

Evaluation of Smoking and Passive Smoking in Pregnant Women Applying to the Obstetrics and Gynecology Polyclinic in Sivas

Sinan Coşkun¹, Savaş Karakuş², Yeltekin Demirel¹, Sanem Nemmezi Karaca¹

¹ Department of Family Medicine, Cumhuriyet University Faculty of Medicine, Sivas, Turkey

² Department of Obstetric and Gynecology, Cumhuriyet University Faculty of Medicine, Sivas, Turkey

Abstract: It is aimed to evaluate the smoking and passive smoking status of the pregnant women participating in this study together with sociodemographic data. Our study is an descriptive screening study and 304 pregnant women have been included. Sociodemographic information, smoking status and exposure to cigarette smoke of all participants were questioned. A survey including the Fagestrom Nicotine Addiction Test was applied to the smokers to evaluate their smoking behaviors. It was observed that 10.2% (n:31) of the pregnant women who participated in the study were still actively smoking, 9.9% (n:30) had quit, and 79.9% (n:243) had never smoked before. Smoking history was found to be significantly higher in women with a smoking spouse, low education level and working as a worker ($p<0.05$). Providing the pregnant women and their husbands with the necessary training in this regard will contribute to the awareness of the society. By guiding those who want to quit and providing psychosocial support, the pregnancy process can be turned into an opportunity to quit smoking.

INTRODUCTION

Smoking is one of the main health problems in the World and in our country ¹. Smoking by pregnant women is an even more important health problem because of the harm it will cause to the fetus ². Smoking and being exposed to secondhand smoke during pregnancy; it causes complications such as risk of miscarriage, premature rupture of membranes, premature birth, low-weight birth, stillbirth, placenta previa, ablation placenta and dysmature lung ³. Pregnant women and babies who do not smoke but are exposed to passive labor are adversely affected by cigarette smoke, as are smokers ⁴. Many of the substances in cigarette smoke are known to be carcinogenic. Cancers are 3 times more common in children of women who smoked during pregnancy ⁵.

Turkey Demographic and Health Survey (TNSA) 2008 results: 10% of pregnant women and %17 of breastfeeding women smoke ⁶. When some studies on pregnant women in Turkey are examined, it is seen that the rate of smoking is between 6.8%-28% ⁷.

Smoking during pregnancy and passive smoking remain current as an important public health problem due to the negative health problems they cause ³.

In our study, we aimed to investigate the smoking and passive smoking status of pregnant women with sociodemographic information and to contribute to the plans to be made in this regard.

MATERIALS and METHODS

This study was conducted with 304 pregnant women who volunteered to participate in the study and applied to Sivas Cumhuriyet University Hospital Gynecology and Obstetrics Polyclinic between 01.05.2021 and 31.05.2021. Pregnant women participating in the study were informed in detail about the purpose and content of the study and their consent was obtained for their participation in the study. This study is a descriptive survey study and the data obtained in the study were collected through a survey. Pregnant women who did not sign the consent form, left the survey unfinished and provided missing data by form were excluded from the study. The data were entered into the SPSS 22 package program. Pearson Chi-square test and Fisher Exact test were used for the variables obtained by

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Corresponding Author:
Sinan Coşkun
E-mail: sinan58coskun06@gmail.com
ORCID: 0000-0002-5194-850X
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counting. $p < 0.05$ was considered statistically significant.

RESULTS

The ages of the pregnant women participating in the study were between 17-43 and the average age of the participants was 28.92 ± 5.18 . Considering the age groups, 12 people (3.9%) aged 20 and under, 54 people (17.8%) between the ages of 21-24, 110 people (36.2%) between the ages of 25-29, 84 people (27.6%) between the ages of 30-34 and 44 people (14.5%) aged 35 and over participated in the study.

There was no illiterate person among the pregnant women who participated in the study. 31 people (10.2%) with primary school education, 68 people (22.4%) with secondary school, 69 people (22.7%) with high school, and 136 people (44.7%) with university attended. It was observed that 71.7% (n:218) of the pregnant women participating in the study were housewives, 23.7% (n:72) were civil servants, and 4.6% (n:14) were workers. When we look at the types of settlements where the pregnant women live, it is seen that there are 30 people (9.9%) living in the village, 46 people (15.1%) living in the district center, and 228 people (75.0%) living in the city center.

Considering the educational status of the spouses, although not literate, 31 people (10.2%) primary school, 68 people (22.4%) from secondary school, 69 people (22.7%) from high school, 136 people (44.7%) from university participated. It was seen that 23.4% (n:71) of the spouses were tradesmen, 34.2% (n:102) were workers, and 42.4% (n:129) were civil servants.

The first 22.7% (n:69) of the pregnant women participated in the study when they were in the first trimester, 42.1% (n:128) in the second trimester, and 35.2% (n:107) in the third trimester (Table 1).

When the smoking status of the participants was examined, it was seen that 31 people (10.2%) active smokers. 30 people (9.9%) who had smoked and quit at one point in their life, and 243 people (79.9%) who had never smoked took part in the study. 62.8% (n: 191) of the pregnant women participating in the study were actively or passively exposed to cigarette smoke. The spouses of 55.6% (n:169) of the participants were smokers.

When the smoking history of the participants was compared with their occupation, education status, and smoking status of their spouses; It was found statistically significant that the history of smoking was higher in those who worked as workers, those with low education level, and those whose spouses smoked (Respectively: $p=0.001$, $p=0.032$, $p=0.001$) (Table 2).

When pregnant women's exposure to cigarette smoke was compared with their education levels, their spouse's education levels and their spouse's occupations; It was found statistically significant that the rate of exposure to cigarette smoke was lower in those with a university education level, and the rate of exposure to cigarette smoke was higher in those whose spouses were at primary school and whose spouses were tradesmen (Respectively: $p=0.008$, $p=0.001$, $p=0.014$) (Table 3).

DISCUSSION

Smoking constitutes one of the most important health problems in our country and in the world, and smoking during pregnancy is also a maternal and infant health problem Like cigarette smoking, passive smoking is also closely related to pregnant health. Undoubtedly, the

Table 1: Sociodemographic data and obstetric characteristics of the participants

SOCIODEMOGRAPHIC FEATURES		N	%	
Age	20 and under	12	3.9	
	21-24	54	17.8	
	25-29	110	36.2	
	30-34	84	27.6	
	35 and older	44	14.5	
Educational Level	Primary	31	10.2	
	Secondary	68	22.4	
	High school	69	22.7	
	University	136	44.7	
Occupation	Housewife	218	71.7	
	Civil servant	72	23.7	
	Worker	14	4.6	
Type of Settlement	Village	30	9.9	
	District center	46	15.1	
	City center	228	75.0	
Family Type	Nuclear	266	87.5	
	Extended	38	12.5	
Spouse's Educational Level	Primary	34	11.2	
	Secondary	50	16.4	
	High school	85	28.0	
	University	135	44.4	
Spouse's Occupation	Tradesman	71	23.4	
	Worker	104	34.2	
	Civil servant	129	42.4	
Monthly Income	<3000 TL	82	27.0	
	3000-6000 TL	139	45.7	
	>6000 TL	83	27.3	
Chronic Diseases	Yes	61	20.1	
	No	243	79.9	
Body Mass Index (BMI)	<18.5	4	1.3	
	18.5-24.99	89	29.3	
	25-29.9	124	40.8	
	30-39.9	83	27.3	
	>40	4	1.3	
Obstetric Information	Planned / Unplanned Pregnancy	Planned	234	77.0
		Unplanned	70	23.0
	Pregnancy Week	1. Trimester	69	22.7
		2. Trimester	128	42.1
3. Trimester		107	35.2	
Gravida	Primigravid	93	30.6	
	Multigravid	211	69.4	
Abortion History	Yes	66	21.7	
	No	238	78.3	
Total		304	100	

group most affected by second-hand smoke is pregnant women and

Table 2: Statistical analysis of pregnant women with smoking history

Variables		Smoking history		P
		Yes n %	No n %	
Spouse's smoking status	Yes	50 (29.6)	119 (70.4)	0.001
	No	11 (8.1)	124 (91.9)	
Occupation	Housewife	43 (19.7)	175 (80.3)	0.001
	Civil servant	10 (13.9)	62 (86.1)	
	Worker	8 (57.1)	6 (42.9)	
Educational Level	Primary school	5 (16.1)	26 (83.9)	0.032
	Secondary school	21 (30.9)	47 (69.1)	
	High school	16 (23.2)	53 (76.8)	
	University	19 (14.0)	117 (86.0)	
Chronic Diseases	Yes	17 (27.9)	44 (72.1)	0.089
	No	44 (18.1)	199 (81.9)	

Table 3: Statistical analysis of pregnant women exposed to cigarette smoke

Variables		Smoking exposure		P
		Yes n %	No n %	
Educational Level	Primary school	22 (71.0)	9 (29.0)	0.008
	Secondary school	48 (70.6)	20 (29.4)	
	High school	50 (72.5)	19 (27.5)	
	University	71 (52.2)	65 (47.8)	
Spouse's occupation	Tradesman	51 (71.8)	20 (28.2)	0.014
	Civil servant	69 (53.5)	60 (46.5)	
	Worker	71 (68.3)	33 (31.7)	
Spouse's Educational Level	Primary school	28 (82.4)	6 (17.6)	0.001
	Secondary school	35 (70.0)	15 (30.0)	
	High school	61 (71.8)	24 (28.2)	
	University	67 (49.6)	68 (50.4)	
Family type	Nuclear	165 (62.0)	101 (38.0)	0.446
	Extended	26 (68.4)	12 (31.6)	

babies⁹.

When the results of some studies are examined, the rates of smoking in pregnant women vary between 7.3% and 12.7%¹⁰⁻¹³. In the study conducted by Marakoglu et al. in 2003 in women who gave birth in Sivas, the rate of women who smoked during any period of pregnancy was 17%¹⁴. In our study, smoking rates of pregnant women were similar to other studies and TNSA-2008 data⁶, and was lower than the study conducted in Sivas in 2003.

In the study conducted by Afsin et al. in Erzurum in 2018, housewives were in the first place among smokers with 48.3%¹⁵. In the study conducted by Balcioglu et al. In their study conducted in 2019 80% of pregnant women who smoked were housewives¹⁶. In the study of Ergin et al. smoking among unemployed pregnant women was statistically significantly higher than those who worked¹⁷. In the study of Cesur et al. smoking rate in working pregnant women was lower than housewives. When the employment status of pregnant women with a smoking history was examined in our study, housewives were in the first place 70.5%, but it was statistically more significant that the rate of smoking history was higher in pregnant women working as workers. It is thought that the fact that housewives are in the first place in groups with a history of smoking is due to the fact that the majority of pregnant women participating in these studies are housewives.

When some studies in the literature are examined, it has been stated that 48.6%-69.5% of women who smoke quit smoking during pregnancy¹⁸⁻²⁰. In our study, when pregnant women who had quit smoking were questioned, it was found that 63.3% of them quit after learning about their pregnancy status, and 10.0% quit when they planned a pregnancy similar to the studies done. In the study conducted by Borges et al. in 2005, the amount of cigarette smoked by the smoking pregnant women who received counseling and behavioral therapy decreased by 51%, while this rate was found to be 19.1% in the pregnant women in the other group²¹. These results show that it is an undeniable fact that pregnancy status pushes smokers to quit smoking. Pregnancy status can be turned into an opportunity to quit smoking, with more effective use of the healthcare team in this regard.

Conclusion

Smoking is an issue that should be emphasized during pregnancy as it is at every stage of life. One of the main preventable risk factors for maternal health, infant health, a healthy pregnancy and a healthy birth is smoking and passive smoking. It is a fact that cannot be ignored, as seen in this study, that mothers tend to quit and reduce smoking during pregnancy. However, smoking behaviors and cigarette smoke of pregnant women cannot be adequately questioned due to reasons such as keeping this issue in the background and evaluating patients in very limited time periods in polyclinics. Although they know through the media and their close circles that smoking is harmful in pregnant women, like other members of the society, their

knowledge about what kind of problems that exposure during pregnancy can cause for them and their babies is quite insufficient.

As with many chronic diseases known today, smoking is an important preventable risk factor in pathological conditions that can be seen during pregnancy and postpartum. In this respect, all couples who are planning pregnancy and who are in the pregnancy process should be given the necessary time about smoking. Training on this subject should be accelerated, and the public should be informed in detail about the risks that may arise. Individuals who are considering quitting smoking should not be left alone during the difficult process and necessary guidance and psychosocial support should be provided.

Conflict of interest

The authors declare that they have no conflict of interest.

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