

ABSTRACT

EVALUTION OF THE EFFECTS OF CIGARETTE DURING PREGNANCY

Op. Dr. Fatma Horasan Altıntasoglu*

Gynecology Obstetrics and IVF Specialist / Private Gynecology Obstetrics and IVF Clinic —Alsancak/İzmir.

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*Corresponding Author Op. Dr. Fatma Horasan Altıntasoglu Gynecology Obstetrics and IVF Specialist / Private Gynecology Obstetrics and IVF Clinic -Alsancak/İzmir. Smoking during pregnancy has many maternal and fetal adverse effects. These are fetal growth restriction, increased risk of miscarriage, ectopic pregnancy, premature rupture of membranes, premature birth, stillbirth, placenta previa, placental abruption, sudden infant death syndrome (SIDS) and childhood effects. While the prevalence of smoking is rapidly decreasing in developed countries, total cigarette consumption in the world is increasing rapidly. Smoking addiction should be combated by using media, internet, visual and other educational tools. In this study, it was aimed to investigate the effects of smoking during pregnancy on pregnancy and newborn. Smoking status of 188 pregnant women who applied to our clinic between 2008-2018 was questioned. Smoking behaviors of pregnant women were questioned. Diseases during pregnancy, newborn birth weights, and ultrasound follow-up treatment findings during pregnancy were recorded. Permission was obtained from the patients. As a result of the study, it was seen that 89.4% of the pregnant women did not smoke, 6.3% of them smoked 10 or less cigarettes per day, and 4.3% of them smoked 10 or more cigarettes. IUGR in only 4 (2.3%) of 168 non-smoking pregnant women (89.4%), hypertension and fetal IUGR in 3 (25%) of 12 pregnant women who smoked 10 or less, hypertension and fetal IUGR in 5 of 8 pregnant women who smoked 10 or more fetal IUGR (62.5%) and gestational diabetes in 1 (12.5%) were detected.

KEYWORDS: Pregnancy smoking prevalans.

ENTRANCE

Cigarette consumption is very common in developed and developing countries and is among the important health problems1. Deaths due to cigarette consumption are 5-10 times higher than deaths due to causes such as terrorism, acquired immune deficiency syndrome (AIDS), and traffic accidents.^[2]

Cigarette consumption causes important health problems, especially in pregnant women, as in all age groups3. According to TDHS 2008 data, the rate of smoking in pregnant women is 11%4. In studies conducted in our country, the rate of smoking was reported as 6.8-28%5,6,7-14. Smoking during pregnancy or being exposed to cigarette smoke by being in a smoking environment negatively affects fertility, fetal development, every stage of pregnancy and delivery, and leads to consequences such as low birth weight, premature birth, stillbirth, and risky birth. In addition, it has been reported that tobacco consumption during pregnancy is associated with cognitive function, general intelligence, psychological problems, substance abuse, mood disorder, delinquency in adolescence, Type-II diabetes and obesity, childhood cancers and chest diseases in children in the long term.^[4,6,15-21]

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In this study, it was aimed to evaluate the effects of smoking during pregnancy.

MATERIAL AND METHOD

In this study, it was aimed to investigate the effects of smoking during pregnancy on pregnancy and newborn. Smoking status of 188 pregnant women who applied to our clinic between 2008-2018 was questioned. Smoking behaviors of pregnant women were questioned. Intrauterine growth retardation (IUGR), hypertension and fetal IUGR and gestational diabetes mellitus (GDM) conditions were evaluated according to smoking status. Diseases during pregnancy, newborn birth weights, and ultrasound follow-up treatment findings during pregnancy were recorded. Permission was obtained from the patients.

RESULTS

In our study; IUGR in only 4 (2.3%) of 168 non-smoking pregnant women (89.4%), hypertension and fetal IUGR in 3 (25%) of 12 pregnant women who smoked 10 or less, hypertension and fetal IUGR in 5 of 8 pregnant women who smoked 10 or more fetal IUGR (62.5%) and GDM (12.5%) were detected in 1 (12.5%) (Table 1).

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	IUGR	Hipertansiyon+ Fetal IUGR	GDM
Non Smoker n = 168 (%89.4)	4 (%2.3)		
Smokers of 10 or less per day n = 12 (%6.3)		3 (%25)	
Smokers of 10 or more cigarettes per day $n = 8 (\%4.3)$		5 (%62.5)	1(%12.5)

Table 1: Smoking status and diseases of patients.

DISCUSSION

There are many factors that affect the growth and development of the fetus. Passive or active smoking is important because it is common and preventable. 90% of smokers start before the age of 20. Male users are decreasing, while female users are increasing rapidly, especially in developing countries6,22. In different studies, it has been reported that pregnant women continue to smoke and intrauterine growth retardation is seen in pregnant women who smoke.^[4,6,23-25]

In addition, growth restriction, increased risk of miscarriage, premature rupture of membranes, premature birth, stillbirth, placental anomalies, sudden infant death syndrome and childhood effects are 6,^[22-27] As the number of cigarettes increases during pregnancy, fetal weight decreases. Carbon monoxide gas causes adverse fetal effects by causing chronic fetal hypoxia.^[27]

While smoking is decreasing rapidly in developed countries with the support of education programs, it is increasing rapidly in other countries. Tobacco industry, like every industry, increases its sales volumes with advertising and marketing.^[26,28]

In the past, the relationship between smoking frequency and occupational status in Turkey differed from other countries. In the study of Bilir et al. in 1997, 44% of physicians and 51% of teachers were found to smoke.^[29]

In our study; IUGR in only 4 (2.3%) of 168 non-smoking pregnant women (89.4%), hypertension and fetal IUGR in 3 (25%) of 12 pregnant women who smoked 10 or less, hypertension and fetal IUGR in 5 of 8 pregnant women who smoked 10 or more fetal IUGR (62.5%) and GDM (12.5%) were detected in 1 (12.5%).

In the 2007-2011 data of the US Academy of Pediatrics, it was determined that the risk of sudden death in the baby increased by 0.07 for each cigarette, and increased by 3 times when 20 cigarettes were smoked.^[30]

CONCLUSION

Smoking also causes placental pathologies in pregnant women. These pathologies are important for forensic medicine. In pregnant women who smoke, placenta should be sent for pathological examination. In later years, macroscopic and microscopic reports of the placenta should be kept in terms of medicolegal

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problems in any developmental pathology related to the baby.

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