Exploring Awareness and Attitudes Towards Smoking Among Pregnant Women and Healthcare Professionals: A Qualitative Study

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ABSTRACT

Purpose: Smoking during pregnancy or exposure to secondhand smoke can impact fetal development and child health. Moreover, the smoking habits of healthcare professionals (HCP) not only jeopardize their own well-being but also undermine anti-smoking efforts' credibility. The aim of this study was to investigate the awareness and attitudes of pregnant women and HCP about smoking.

Methods: The study conducted four focus group interviews involving 34 pregnant women and two focus group interviews with 17 HCP. Data collection was carried out through face-to-face interviews with audio recordings, utilizing researcher-developed forms comprising of the mother's information form and semi-structured questions. Content analysis of the research data was performed using MAXQDA-24.

Results: Findings revealed that both pregnant women and HCP were exposed to secondhand smoke within their homes (40% vs 17.6%, respectively) often disregarding areas like the kitchen, balcony, or less frequented rooms as part of the indoor environment. Many emphasized the detrimental impact of smoking in the presence of children, highlighting its potential to influence children to adopt the habit. Additionally, it was stated that educational videos on smoking's dangers to child health motivated pregnant women to quit smoking.

Conclusion: The study highlights a significant gap in awareness among both pregnant women and HCPs regarding the risks of secondhand and thirdhand smoke exposure. Despite HCPs' knowledge of the harms of smoking, the presence of exposure suggest that more effective interventions are needed. To address this gap, pregnant women should receive targetted education from informed HCPs who fully understand the risks associated with smoking, particularly in the home environment.

Keywords: Child health, secondhand tobacco smoke, smoking, thirdhand tobacco smoke

ÖZET

Amaç: Gebelikte sigara içilmesi veya ortamdaki sigara dumanının solunması fetüsün gelişmesini ve çocuk sağlığını etkileyebilmektedir. Sağlık çalışanlarının sigara kullanması; öncelikle kendi sağlıklarını tehdit etmesinin yanı sıra sigara kullanımına karşı yürütülen mücadelenin güvenilirliğini de azaltmaktadır. Bu çalışmanın amacı, gebelerin ve sağlık personelinin sigara içme konusundaki farkındalık ve tutumların araştırılmasıdır.

Yöntem: Araştırmada 34 gebe ile 4 odak grup görüşmesi, bu gebelerin başvurduğu diğer birimlerde görevli 17 sağlık personeli ile 2 odak grup görüşmesi yapıldı. Araştırma verileri araştırmacılar tarafından geliştirilen anne tanıtıcı bilgi formu, yarı yapılandırılmış sorular ile yüz yüze görüşme ile ses kaydına alınarak toplanmıştır. Araştırma verilerinin içerik analizinde MAXQDA-24 kullanılmıştır.

Bulgular: Bulgular, hem hamile kadınların hem de sağlık çalışanlarının evlerinde pasif içiciliğe maruz kaldıklarını (sırası ile %40, %17.6) ve genellikle mutfak, balkon veya daha az kullanılan odalar gibi alanları kapalı ortamın bir parçası olarak görmediklerini ortaya koymuştur. Katılımcılar, çocukların yanında sigara içmenin zararlı etkilerini vurgulayarak, çocukların bu alışkanlığı edinme konusunda etkileme potansiyelinin altını çizmiştir. Ayrıca, sigaranın çocuk sağlığı üzerindeki tehlikelerine ilişkin eğitici videoların hamile kadınları sigarayı bırakma konusunda motive ettiği bildirilmiştir.

Sonuç: Çalışma, hem hamile kadınlar hem de sağlık çalışanları arasında, ikinci el ve üçüncü el duman maruziyeti ile ilgili önemli bir farkındalık eksikliğini vurgulamaktadır. Sağlık çalışanlarının sigaranın zararları hakkında bilgi sahibi olmalarına rağmen, temas varlığı daha etkili müdahalelere ihtiyaç duyulduğunu göstermektedir. Bu eksikliği gidermek için, gebeler, özellikle ev ortamındaki sigara içmenin risklerini tam olarak anlayan eğitimli sağlık çalışanlarından planlı eğitim almalıdır. Anahtar Kelimeler: Çocuk sağlığı, ikinci el tütün dumanı, sigara, üçüncü el tütün dumanı

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Received: 06.08.2024 Accepted: 26.02.2025 moking which cause severe illnesses and functional impairments, and ultimately death in smokers and those around them, while also reducing their quality of life, stands as a major public health issue due to the significant economic and emotional burdens it places on families and communities (1).

Despite causing over 8 million deaths annually, tobacco use continues to persist widely (2). According to the Turkish Health Survey 2022 data, the prevalence of daily tobacco product use among individuals aged 15 and older in Türkiye has increased to 28.3% (3). Despite awareness of all known risks associated with tobacco use, maternal smoking during pregnancy remains a global health concern (4). Additionally, exposure to secondhand smoke is as detrimental as active smoking (2,5). One form of this exposure, secondhand smoke (passive smoking), is the smoke emitted from burning tobacco products like cigarettes, cigars, or pipes, as well as the exhaled breath of a smoker (6). Thirdhand smoke, on the other hand, refers to the residual smoke particles from burned tobacco products that react with surfaces such as furniture, clothing, and walls, becoming re-emitted and potentially inhalable (7).

Maternal smoking during pregnancy or exposure to secondhand smoke not only affects the mother's health but also constitutes a leading cause of adverse health outcomes for the unborn child (e.g., stillbirth, preterm birth, low birth weight, cleft lip, asthma, sudden infant death syndrome, and metabolic disorders) (5,8). Smoking during pregnancy is prevalent both worldwide and in Türkiye (8,9).

The role of healthcare professionals is pivotal as they serve as community role models and are crucial in informing and deterring pregnant women from smoking or exposure to smoking-related risks (9). Their smoking status and exposures also shape their approaches (10). It's worth noting that healthcare professionals' smoking not only endangers their own health but also undermines efforts against smoking (11). Studies indicate a troubling rise in smoking rates among healthcare professionals both nationally and internationally (1,12-15).

We hypothesize that both pregnant women and healthcare professionals who smoke or are exposed to smoke will demonstrate a lack of awareness regarding the adverse effects of smoking on child health. Additionally, we predict that healthcare professionals' smoking habits and exposures will influence their approaches to informing and deterring pregnant women from smoking.

The aim of this study was to investigate the awareness and attitudes of pregnant women attending antenatal classes, as well as healthcare professionals working in the units visited by these pregnant women, regarding smoking.

Material And Method

The qualitative study was conducted between February and June 2023 in pregnant women and healthcare professional form two centers in Şanlıurfa, Turkey.

All participants voluntarily agreed to take part in the study and provided informed consent. Only pregnant women attending prenatal classes at Şanlıurfa Training and Research Hospital and Viranşehir State Hospital were included in the study. Only healthcare professionals working in units visited by the pregnant women were included in the study. Pregnant healthcare professionals were included in the healthcare professional group to provide a unique perspective, as they represent both the professional knowledge of healthcare providers and the lived experience of pregnancy. Their dual role allows for a more comprehensive understanding of attitudes and awareness about smoking during pregnancy.

To conduct the research, institutional permission was obtained from Şanlıurfa Training and Research Hospital and Şanlıurfa Viranşehir State Hospital, along with written approval from the University Clinical Research Ethics Committee. After obtaining these approvals, informed consent was obtained from all participants who agreed to take part in the study.

In qualitative research literature, it is recommended that the sample size should not be so small as to preclude saturation, and for phenomenological studies, conducting interviews with up to 10 individuals is suggested (16). In line with this information, 4 focus group interviews were conducted with a total of 34 pregnant women who attended antenatal classes at Şanlıurfa Training and Research Hospital and Viranşehir State Hospital. Additionally, 17 healthcare professionals working in other units visited by these pregnant women participated in 2 focus group interviews. Saturation was achieved after a total of 6 interviews conducted at both centers.

Inclusion Criteria: Pregnant women were eligible to participate if they agreed to take part in the study and were regularly attending and continuing their follow-up at the pregnancy school. Healthcare professionals were included if they agreed to participate and had direct interactions with pregnant women during the treatment or care process.

Exclusion Criteria: Individuals who refused or were unwilling to participate in the study were excluded.

Data Collection Instruments

In this study, the researchers used the mother information form and the semi-structured questions for both pregnant women and and for health personnel (Table 1). The study form was developed by the researchers. The questions were refined in accordance with existing literature (1, 8, 9, 10-12) to ensure they were relevant and aligned with the study's objectives. To ensure its clarity and appropriateness, the questions were tested with five pregnant women and healthcare professionals. Based on their feedback, adjustments were made to improve the clarity of the questions.

The Mother and Health Personnel Information Forms included sociodemographic questions such as age, occupation, marital status, and number of children. The Semi-Structured Forms for both groups contained open-ended questions regarding participants' views on smoking and tobacco use, smoking status within the home, and opinions on the effects of cigarette smoke on children's present and future health.

Data were collected through face-to-face interviews conducted by the researchers, during which audio recordings were made. Participants were informed at the beginning of the interviews that the conversations would be recorded. Suitable environments were provided to ensure that the interviews were conducted under healthy conditions, with privacy ensured for both the interviewer and the participating pregnant women and healthcare professionals.



Data Analysis

The audio recordings were transcribed verbatim and analyzed using a traditional content analysis approach, wherein categories and codes were generated by the researchers. The transcripts were repeatedly read to ensure accurate coding and categorization. The collected data were analyzed using thematic analysis. MAXQDA-24 software was utilized for content analysis. Interview statements were reported in alignment with the identified categories and codes, and participant anonymity was maintained, with quotations presented as excerpts from the discussions. For triangulation, multiple sources of data, including interviews with both pregnant women and healthcare professionals, were triangulated to enhance the validity and reliability of the findings.

Results

The mean age of the pregnant women who participated in the study was 26.3 ± 4.1 years, while that of the healthcare professionals was 30.6 ± 5.0 years. Among the pregnant women, 35.3% were literate, and 85.3% identified as housewives. Additionally, 35.3% of the husbands had graduated from secondary school, and 38.3% were selfemployed. Furthermore, 17.6% of the pregnant women lived in extended families, and 76.5% reported receiving help from their mothers in childcare. On average, the pregnant women had 2.55 ± 1.54 children. A total of 34 pregnant women were interviewed in two centres. It was determined that four of the interviewed pregnant women continued to smoke while three quit smoking due to pregnancy. All pregnant smokers acknowledged the harmful effects of smoking on child health. Thirty pregnant women believed smoking was harmful to children's health, one believed it was harmful to pregnant women, and four stated it was harmful to everyone, including themselves.

A total of 17 healthcare professionals, including 1 doctor, 3 nurses, 1 psychologist, 1 dietician and 11 midwives, working in units where pregnant women were admitted in two centres were interviewed. Four of the healthcare professionals were male. All of the healthcare professional stated that they did not smoke. 70.6% of the healthcare professionals were married, with an average of 2.0±1.0 children.

There were 14 statements about smoking during pregnancy, 57 statements about household exposure to cigarette smoke, 36 statements about negative effects on health, 14 statements about being disturbed by smoke, 19 statements about being against smoking and 10 statements about normalisation of smoking for the child. The findings obtained from the participants were divided into three themes

Theme 1. The effects of smoking on children

Most of the pregnant women (P) and healthcare professional who participated in the research emphasized the detrimental effects of smoking on child health. Specifically, they expressed concerns about the potential for respiratory distress, as noted by participants P21 and P28. One pregnant woman (P30) attributed her decision to guit smoking to a video she watched illustrating the negative consequences of smoking. Similarly, another participant (P25) mentioned that witnessing her other child develop bronchitis, attributed to cigarette smoke by the doctor, motivated her to stop smoking around her child. Additionally, a pregnant woman (P7) shared her experience of losing her baby during a previous pregnancy, which led her to abstain from smoking during her current pregnancy. Healthcare professionals echoed similar sentiments, expressing their belief that smoking would adversely affect children's lungs and have longterm negative implications for their health, as mentioned by participants P22 and P26.

Furthermore, both pregnant women and healthcare professionals voiced concerns about the potential influence of exposure to smokers on children's future smoking behavior. They emphasized the risk that children who witness smoking may be more inclined to start smoking themselves later in life.

Negative effect

P7: It's very harmful to children. I was smoking during my other pregnancy. My baby died at 5 months.

P21: I think smoking deteriorates the lungs. I've heard it corrodes them. And I think there'll be respiratory distress.

P25: Smoking is harmful to children now and later in life. My little son had bronchitis. The doctor said it was caused by cigarette smoke. That's why I don't smoke around him.

P28: The child can't breathe. It ruins a child with bronchitis. Smoking is not a good thing. If you put a kid with bronchitis in a smoking environment, he/she'll end up in intensive care.

P30: I smoke once in a while. My sister posted a video on the internet about the harm to the baby. I haven't smoked since I saw it.

HCP12: Smoking is bad for health. It affects the baby's lungs and blood circulation. It is a poison. It can cause disability and other diseases in the future.

HCP14: It is necessary to keep it away from children. Because their alveoli are very small. They are not able to handle this smoke.

The act of emulating cigarette smoking

P23: Since the child sees smoking, he/she wants to start in the future, it feels normal.

P29: The children are getting used to it. Because the father smokes, the child also wants to smoking.

HCP1: Since children are exposed to cigarettes, they become enamoured of smoking and their addiction increases.

HCP2: I don't smoke. My husband does. He smokes on the balcony. When a child sees his own father, he imitates and envies him.

Theme 2. Contact with smoking

The study found that 12 pregnant women (40%) did not smoke themselves but were exposed to secondhand smoke at home, primarily due to their spouses or other household members.

Among the 18 pregnant women who smoke and have household exposure to cigarette smoke, they mentioned using areas such as balconies and kitchens where other family members are not present for smoking.

All healthcare professionals stated that they do not smoke, while three healthcare professionals mentioned that their spouses smoke indoors or on the balcony.

Both pregnant women and healthcare professionals who participated in the study expressed the belief that passive smoking has negative effects. It was determined that there is household exposure to cigarette smoke among the pregnant women and healthcare professionals participating in the study, and there is a perception that smoking in areas such as the kitchen or balcony eliminates the effects of smoking (P1, P23, P25, HP3, HP8).

Passive smoking / Secondhand smoke

P4: I don't use it, my husband does. He smokes on the balcony. Non-smokers are more affected by smoking, it's harmful.

P27: It harms the child's lungs as they grow up. Even if they don't smoke, sitting next to someone who does affects them negatively due to the bad smell.

HCP10: Smoking should not be allowed in the presence of children. Passive smoking also has many harmful effects.

HCP16: Both cigarettes and tobacco are extremely harmful to the body. They have the same raw material. They affect the lungs to the extent of destroying them. Not only the smoker but also passive smoking is a dangerous situation. Even someone who doesn't smoke but is around someone who does is in danger as if they were smoking themselves. It is harmful for indoor use. Whether adult or child, this situation poses a high risk..

Household exposure to cigarette smoke

P1: My husband smokes a lot. He smokes inside the house too. It's poisoning the children. My children get bronchitis, I

tell my husband not to smoke. He keeps smoking. I tell him to quit smoking, but he doesn't.

P23: I'm strongly against it. I don't even allow it around me. If a guest comes to the house, they go to the balcony to smoke.

P25: I smoke. My husband smokes. We smoke at home too. When the children are inside, we either go to the balcony or the kitchen.

HCP3: I don't use it. My husband does. It should definitely not be used. My husband doesn't smoke around us. He smokes on the balcony. But even the smell is bothersome.

HCP8: Neither my husband nor I smoke. When guests come over, they smoke on the balcony.We are not with him/her at that moment.

Theme 3. Pregnant women's smoking habits

Among the interviewed pregnant women, four continued smoking, one smoked during pregnancy but quit after watching a video about the negative effects of smoking (P30), and two stopped smoking after learning they were pregnant. One of these pregnant women mentioned smoking during a previous pregnancy but quit after losing her baby during pregnancy (P7). Another pregnant woman mentioned stopping smoking during pregnancy because of the harm it could cause to the children's health (P10). All pregnant women who smoked stated that smoking is harmful to child health.

Healthcare professionals participating in the study expressed that smoking by pregnant women is akin to committing a crime against the child and also has negative effects on the mother's health (HCP14).

One pregnant woman mentioned smoking to eat the cigarette ash and not being able to tell her husband because of fear (P5). One pregnant woman who smoked mentioned continuing to smoke out of habit but expressed a desire to quit (P14).

Negative impact

P10: My husband and I used to smoke. But I don't smoke now. I don't smoke around the child. It harms the child.

P16: Pregnant women especially should not smoke because it's harmful.

HCP2: Pregnant women here also smoke. We warn them but they continue to smoke. It's very harmful for the children's health too.

HCP14: Even the name 'cigarette' is frightening. It causes permanent damage to the lungs. I can't believe pregnant women smoke. It's murder for the baby.

HCP16: Smoking during pregnancy can lead to hereditary diseases in babies. According to researches, if the mother uses alcohol and cigarettes during pregnancy, the possibility of anxiety and depression in babies increases. This shows that it is important for women not to smoke during pregnancy.

Habituation

P5: I smoke. Not a lot, actually, I eat the ash. I'm scared because my husband is around, I can't tell the doctor. My husband gets mad at me for smoking.

P14: It's a bad thing, but I use it. It should be kept out of the house as much as possible. We don't use it at home either. It also harms children. It affects their breathing. I want to quit, but I can't.

P28: I hate it, even the smell of it. It harms both life and property. Despite warning people around me, they continue. Once you start, you can't quit. Hopefully, I never smoke.

Discussion

All healthcare professionals participating in the research stated that they did not smoke, while it was determined that among the pregnant women, some continued smoking while others stopped smoking due to pregnancy. Reasons for quitting smoking included watching videos about the harms of smoking, previous negative experiences, and concerns about the negative impact on the unborn baby. Based on these findings, it is believed that education and videos provided to pregnant women about quitting smoking would be effective. Additionally, the research revealed that both pregnant women and healthcare professionals are knowledgeable about the harms of smoking. Similar studies in the literature have found that the rate of smoking among pregnant women is low (8,17).

Similar to previous research findings, the study also observed a tendency among women to quit smoking during pregnancy. However, there are still pregnant women who continue to smoke. In light of these findings, as quitting smoking during pregnancy may not be promptly achieved, it is crucial to initiate this struggle in a planned manner during the pre-pregnancy period and prioritize women's inclusion in smoking cessation programs. Within these programs, different approaches at both individual level (counseling, behavioral support therapy, text messaging, financial incentives, pharmacotherapy, etc.) and societal level (smoking bans, increasing social stigma, taxation, etc.) have been found to be beneficial (5,18-20). Quitting smoking after learning about pregnancy may be considered a delayed decision due to nearly completed organogenesis. Similar studies have also found that smoking behavior is common among women planning pregnancy and is often discontinued after pregnancy confirmation (21,22). Therefore, expanding preconception care services and considering smoking and passive exposure to smoke within this context are crucial for child health.

The study determined that 12 pregnant women (40%) do not smoke themselves but are exposed to secondhand smoke at home, while 3 healthcare professionals (17.6%) reported similar exposure. In a study conducted in Türkiye, in 2020, it was found that 50% of pregnant women were exposed to passive smoke at home (22). A similar study in China, involving a total of 15,682 pregnant women, found that non-smoking pregnant women (48.2%) were exposed to secondhand and thirdhand smoke (23). In a study comparing exposure to secondhand and thirdhand smoke, no difference was found in the levels of cotinine, a nicotine metabolite and an objective measure of passive smoking, between individuals exposed to both types of smoke. Both types of exposure lead to similar negative health outcomes.

Exposure to secondhand and/or thirdhand smoke can cause emotional, structural, or behavioral problems, as well as respiratory diseases in infants and children in later stages of life (24-26). In a study by İnci et al. aimed at determining the negative effects of environmental tobacco smoke exposure on child health under the age of five, the rate of household smokers was found to be 70.3%, and the rate of smoking mothers was 50%. According to the same study, one-third of the children of smokers were considered passive smokers based on the examination of urine cotinine/creatinine ratios, and the presence of smokers in the household and an increase in the number of cigarettes smoked per day were found to increase the frequency of acute respiratory tract infections (26).

According to the Turkey Global Youth Tobacco Survey 2017 data, approximately half of the children aged 13-15

are exposed to tobacco smoke at home (27). Babies and children living in these households are exposed to both secondhand smoke and its inevitable consequence, thirdhand smoke, from birth to adulthood. The only way to eliminate this situation is to prohibit smoking in homes (28). Babies, children, and pregnant women are particularly vulnerable to exposure to secondhand and thirdhand smoke, so they should be protected from tobacco smoke.

In the study, it was determined that pregnant women and healthcare professionals are exposed to secondhand smoke at home. Pregnant women and healthcare professionals stated that in order to protect non-smokers and children at home, smoking is confined to balconies, gardens, or rooms where no one else is present. According to this finding, participants do not consider these areas as part of the home environment and are not aware of the potential effects of tobacco smoke exposure. Furthermore, while not smoking in enclosed areas of the home prevents exposure to secondhand tobacco smoke, smoking in outdoor areas poses a risk of exposure to thirdhand tobacco smoke. While some of the pregnant women and healthcare professionals participating in the study showed caution regarding secondhand smoke, none of the participants expressed awareness of the negative consequences of thirdhand smoke. Studies in the literature have similarly found that smoking occurs indoors, in rooms, on balconies-terraces, where children are present (21,23,29).

The Turkey Baby, Child, Adolescent Follow-up Protocols guide stated that counseling on smoking should be provided to young people, and families should be educated about ensuring that babies do not have direct and indirect contact (smoking in another room, close contact with a smoker) with tobacco smoke (30).

Strengths and Limitations

As a limitation, data collection relied on self-reported information from participants, which might introduce bias or inaccuracies in responses. However, the study included perspectives from both pregnant women and healthcare professionals, enriching the analysis and interpretation of the findings. The study focused on passive smoke exposure among pregnant women and healthcare professionals, addressing an important public health concern. Qualitative data collection methods, such as interviews, allowed for in-depth exploration of attitudes, behaviors, and perceptions related to smoking and secondhand smoke exposure. The study provided insights into potential areas for intervention, such as preconception care services and smoking cessation programs, to mitigate the harmful effects of tobacco smoke exposure.

Conclusion

According to the findings of this study, it was determined that the majority of pregnant women and healthcare professionals lack awareness of the negative effects of secondhand and thirdhand smoke exposure. Additionally, the finding that some pregnant women continue smoking during pregnancy and only quit upon learning of their pregnancy can lead to significant issues concerning child health. In order to eliminate the impact of smoking and exposure to secondhand and thirdhand smoke, it is imperative for healthcare professionals with a high level of awareness regarding the negative effects of smoking to provide education to pregnant women.

Furthermore, these educational efforts should extend to include spouses and other individuals living in the household. Increasing the awareness of healthcare professionals about the harms of smoking on pregnant women and child health may also have an indirect effect on the society they come into contact with. This study is expected to raise awareness about the harms of smoking, secondhand and thirdhand smoke exposure among pregnant women, healthcare personnel and the public.

Declarations

Declarations of Interest

The authors declare no conflict of interest.

Funding

This article was not funded by anyone.

Conflict of Interest

The author declared that there is no conflict of interest

Ethical Approval

The study was conducted with the permission of the Harran University Clinical Research Ethics Committee (Protocol no: 2023/03/17).

Availability of Data And Material

Available.

Authors' Contributions

Concept- HYSA, BG, SSY; Design- HYSA, BG, SSY; Supervision- SSY; Resources- HYSA, BG; Materails- HYSA, BG; Data Collection and/or Processing- HYSA, BG; Analysis and/or Interpretation- HYSA, BG, SSY; Literature Search-HYSA; Writing Manuscript-HYSA; Critical Review-HYSA, BG, SSY.

References

- Sezgin L, Pirinçci E. Evaluation of smoking status of nurses working in hospitals in Mus province and districts. KSÜ Medical Journal. 2020;15(3):14-21. doi:10.17517/ksutfd.657555
- WHO report on the global tobacco epidemic. https://www.who.int/ publications/i/item/9789240077164
- Turkish Health Survey. https://data.tuik.gov.tr/Bulten/ Index?p=Turkiye-Saglik-Arastirmasi-2022-49747
- Azagba S, Manzione L, Shan L. et al. Trends in smoking during pregnancy by socioeconomic characteristics in the United States, 2010–2017. BMC Pregnancy Childbirth. 2020;20:52. https://doi. org/10.1186/s12884-020-2748-y
- Oflaz S, Amanak K, Kulaksız D. Relationship between smoking and adaptation to pregnancy and body image. Journal of Dependence. 2024;25(2):143-152. doi:10.51982/bagimli.1324625
- Karaçorlu FN, Pirinçci E. Evaluation of the behaviors of physicians working in primary healthcare institutions about secondhand smoke. Addicta: The Turkish Journal on Addictions. 2023;10(3):268-274. DOI: 10.5152/ADDICTA.2023.22098
- Drehmer JE, Walters BH, Nabi-Burza E, Winickoff JP. Guidance for the clinical management of thirdhand smoke exposure in the child health care setting. J Clin Outcomes Manag. 2017;24:551–9.
- Fergie L, Coleman T, Ussher M, Cooper S, Campbell KA. Pregnant smokers' experiences and opinions of techniques aimed to address barriers and facilitators to smoking cessation: A qualitative study. Int J Environ Res Public Health. 2019;16(15):2772. doi: 10.3390/ ijerph16152772.
- Cengizoğlu H, Gölbaşı Z. Determination of cigarette smoking and exposure of passive cigarette smoke among pregnant women. Gazi Journal of Health Sciences. 2021;6(3):78-89. https://doi. org/10.52881/gsbdergi.938147
- Meijer E, Kleij R, Segaar D, Chavannes N. Determinants of providing smoking cessation care in five groups of healthcare professionals: A cross-sectional comparison. Patient Educ Couns. 2019;102(6):1140-1149. doi: 10.1016/j.pec.2019.01.015.
- Hassoy D, Ozvurmaz S. Investigation of smoking status and related factors of nurses working in a state hospital. Journal of Nursing Science. 2021;4(3):140-147. https://doi.org/10.54189/hbd.1019041
- Almerie MQ, Matar HE, Salam M, Morad A, Abdulaal M, Koudsi A, et al. Cigarettes and waterpipe smoking among medical students in Syria: A cross-sectional study. Int J Tuberc Lung Dis. 2018;12(9):1085–91.
- Baska T, Pudule I, Tilgale N, Warren CW, Lee J, Lea V, et al. Smoking tobacco in waterpipes among adolescents in Europe: The case of Latvia and Slovakia. Tob Control. 2018;17(6):432. doi: 10.1136/ tc.2008.027128.
- Ahmed MM, Younis NM, Hussein AA. Prevalence of tobacco use among health care workers at primary health care centers in Mosul city. Pakistan Journal of Medical and Health Sciences. 2021;15(1):421-424.

- Sarı A, Bozkurt E, Dizen KE, Aysal S. The effect of the covid-19 pandemic on the smoking habits of healthcare professionals: A sectional look in a stage 3 hospital. Kocatepe Medical Journal 2022;23(4):447-451. https://doi.org/10.18229/kocatepetip.983772
- Onwuegbuzie JA, Leech LN. A call for qualitative power analyses. Quality&Quantity. 2007;41:105-121. DOI: 10.1007/ s11135-005-1098-1.
- Dilcen HY, Öztürk A, Yıldız MN. The relationship between smoking during pregnancy and perceived social support, self-esteem and psychological resilience. Journal of Dependence. 2021;22(2):161-170.
- Özpinar S, Demir Y, Yazicioğlu B, Bayçelebi S. Pregnant women's beliefs about third-hand smoke and exposure to tobacco smoke. Central European Journal of Public Health. 2022;30(3):154–159. doi:10.21101/cejph.a7063
- Scherman A, Tolosa JE, McEvoy C. Smoking cessation in pregnancy: A continuing challenge in the United States. Ther Adv Drug Saf. 2018;9(8):457–474.
- Acar D, Berk ÖS. Smoking cessation in pregnancy within the framework of health behavioral theories: A current review. Current Approaches in Psychiatry. 2022;14(2):152-164.
- Bal EG, Şengezer T, Yıldırım U, Özkara A. Investigation of active and passive smoking in pregnant women applying to a maternity hospital in Ankara. Konuralp Med J. 2020;12(2):261-269.
- Danagöz AP, Çetin H, Can Ö, Şimşek EE. Passive smoking levels and related factors in non-smoking pregnant. Journal of Dependence. 2020;21(4):265–274.
- Sun W, Huang X, Wu H, Zhang CJP, Yin Z, Fan Q, Ming W. Maternal tobacco exposure and health-related quality of life during pregnancy: A national-based study of pregnant women in China. Health and Quality of Life Outcomes. 2021;19(1):1–9. doi:10.1186/ s12955-021-01785-x
- Hang B, Mao JH, Snijders AM. Genetic susceptibility to thirdhandsmokeinduced lung cancer development. Nicotine and Tobacco Research. 2019;21(9):1294–1296. doi:10.1093/ntr/nty127
- Lidon-Moyano C, Fu M, Perez-Ortuno R, Ballbe M, Garcia E, Martin-Sanchez JC, Martinez-Sanchez JM. Third-Hand exposure at homes: assessment using salivary cotinine. Environmental Research. 2021;196:110393. doi:10.1016/j.envres.2020.110393
- İnci G, Baysal SU, Şişman AR. Exposure to environmental tobacco smoke by healthy children aged below five (Preliminary study). Turkish Archives of Pediatrics. 2018;53(1):37-44. doi: 10.5152/ TurkPediatriArs.2018.5963.
- Global Youth Tobacco Survey. https://hsgm.saglik.gov.tr/ depo/birimler/tutun-ve-madde-bagimliligi-ile-mucadele-db/ dokumanlar/KGTA-2017_pdf.pdf
- Sezer RE. Noncommunicable diseases and other casual factors: Exposure to secondhand and thirdhand tobacco smoke. In: Koçoğlu G, ed. Current Approaches to the Interaction of Nutrition and Dietary Components with Non-Communicable Diseases. Ankara: Turkey Clinics 2019;85-92.
- Bildik HN, Bilgin E, Demirdöğen E, Yıldız E, Aslan D, Yalçın S. Are children at risk for passive exposure to cigarette smoke: A primary school experience. Çocuk Sağlığı ve Hastalıkları Dergisi. 2008;51:147-52.
- Baby, Child, Adolescent Follow-up Protocols. https://ekutuphane. saglik.gov.tr/Ekutuphane/kitaplar/Bebek_Cocuk_Ergen_Izlem_ Protokolleri_2018.pdf