Turk Thorac J 2021; 22(3): 217-223 DOI: 10.5152/TTJ.2021.20046

Original Article

Characteristics of Smoking Behavior Among Poor Pregnant Women in İzmir, Turkey: A Qualitative Study

Deniz Aslı Dokuzcan[1], Nihal Gördes Aydoğdu[2]

[1]Public Health Nursing, Dokuz Eylül University Graduate School of Health Sciences, İzmir, Turkey
[2]Faculty of Nursing, Erzurum Technical University Health Sciences, Erzurum, Turkey

Cite this article as: Dokuzcan DA, Gördes Aydoğdu N. Characteristics of smoking behavior among poor pregnant women in İzmir, turkey: A qualitative study. *Turk Thorac J.* 2021; 22(3): 217-223.

Abstract

OBJECTIVE: Despite the negative aspects of cigarette use on pregnant, the level of smoking is extremely high among low-income women during pregnancy.

MATERIAL AND METHODS: This study which has been conducted using an in-depth individual interview method, qualitatively explores and describes the characteristics of smoking behavior among poor pregnant women in Izmir, Turkey. A conventional content analysis method was used in the data analysis. Twelve pregnant women who smoked at least 1 cigarette a day and had $4 daily income were chosen as participants in this study. Interviews were recorded using a voice recorder, and the average duration of the interviews was 31 min.

RESULTS: The smoking behavior of poor pregnant women is classified under 2 themes: "Individual attitudes and behavior" and "Interpersonal factors."

CONCLUSION: Public health nurses should include smoking/non-smoking criteria in their routine check-ups and follow up with pregnant women while undertaking the role of educator and counseling regarding smoking cessation.

KEYWORDS: Pregnancy, smoking cessation, poverty, qualitative study
Received: *May 14, 2020* ***Accepted:*** *September 15, 2020*

INTRODUCTION

Poverty is the insufficiency of an individual's total income to supply the bare minimum amount of food, clothing, etc., which are necessary for the maintenance of their biological existence.[1] However, the United Nations Development Program makes an overarching description by including the lack of lifelong health care, freedom, self-confidence and not having average life standards which are essential opportunities for the development of an individual to their description and so, they emphasized it as being a multidimensional concept.[2]

The culture of poverty which is passed on from generation to generation is a lifestyle in the process of socialization. It causes poor individuals to exhibit different behavior and attitudes from the rest of the society and forms the biggest obstacle for an individual to get rid of the poverty and so not to show positive attitudes and behavior. The culture of poverty is a formation that has some economical, social, and psychological features of its own. Therefore, it is one of the biggest determinants, especially in an individuals' health behavior.[3]

Infants, children, and women, respectively, are the groups in society that are mostly affected by the impact of poverty on health status. The most serious health problems that poor women face include infectious diseases, chronic diseases, mental disorders, HIV, and malnutrition. They are often victims of violence, and maternal–infant mortality is higher among poor women. Additionally, sanitation is inadequate; healthy behaviors are lacking, and substance addiction is widely observed among poor women.[4,5]

Regarding substance addiction, the rates of tobacco use, in particular, are higher among poor women than among those with a higher socioeconomic status. This is due to several reasons, such as inadequate management of stress, poverty, and inadequate social support.[6]

Previous studies have determined that the factors that affect smoking during pregnancy are low level of education, migration, poverty, gravidity, gestational week, pregnancy planning status, frequency of prenatal care, spouse's smoking status, being exposed to second-hand smoke, and lack of knowledge about the harms of smoking.[7,8]

Smoking during pregnancy is not only the behavior of an individual but also the behavior of a mother. Therefore, pregnant smokers have different attitudes compared to non-pregnant smokers. Previous studies also indicated that barriers to smoking cessation among pregnant women included inadequate stress management, lack of self-confidence, nicotine addiction, hormonal changes, stigmatization, being in a social environment supporting smoking, inadequate professional support, and lack of knowledge about the fetus and pregnancy.[9-13]

Corresponding author: Deniz Aslı Dokuzcan, e-mail: denizdokuzcan@hotmail.com

Pregnancy is the most appropriate time for learning so that women can prepare to care for their infants and focus on their own maternal health.[14] In order to evaluate this period most effectively, the smoking behavior of the poor pregnant women should be defined. The data obtained will be a guide for the interventions which will be implemented to help pregnant women cease smoking. Thus, this study aims to determine the smoking behavior of poor pregnant women.

MATERIAL AND METHODS

Study Design

A qualitative design was used to research this study. The interviews conducted as part of this study followed the Consolidated Criteria for Reporting Qualitative Research checklist for interviews.[15]

Research Team

The research team consisted of 2 women academician researchers (Assistant professor: NGA and PhD Candidate: DAD), both of whom currently work as lecturers in a nursing faculty. In addition, they had received education on qualitative research and previous experience with conducting qualitative research.

Study Place and Time

The study included poor pregnant smokers who went to the Gynecology Outpatient Clinic of a University hospital for routine pregnancy follow-up between November 23 and December 15, 2016.

Study Population and Sample

The study sample was determined using the purposeful sampling method. Data were collected until saturation was reached for the research question/subject.[16] This study included 12 poor pregnant women who were older than 18, smoked at least once a day, and had no complications with their pregnancy.

Poverty level per person is accepted as $1 for underdeveloped countries, $2 for Latin America and the Caribbean, $4 for Eastern European countries and Turkey, and $14.40 for developed-industrialized countries per day due to the need for a method of mean calculation.[17] The poverty criterion in the study was calculated based on $4.3, which is the poverty line for daily expenses per capita according to TurkStat data.[18] Accordingly, the Central Bank data for the exchange rate of dollars on November 2, 2016, indicated that the poverty line for a family with 4 members was found to be TL 1.604.00 ($1 was considered to be TL 3.11 for calculation). In the case of families with more or less than 4 members, poverty was determined per capita using the simple proportion method.

Main Points

- In our study of poor pregnant women quitting smoking, it is determined that economical struggles, the problems about family dynamics, and scantiness of their social lives increase their stress, and not knowing how to handle this stress is a big prohibitive factor to quit smoking.
- It is seen in the personal meetings that they are not aware of how smoking affects their fetus and themselves, and this situation reduces their perception of the risk. Also, their misknowledge about smoking and quitting smoking and their awareness level about cigarette addiction constitute them quitting smoking.
- The lack of getting a good consultancy about smoking and also the permission by the medical personal of a limited number of cigarette consuming are understood by the pregnant women as an allowance of smoking. So this situation affects quitting smoking negatively.

Data Collection Tools

Introductory Information Form

This form was prepared by the researcher to determine the women's individual characteristics and smoking status.

Fagerström Test for Nicotine Dependence (FTND)

Fagerström test for nicotine dependence was developed by Karl O. Fagerström in 1989 with a view to identify the level of physical dependence on a cigarette.[19] The Fagerström test for nicotine dependence is a 6-item scale that provides a continuous measure of nicotine dependence. Total score of the scale ranges from 0 to 10, where a higher score indicates stronger dependence. Reliability and factor analysis of the Turkish version were tested by Uysal et al.[20] in our country.[20]

Semi-Structured Interview Form

The study was conducted using a semi-structured interview form to determine the smoking behavior among poor pregnant women. The form included 2 questions and 6 subquestions and was evaluated by 3 experts.

Data Collection

The data were collected from poor pregnant women who went to the Gynecology Outpatient Clinic of a University hospital for a routine pregnancy follow-up using the semi-structured interview form through the in-depth interview method. The interviews were initiated after the participants were informed about the aim and methods of the study, and their consent to the use of a tape recorder was obtained. The interviews were conducted by 2 researchers; one conducted the interviews and the other served as an observer. The researchers conducted the interviews in a quiet and comfortable room with 1 table and 2 chairs, where no interruption was expected to create an environment of trust with women in the sample group. The room was located at the gynecology outpatient clinic. The interviews lasted for 20 to 45 min.

Data Analysis

The data obtained from the in-depth interviews were evaluated using the content analysis method. Transcribing was conducted manually by the researcher without using a computer program. Codes, concepts, and themes were created by the 2 researchers, and they were finalized after an examination was completed by an experienced researcher.

The Validity and Reliability of the Study

The validity and reliability of the study were ensured using the credibility, transmissibility, consistency, and confirmability principles of qualitative research.[16] The adequacy of the data obtained in response to the research question was reported in the findings section. Expert support from the study

Table 1. Sample Characteristics

Participant No.	Age	Age to Start Smoking	No. of Cigarettes Smoked per Day Before Pregnancy	No. of Cigarettes Smoked per Day During Pregnancy	Gestational Week	Gravidity	Spouses' Smoking Status
1.	29	15	20	3-5	18	2	Yes
2.	28	22	20	2	22	2	Yes
3.	39	18	20	14-16	22	2	Yes
4.	29	17	30	20	36	2	No
5.	44	14	8-9	8	33	2	Yes
6.	38	14	20	20	30	2	Yes
7.	22	13	20	4-5	40	1	Yes
8.	21	17	4-5	4-5	31	2	Yes
9.	36	7	20	6-7	37	7	Yes
10.	26	13	35-40	15-20	24	2	Yes
11.	38	17	10	5-6	30	3	Yes
12.	36	15	7-8	20	32	2	Yes

design to the conclusion section was received in each stage of the research. Findings were presented to the audience without generalization. All interviews were conducted using the same data collection form and tape recorder in order to obtain consistent results from the study. The observer took notes during the tape recording. All data collection tools used during the study, such as voice recordings, raw data, codes, and themes created during the analysis, were examined by an expert. All voice recordings, observation notes, data sets, and analyses were retained to ensure the external reliability of the study. Additionally, sociodemographic characteristics of all participants in the data sets were identified.

RESULTS

The average age of the poor pregnant women who participated in this study is 32.16 ± 7.30, and the average age to start smoking is 15.16 ± 3.61. While the amount of smoking before pregnancy is about 17.83 (min 4-max 35) per day, it is about 10.08 (min 2-max 20) during pregnancy. The gestational week of women is 29.58 ± 6.77, and the gravidity of these women is minimum 1 and maximum 7. Only 1 of the pregnant women's husband does not smoke (Table 1). Table 2 shows the data obtained regarding the smoking behavior of poor pregnant women.

Individual Attitudes and Behaviors

The participants reported that they felt themselves inadequate in coping with stress and chose smoking as a coping method. The pregnant women reported that financial and family problems, in particular, were the causes of stress. Most of the pregnant women reported that they smoked to relax, console themselves, and calm down. On the other hand, some of them stated that smoking made them happy and they smoked to take pleasure. It was observed that the perceived addiction varied among participants. Some pregnant women reported that although they were not addicted to smoking, they found it necessary to have cigarettes in stock and smoke every day. Some of them, on the other hand, stated that they were highly addicted to smoking, and therefore, they could not quit. One of the participants described her smoking addiction using metaphors that would likely be used by an alcoholic or heroin addict.

> *"I began smoking when I was seventeen. I will cease it when I die." (11th Participant)*

The pregnant women reported that they experienced withdrawal symptoms such as shaky hands, dizziness, headaches, irritability, and aggression when they did not smoke. In addition, some of the pregnant women considered smoking cessation to be extremely challenging and said they would not quit unless they were medicated. They believed they would not quit before they died.

> *"Actually, if I am determined to do something, I manage to do it, but it is not true about smoking. If I don't smoke for four or five hours, my hands begin to shake. I light up to prevent dizziness and shaky hands." (9th Participant)*

Table 2. Smoking Behavior of Poor Pregnant Women

Smoking Behavior	
Themes	**Subthemes**
Individual attitudes and behaviors	Stress
	Perceived level of addiction
	Level of knowledge
	Perceived self-efficacy
	Cultural beliefs
	Desire to maintain the daily routines
	Perceived risk
	Rationalization
Interpersonal factors	Health care personnel
	Social environment
	Family dynamics

The pregnant women's statements on how they managed financial issues in order to access cigarettes were listed under the addiction heading. The pregnant women were found to seek procurement of cigarettes even if they paid for them later, cut down on food expenses, or put money aside to pay for cigarettes.

"We always lack money so we usually buy on credit and pay monthly. When we draw our salaries, we pay for cigarettes first." (9th Participant)

Although the participants perceived that smoking was harmful, it was observed that they tended not to describe its damages to the fetus or themselves, and they were found to lack knowledge about this issue. Regarding the harm that smoking can do to their own health, the pregnant women reported that smoking led only to post-nasal drip, hypertension, and difficulty in climbing stairs. They also lacked knowledge about smoking cessation methods and said that they did not know how to quit smoking.

The self-efficacy of the participants was low and this affected their smoking cessation behavior negatively. The pregnant women reported that they tried to quit smoking but they failed. They thought that any further efforts would just go down the drain since they would fail when they tried to quit smoking, and they feared not being able to quit.

"When I was pregnant with my first daughter I tried hard to quit smoking, but I couldn't… I am thinking of quitting, but I can't I fear." (10th Participant)

The pregnant women's cultural beliefs, in that they believed they could quit smoking only with the help of divine power, prevented them from making any attempt to quit smoking. The pregnant women reported that they prayed to loath smoking but could not quit.

"I don't suppose that I can quit unless I have a severe disease. I have to loathe smoking. I mean, I prayed to God to loathe smoking when I was pregnant, but I didn't." (4th Participant)

A fatalistic approach is another inhibiting factor that affected the smoking behavior of pregnant women. They reported that they would die 1 day anyway from the effects of smoking or from another cause. These women thought that non-smokers could have chronic diseases, whereas smokers led a healthy life for a long time. They also reported that their non-smoking relatives were diagnosed with chronic bronchitis and cancer, while their smoking relatives did not have any health problems.

"I surrendered in three days. I gave up trying to quit smoking. I said 'God damn it! I would rather smoke than make myself agonize. I will die sooner or later anyhow.'" (4th Participant)

Smoking was part of the daily routine of the pregnant participants. The pregnant women reported that they smoked after breakfast, as soon as they woke up in the morning, while they were drinking coffee, after drinking tea, and after they took the kids to school.

"I like to smoke while I am eating something or drinking tea. I always smoke after a meal or tea. I absolutely smoke with each cup of tea. I smoke my first cigarette after breakfast." (8th Participant)

The participants' levels of perceived risk regarding the harm of smoking were found to be low. The more the pregnant women felt themselves at risk, the less they would exhibit risky behavior. However, in this study, the pregnant women reported that they were not harmed by smoking, and did not believe that smoking would cause any harm to the fetus.

"I don't think smoking will harm my baby." (9th Participant)

The study found that pregnant women needed to attribute their smoking behaviors to logical reasons. The reasons stated by the pregnant women included craving, facilitation of bowel movements, facilitation of breathing during sickness, and taking some steps to reduce the harms of smoking.

"I constantly crave cigarettes during my pregnancy." (1st Participant)

"I feel very constipated because of my pregnancy. I can't defecate unless I smoke."(11th Participant)

The pregnant women reported that they reduced the risk of smoking for themselves, their children, and fetuses by maintaining a balanced diet, avoiding smoking on an empty stomach, washing their hands and faces, and brushing their teeth after smoking and smoking outdoors.

Interpersonal Factors

This study examined the theme of interpersonal factors under the headings of health care personnel, social environment, and family dynamics. During the interviews, the attitudes and approaches of health care personnel were found to be an important determiner of smoking. The fact that health care professionals instructed the pregnant women to quit smoking, rather than offer counseling when these women said they were smokers, resulted in a negative attitude. When the health care personnel recommended that the pregnant women can smoke only a certain number of cigarettes in order to limit their smoking, this was considered by the pregnant women as permission to smoke. Some of the pregnant women reported that they expected to get information about smoking from health care professionals but they were not provided with it.

"I told the doctor that I smoke and the doctor told me to try not to smoke, or at least not to smoke more than five cigarettes a day. One or five, all the same. They smoked in any case. The doctor told me to drink milk and eat cheese to at least help the infant be nourished." (4th Participant)

The study found that smoking among health care professionals negatively affected the pregnant women regarding the issue of smoking cessation, and therefore, they did not take the recommendations of health care professionals seriously. The pregnant women emphasized that their social

environment was important in smoking and having a circle of smoking friends and neighborhood relationships increased their desire to smoke.

> *"I also smoke with my friends a lot. For example, I have a neighbor who smokes a lot. I have begun to smoke more since my neighbor moved in to the opposite building" (11th Participant)*

Family dynamics play an important role in the smoking behavior of pregnant women. Although the pregnant women reported that their family members supported them in quitting smoking, a smoking spouse negatively affected their behavior. Some of the pregnant women reported that cigarettes were procured by their spouses, while some of the pregnant women reported that they had nobody around to support them as they tried to quit smoking.

> *"Nobody would support my smoking cessation. My spouse also smokes. He sometimes used to tell me not to smoke, but he doesn't tell me that any more. Nobody tells me anything." (10th Participant)*

DISCUSSION

Individual Attitudes and Behaviors

This study found that inadequacy in coping with stress was an inhibiting factor in the smoking behavior of poor pregnant women. Other studies also show that pregnant women refer to smoking as a way of coping with stress.[21,22] A low socioeconomic level, an inadequate level of education, anxiety during pregnancy, and psychosocial stress were found to increase smoking.[23,24] Higher levels of stress among poor women, their lack of knowledge on how to manage stress, and the continuance of this situation in the gestation period caused smoking to be unavoidable during the pregnancy.[25] These factors drive women to smoke, an ineffective method to cope with stress.

The differences between the pregnant women's perceived addiction and their existing addiction levels and their experience of withdrawal symptoms were considered to be barriers to smoking cessation. The majority of the participants had moderate levels of addiction. Pregnant women do not acknowledge their addiction since they do not consider smoking as their problem. The extent to which hormonal or other physiological changes related to pregnancy can affect or decrease nicotine addiction is not clear, and it is still being discussed.[26]

The pregnant women's budgeting for the procurement of cigarettes which pushed their financial limits showed that there were differences between their own addiction status and their perceived addiction status. In this study, poverty was not a facilitating factor in quitting smoking. Although Wood et al.[22] considered the cost of cigarettes as a negative factor in smoking, the pregnant women reported cutting down on other expenses, such as buying food in order to purchase cigarettes. It is believed that the women's smoking addiction is caused by the early age at which they began smoking and their long-term cigarette smoking.[22]

In this study, it has been determined that pregnant women lack knowledge about smoking cessation methods and the adverse effects of smoking on pregnant women and their fetuses. The literature supports this finding.[27] However, it is reported that having knowledge about the potential health risks associated with smoking is not sufficient to motivate poor pregnant women to quit smoking.[9] The low level of education among the participants of the present study can result in their lack of knowledge about the effects of smoking. Furthermore, poor women's inadequate use of health care services can make it difficult for health care personnel to reach these individuals.

Most of the participating pregnant women had failed to stop smoking in previous attempts. Therefore, they imagined that if they tried to quit smoking again, their efforts would be wasted and that they could not quit smoking. The related literature states that previous experiences affect the individual's self-efficacy.[28] High levels of self-efficacy perception reduce the likelihood of smoking.[29,30] Thus, women did not have a strong self-belief in their own ability to quit smoking.

The pregnant women's beliefs that they could quit smoking only with the help of divine power, and their fatalistic approaches prevented them from making any attempt to quit smoking. The pregnant women avoided taking the responsibility of smoking cessation and left this responsibility to divine power. Previous studies showed that piety was positively associated with health promotion behaviors, which also included smoking cessation.[31] No study was found in the literature relating smoking during pregnancy to a fatalistic approach. Fatalism is defined as the belief that everything in life is determined by the will of supernatural power, and no one can go beyond this determination by making efforts or taking action.[32,33] It is argued that poverty and a low level of education lead to a sense of fatalism. This fatalistic approach is an important factor that affects individuals' behavioral change.[34] This study showed that women's fatalistic approach might affect behavioral change negatively.

Pregnant women defined their smoking behavior as a routine or daily habit. This study observed that women usually smoked while drinking tea or coffee or after their breakfast. Tea and coffee can affect the smoking habits of pregnant women since they are psychological reminders of smoking, and they also physiologically trigger the desire to smoke by lowering the pH level within the mouth.[35,36]

The participants' perceived levels of risk negatively affected their smoking behaviors. In particular, poor pregnant women who were addicted to smoking and who did not experience any problems despite smoking during their first pregnancy were not sensitive to the harms of smoking. Haslam and Draper[37] found that smoking pregnant women were not concerned about the risks of complications. They justified this by reporting that these women and other smoking women around them had uncomplicated pregnancies despite smoking. The participants' high levels of sense of fatalism due to their poverty and their lack of knowledge led them to have low levels of perceived risk. The pregnant women defined

smoking as "a harmful action" despite their low levels of perceived risk, which indicated high levels of perceived seriousness among them. Women feel deeply guilty about their babies as they smoke during pregnancy. Previous studies showed that women feel guilty and ashamed of smoking during pregnancy and they smoked secretly to avoid being stigmatized. This study observed that pregnant women were not concerned about being stigmatized for smoking and they did not need to hide it. Perceived seriousness and perceived risk are the 2 factors that affect behavior development. These perceptions come together and form the perceived threat. The more the individuals feel under threat, the more efforts they exert in order to perform a particular behavior.[38,39] This study assumed that women's low level of perceived risk affected their perceived threat negatively and caused them to continue their smoking behavior.

It also showed that poor pregnant women needed to attribute their smoking behaviors to a logical reason. The literature reported that pregnant women did not attempt to quit smoking because they denied the risks of smoking; also, they attributed their smoking to what they believed was a logical reason, and some believed that they had personal immunity to the risks of smoking.[37] Attributing their smoking to a logical reason helped the pregnant women suppress their feelings of guilt.

Interpersonal Factors

In this study, some of the pregnant women reported that they expected to get information from health care professionals about smoking, but they were not provided with this. Previous studies showed that pregnant women complained about not being given adequate help and suggestions on smoking cessation by health care providers.[37,40] High rates of smoking among health care personnel in Turkey lead to problems with their being role models for individuals. Smoking among health care personnel and health care personnel making suggestions to pregnant women to smoke a certain number of cigarettes in order to limit their smoking caused these women to perceive this as permission to smoke.

Participants emphasized that the social environment plays an important role in smoking. The effect of social support on the extent of smoking is known to vary. It can either enhance or reduce smoking.[10] In addition, smoking among women was considered by their friends and family to be a social activity and an indication of social status.[22] Active guidance of families and friends on smoking cessation among poor people during pregnancy supports the literature.[41] In this study, families, and friends of the women formed their social environment. Therefore, they constantly interacted with them. Smoking behaviors of the people in the social environment of the participants affected their smoking behaviors.

Although a great majority of pregnant women reported that their family members supported them in smoking cessation, smoking spouses led to a negative attitude. Marakoğlu and Sezer (2003) showed that smoking spouses facilitated women to begin smoking and also made smoking cessation difficult for smoking women.[42] Thompson et al.[41] reported that pregnant women would receive support from their spouses once they decided to quit smoking; however, this support would not be an actual support and their spouses would just do it perfunctorily.[41] Studies showed that pregnant women who have tried to quit smoking will obtain more successful results if there are no other smokers in their family or if their spouses have also tried to quit.[43] In this study, the pregnant women reported that their spouses would be their pillars of support in their smoking cessation. However, a great majority of the pregnant women reported that their spouses set aside a certain number of cigarettes per day for them and smoked with them, and this was considered an inhibiting attitude toward smoking cessation. The actions of their spouses were perceived as a support for their smoking.

Study Limitations

In this study, stress levels, self-efficacy, and fatalism of smoking, poor pregnant women were evaluated based on their verbal expressions. No measurement tools were used for these 3 concepts. The findings of this qualitative study may not be generalized to a larger population**.** In addition, as the study is specific to the poor pregnant women who participated in this study and there is no pretest-posttest control group design, it has limitations on explaining the effects of a poverty-related variable. Furthermore, the authors recommend conducting interventional studies based on the findings of this study.

CONCLUSION

In this study, the smoking behavior of poor pregnant women is classified under 52 themes: individual attitudes and behavior, and interpersonal factors. It is recommended to take these findings into account when planning smoking cessation programs for pregnant women. Moreover, similar studies in which data are collected through focus group interviews are recommended for data diversity.

Ethics Committee Approval: This study was approved by Ethics committee of Dokuz Eylül University, (Approval No: 03.11.2016, 2977-GOA, 2017/11-40).

Informed Consent: Written informed consent was obtained from the patients who agreed to take part in the study.

Peer Review: Externally peer-reviewed.

Author Contributions: Supervision – N.G.A.; Design – N.G.A., D.A.D.; Resources – D.A.D.; Materials – N.G.A., D.A.D.; Data Collection and/or Processing – N.G.A., D.A.D.; Analysis and/or Interpretation – N.G.A., D.A.D.; Literature Search – D.A.D.; Writing Manuscript – N.G.A., D.A.D.; Critical Review – N.G.A.

Conflict of Interest: The authors have no conflict of interest to declare.

Financial Disclosure: The authors declared that this study has received no financial support.

REFERENCES

1. Öztornacı B, Demirdöğen A. According to different equivalence scales, change of basic poverty indicators: the case of Turkey [Farklı eşdeğerlik ölçeklerine göre temel yoksulluk göstergelerinin değişimi: Türkiye örneği]. *Turk J Agric Econ.* 2015;21:7-15.
2. United Nations Development Programme [UNDP]. Human development report. 1997. Available at: http://hdr.undp.org/sites/default/files/reports/258/hdr_1997_en_complete_nostats.pdf.

3. Bilen M, Şan MK. Culture of poverty and problem of poverty in Turkey [Yoksulluk kültürü ve Türkiye'de yoksulluk sorunu]. *Sivil Toplum*. 2006;4(13):167-178.
4. Ngoma C, Mayimbo S. The negative impact of poverty on the health of women and children. *Ann Med Health Sci Res*. 2017;7(6):442-446.
5. United Nations Development Programme [UNDP]. Women and poverty. Teams to end poverty. 2019. Available at: http://www.teamstoendpoverty.org/wq_pages/en/visages/femmes etpauvrete_detail.php.
6. Pampel FC, Krueger PM, Denney JT. Socioeconomic disparities in health behaviors. *Annu Rev Sociol*. 2010;36:349-370. ([CrossRef]
7. Ergin I, Hassoy H, Tanik FA, Aslan G. Maternal age, education level and migration: Socioeconomic determinants for smoking during pregnancy in a field study from Turkey. *BMC Public Health*. 2010;10(1):325. ([CrossRef]
8. Tarhan P, Yılmaz T. Gebelikte sigara kullanımı ve etkileyen faktörler [Smoking during pregnancy and affecting factors]. *HSP*. 2016;3(3):140-147. [CrossRef]
9. Ingall G, Cropley M. Exploring the barriers of quitting smoking during pregnancy: A systematic review of qualitative studies. *Women Birth*. 2010;23(2):45-52. [CrossRef]
10. Koshy P, MacKenzie M, Tappin D, Bauld L. Smoking cessation during pregnancy: The influence of partners, family and friends on quitters and non-quitters. *Health Soc Care Community*. 2010;18(5):500-510. [CrossRef]
11. Maxson PJ, Edwards SE, Ingram A, Miranda ML. Psychosocial differences between smokers and non-smokers during pregnancy. *Addict Behav*. 2012;37(2):153-159. [CrossRef]
12. Flemming K, Graham H, Heirs M, Fox D, Sowden A. Smoking in pregnancy: A systematic review of qualitative research of women who commence pregnancy as smokers. *J Adv Nurs*. 2013;69(5):1023-1036. [CrossRef]
13. Graham H, Flemming K, Fox D, Heirs M, Sowden A. Cutting down: Insights from qualitative studies of smoking in pregnancy. *Health Soc Care Community*. 2014;22(3):259-267. [CrossRef]
14. Chamberlain C, O'Mara-Eves A, Porter J et al. Psychosocial interventions for supporting women to stop smoking in pregnancy. *Cochrane Database Syst Rev*. 2017;2:CD001055. [CrossRef]
15. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for in-terviews and focus groups. *Int J Qual Health Care*. 2007;19(6):349-357. [CrossRef]
16. Merriam SB. *Qualitative Research: Designing, Implementing, and Publishing a Study. In Handbook of Research on Scholarly Publishing and Research Methods*. University of Georgia: IGI Global; 2015.
17. Kızıler N. Poverty reduction and social transfer expenditures in Turkey [Türkiye'de yoksullukla mücadele ve sosyal transfer harcamaları]. *J Life Econ*. 2017;4(1):77-100. [CrossRef]
18. Turkish Statistical Institute. [TurkStat]. A study on poverty [Temel istatistikler]. 2016. Available at: http://www.tuik.gov.tr/PreHaberBultenleri.do?id=21867.
19. Fagerstrom KO, Schneider NG. Measuring nicotine dependence: A review of the Fagerstrom Tolerance Questionnaire. *J Behav Med*. 1989;12(2):159-182. [CrossRef]
20. Uysal MA, Kadakal F, Karsıdag C et al. Fagerstrom Test for Nicotine Dependence: reliability in a Turkish sample and factor analysis. *Tuberk Toraks*. 2004;52(2):115-121.
21. Crittenden KS, Manfredi C, Cho YI, Dolecek TA. Smoking cessation processes in low-SES women: The impact of time-varying pregnancy status, health care messages, stress, and health concerns. *Addict Behav*. 2007;32(7):1347-1366. [CrossRef]
22. Wood L, France K, Hunt K, Eades S, Slack-Smith L. Indigenous women and smoking during pregnancy: Knowledge, cultural contexts and barriers to cessation. *Soc Sci Med*. 2008;66(11):2378-2389. [CrossRef]
23. Schneider S, Maul H, Freerksen N, Pötschke-Langer M. Who smokes during pregnancy? An analysis of the German perinatal quality survey 2005. *Public Health*. 2008;122(11):1210-1216. [CrossRef]
24. Jabbour S, Chaaya M, El-Roueiheb Z, Khalik ZA. Cigarette smoking, addiction, and quitting among pregnant women in Lebanon. *CVD Prevention and Control* . 2008;3(2):91-97. [CrossRef]
25. Ergül Ş. Poverty health relationship and nursing approach [Yoksulluk sağlık ilişkisi ve hemşirelik yaklaşımı]. *Journal of Atatürk University School of Nursing*. 2005;8(2):95-104.
26. Lynch WJ, Sofuoglu M. Role of progesterone in nicotine addiction: Evidence from initiation to relapse. *Exp Clin Psychopharmacol*. 2010;18(6):451-461. [CrossRef]
27. Grangé G, Vayssière C, Borgne A et al. Characteristics of tobacco withdrawal in pregnant women. *Eur J Obstet Gynecol Reprod Biol*. 2006;125(1):38-43. [CrossRef]
28. Pender NJ, Murdaugh CL, Parsons MA. *Health Promotion in Nursing Practice*. Upper Saddle River, NJ: Pearson; 2015.
29. Stotts AL, DeLaune KA, Schmitz JM, Grabowski J. Impact of a motivational intervention on mechanisms of change in low-income pregnant smokers. *Addict Behav*. 2004;29(8):1649-1657. [CrossRef]
30. Slade P, Laxton-Kane M, Spiby H. Smoking in pregnancy: The role of the transtheoretical model and the mother's attachment to the fetus. *Addict Behav*. 2006;31(5):743-757. [CrossRef]
31. Page RL, Ellison CG, Lee J. Does religiosity affect health risk behaviors in pregnant and postpartum women? *Matern Child Health J*. 2009;13(5):621-632. [CrossRef]
32. Kasapoğlu A. Fatalism in the Holy Quran-Fatalism as an attitude of deniers [Kuran açısından fatalizm, inarcıların bir tutumu olarak kadercilik]. *Hikmet Yurdu*. 2008;1(1):87-107.
33. Sobol-Kwapinska M. Hedonism, fatalism and 'carpe diem': Profiles of attitudes towards the present time. *Time Soc*. 2013;22(3):371-390. [CrossRef]
34. Holroyd E, Twinn S, Adab P. Socio-cultural influences on Chinese women's attendance for cervical screening. *J Adv Nurs*. 2004;46(1):42-52. [CrossRef]
35. Turkish Thoracic Society. Sigara bırakma tanı ve tedavi Uzlaşı raporu [Smoking Cessation diagnosis treatment and reconciliation report]. *Tobacco Control Working Group [Tütün Kontrolü Çalışma Grubu]*. 2014. Avaiblable at: http://www.toraks.org.tr/uploadFiles/book/file/142201415150 2014.pdf.
36. Treur JL, Taylor AE, Ware JJ et al. Associations between smoking and caffeine consumption in two European cohorts. *Addict (Abingdon Engl)*. 2016;111(6):1059-1068. [CrossRef]
37. Haslam C, Draper ES. A qualitative study of smoking during pregnancy. *Psychol Health Med*. 2001;6:95-99. [CrossRef]
38. Wigginton B, Lee C. A story of stigma: Australian women's accounts of smoking during pregnancy. *Crit Public Health*. 2013;23(4):466-481. [CrossRef]
39. Murray CL, Small SP, Burrage L. The lived experience of smoking in pregnancy. *Open J Nurs*. 2014;04(11):762-773. [CrossRef]
40. McCurry N, Thompson K, Parahoo K, O'Doherty E, Doherty AM. Pregnant women's perception of the implementation of smoking cessation advice. *Health Educ J*. 2002;61(1):20-31. [CrossRef]
41. Thompson KA, Parahoo KP, McCurry N, O'Doherty E, Doherty AM. Women's perceptions of support from partners, family members and close friends for smoking cessation during pregnancy–combining quantitative and qualitative findings. *Health Educ Res*. 2004;19(1):29-39. [CrossRef]
42. Marakoğlu K, Sezer R. Smoking during pregnancy in Sivas [Sivas'ta gebelikte sigara kullanımı]. *Cumhuriyet Med J*. 2003;25(4):157-164.
43. Park EW, Tudiver FG, Campbell T. Enhancing partner support to improve smoking cessation. *Cochrane Database Syst Rev*. 2004;3:1-23. [CrossRef]