis of the reasons for quitting smoking revealed that decreased bodily capacity, health concerns about the future, physician recommendations, financial problems, and pressure from the family or social environment were particularly important. While grandchildren are important for grandparents, the wishes of their children are more significant for parents. In another study conducted with Turkish participants, social support provided by the family emerged as an independent risk factor for smoking cessation (OR = 1.044, $p<0.001$) [22]. This can be explained by the fact that the classic Turkish family structure is wide enough to include children and grandchildren and that the interaction between them is very strong. Determining the social and age groups to which appropriate motivational messages will be given may be a factor that increases the success rates of smoking cessation experiences [23]. For instance, reminding a newly married couple about the risk factors that their future children will face due to smoking may be more beneficial than explaining the other harms of smoking. The view that an adult can get cancer from smoking may differ from that of an adolescent.

Most of our participants were acquainted with someone who had quit smoking in some way. It seemed that the most important challenge for the participants was to develop an effective approach to coping with nicotine withdrawal. A powerful need emerged for effective medical approaches toward physical and psychological complaints experienced while quitting smoking. However, participants were less enthusiastic about the need for motivational approaches or therapies. Successful smoking cessation stories can increase the success motivation of addicts who will try to quit smoking [24].

This study yielded a number of findings regarding smokers' knowledge, beliefs, and misbeliefs concerning their addiction, which will be useful in the consideration and design of appropriate strategies. Although the number of participants who had previously received professional help was low, most had attempted to quit smoking more than once. Some had used bupropion or varenicline employed in smoking cessation therapy without the supervision of a doctor. With one or two exceptions, patients using nicotine replacement therapy preferred to do so without medical supervision. These patients stated that they were not informed about the way to use the therapy, its side-effects, or effi-

cacy. Bupropion, varenicline, and NRT are alternative, supportive, effective, and modern options used in smoking cessation. However, improper use of these options can reduce patients' faith in them. This may be a factor that reduces the effectiveness of the professional treatment when these are subsequently recommended again [25].

Our participants took a number of precautions to reduce the adverse effects of smoking on health. Although this was effectively useless, one of the most common precautions taken by smoker parents was to smoke in the kitchen or on the balcony in order to protect their children from second-hand smoke. Based on medical education physicians usually investigate the smoking status of their participants and generally may not investigate exposure to secondhand smoke in the home or workplace [26]. However, other individuals in the house who smoke are at risk of health caused by second-hand cigarette smoke. As emphasized by the CDC, only smoke-free homes are entirely safe for children. Opening a window or using a fan does not protect children, and air purifiers and fresheners do not remove toxic materials from smoke. Smoking in hallways, on stairs, or out on the balcony also does not protect children. A very recent study showed that children in households with smoke-free home rules had less salivary cotinine and risks for secondhand smoke exposure [27]. The risk of secondhand smoking caused by smoking mothers (OR 13.73, 95% CI: 6.06, 33.28) is higher than that deriving from smoker fathers (OR 5.35, 95% CI: 2.22, 13.17) as determined from children's saliva cotinine levels. However, the attempts may be addicts with children to protect them from second-hand smoke may be considered as evidence showing the development of a certain awareness on this issue. The family physicians can recommend this issue to smoker parents in the future.

There is a very profitable Online market for smoking cessation products. However, the scientific basis and effectiveness of these products are highly questionable [28]. Apart from positive lifestyle modifications, such as increasing physical activity levels and consuming more water, most of the other precautions adopted by the participants have no scientific basis. Yogurt and garlic are very popular in Turkish cuisine and are consumed in large amounts. Turkish yogurt is known for its various beneficial effects on human health [29]. Garlic lowers blood pressure in hypertensive subjects and improves arterial stiffness and gut microbiota [30]. However, neither has any known effect on either protection from tobacco smoke or cessation.

Another misbelief among the participants in this study was that 'light' cigarettes have less cancer risk. These cigarettes are often marketed as containing low tar and nicotine levels. However, the amount of nicotine contained can greatly vary from one brand to another ('light' or 'slim' cigarettes and cigars etc.) [31]. Although an average cigarette contains approximately 10 mg of nicotine, a 'light' cigarette may contain some 6 mg, while some brands contain as much as 28 mg. Nevertheless, it is generally accepted that a smoker receives 1.1 to 1.8 mg of nicotine after smoking an average cigarette [32]. The risks for light smokers, while lower, are still substantial. Women between the ages of 35 and 49 who smoke 1–4 cigarettes a day have a five-fold higher risk of developing lung cancer (RR 5.0, 95% CI 1.8 to 14.0), while in men the risk is three times greater (RR 2.8, 95% CI 0.9 to 8.3) than in non-smokers [33]. Additionally, in several cases, smokers who switch to 'light' cigarettes increase their daily consumption in order to maintain their regular daily blood nicotine levels [34].

CONCLUSION

In conclusion, this study yielded a number of findings regarding smokers' knowledge, beliefs, and misbeliefs concerning their addiction, which will be useful in the consideration and design of appropriate strategies.

AUTHORS' CONTRIBUTION

- **Bektas Murat Yalcin**: Study design, Data analysis, and Writing the first draft of the manuscript.
- **Gokce Celik Kara**: Patient Recruitment, Data collection.
- **Muge Ustaoglu**: Editing data, Preparing the final edition of the first draft of the manuscript.

CONFLICT OF INTEREST

Declared none.

ACKNOWLEDGEMENTS

Declared none.

REFERENCES

[1] Samet JM. Tobacco smoking: The leading cause of preventable disease worldwide. Thorac Surg Clin 2013; 23(2): 103-12.

[2] WHO. World health statistics. Global Health Observatory Data. 2018; Available at: http://www.who.int/gho/tobacco/use/en/

[3] Rosser WW. The role of the family physician in smoking cessation. Can Fam Physician 1984; 30: 160-7.

[4] Fiore M, Jaen CR, Baker T, *et al*. Treating tobacco use and dependence: 2008 update. Rockville, MD: US Department of Health and Human Services 2008.

[5] Gorniak B, Yong HH, Borland R, *et al*. Do post-quitting experiences predict smoking relapse among former smokers in Australia and the United Kingdom? Findings from the International Tobacco Control Surveys. Drug Alcohol Rev 2022; 41(4): 883-9.

[6] Yalcin BM, Unal M, Pirdal H, Karahan TF. Effects of an anger management and stress control program on smoking cessation: A randomized controlled trial. J Am Board Fam Med 2014; 27(5): 645-60.

[7] Agency for Health Care Research and Quality. Patients not ready

to make a quit attempt now (The "5R's"). 2012; Available at: https://www.ahrq.gov/prevention/guidelines/tobacco/5rs.html.

[8] WHO. Toolkit for delivering the 5A's and 5R's brief tobacco interventions in primary care. 2014; Available at: https://iris.who.int/bitstream/handle/10665/112835/9789241506953_eng.pdf?sequence=1.

[9] O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: A synthesis of recommendations. Acad Med 2014; 89(9): 1245-51.

[10] Guest G, Bunce A, Johnson L. How many interviews are enough? An experiment with data saturation and variability. Field Methods 2006; 18(1): 59-82.

[11] Creswell JW, Creswell JD. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. USA: Sage publications 2017.

[12] Jessor R. Risk behavior in adolescence: A psychosocial framework for understanding and action. J Adolesc Health 1991; 12(8): 597-605.

[13] Sutfin EL, Sparks A, Pockey JR, *et al*. First tobacco product tried: Associations with smoking status and demographics among college students. Addict Behav 2015; 51: 152-7.

[14] Wiencke JK, Thurston SW, Kelsey KT, *et al*. Early age at smoking initiation and tobacco carcinogen DNA damage in the lung. J Natl Cancer Inst 1999; 91(7): 614-9.

[15] Swahn MH, Bossarte RM, Choquet M, Hassler C, Falissard B, Chau N. Early substance use initiation and suicide ideation and attempts among students in France and the United States. Int J Public Health 2012; 57(1): 95-105.

[16] Catalano RF, Hawkins JD. The social development model. In: Hawkins JD, Ed. Delinquency and Crime. UK: Cambridge University Press 1996; pp. 149-97.

[17] Smetana JG, Campione-Barr N, Metzger A. Adolescent development in interpersonal and societal contexts. Annu Rev Psychol 2006; 57: 255-84.

[18] Hill KG, Hawkins JD, Catalano RF, Abbott RD, Guo J. Family influences on the risk of daily smoking initiation. J Adolesc Health 2005; 37(3): 202-10.

[19] Sunar D. and Fişek GO. Contemporary turkish families In: Roopnarine JL, Gielen UP, Eds. Families in Global Perspective. USA: Allyn & Bacon/Pearson 2005; pp. 169-83.

[20] Ataca B, Sunar D. Continuity and change in Turkish urban family life. Psychol Dev Soc 1999; 11(1): 77-90.

[21] Hassoy H, Ergin I, Yararbas G. Trends in socioeconomic inequalities in smoking in Turkey from 2008 to 2016. BMC Public Health 2021; 21(1): 2128.

[22] Yalcin BM, Mustafa U. The impact of family and social support during the first six months after attempt for smoking cessation. Turkish J Fam Med Prim Care 2019; 13(1): 52-9.

[23] Soulakova JN, Tang CY, Leonardo SA, Taliaferro LA. Motivational benefits of social support and behavioural interventions for smoking cessation. J Smok Cessat 2018; 13(4): 216-26.

[24] Lim MK, Kim HJ, Yun EH, *et al*. Role of quit supporters and other factors associated with smoking abstinence in adolescent smokers: A prospective study on Quitline users in the Republic of Korea. Addict Behav 2012; 37(3): 342-5.

[25] Wadgave U, Nagesh L. Nicotine replacement therapy: An overview. Int J Health Sci (Qassim) 2016; 10(3): 425-35.

[26] Victor JC, Brewster JM, Ferrence R, Ashley MJ, Cohen JE, Selby P. Tobacco-related medical education and physician interventions with parents who smoke: Survey of Canadian family physicians and pediatricians. Can Fam Physician 2010; 56(2): 157-63.

[27] Fallavollita WL, Do EK, Schechter JC, *et al*. Smoke-free home rules and association with child secondhand smoke exposure among mother-child dyad relationships. Int J Environ Res Public Health 2021; 18(10): 5256.

[28] Yalcin BM. The scientific and pseudoscientific features of smoking cessation products which are marketed on internet. Arch Fam Med Gen Pract 2020; 5(1): 165-8.

[29] Harvard TH Chan. The Nutrition Source. 2019; Available at: https://www.hsph.harvard.edu/nutritionsource/food-features/yogurt/. [Accessed on January 25, 2023].

[30] Ried K. Garlic lowers blood pressure in hypertensive subjects, improves arterial stiffness and gut microbiota: A review and meta-analysis. Exp Ther Med 2020; 19(2): 1472-8.

[31] Carroll DM, Stepanov I, O'Connor R, *et al*. Impact of cigarette filter ventilation on u.s. smokers' perceptions and biomarkers of exposure and potential harm. Cancer Epidemiol Biomarkers Prev 2021; 30(1): 38-44.

[32] Scherer G, Lee PN. Smoking behaviour and compensation: A review of the literature with meta-analysis. Regul Toxicol Pharmacol 2014; 70(3): 615-28.

[33] Bjartveit K, Tverdal A. Health consequences of smoking 1-4 cigarettes per day. Tob Control 2005; 14(5): 315-20.

[34] Schane RE, Ling PM, Glantz SA. Health effects of light and intermittent smoking: A review. Circulation 2010; 121(13): 1518-22.

Received: April 11, 2023 Revised: July 10, 2023 Accepted: July 18, 2023