

Knowledge of the Adverse Effects of Smoking and Related Changes in Smoking Status during Pregnancy among Female Smokers

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The tobacco epidemic is one of the most serious threats to health and economic growth worldwide, killing over 8 million people each year both from direct tobacco use and exposure to passive smoke [1]. The prevalence of female smokers in low-middle income countries and Mongolia is 7.8% and 6.9%, respectively [2, 3]. Most people are aware of smoking-related adverse health effects, such as cancer and cardiovascular disease, and that both active and passive smoking contribute to various antenatal complications in pregnant women [4]. Smoking during and after pregnancy is associated with fetal and infant risks, including low birth weight (<2500 g) [4, 5]. The risk of premature labor is also higher in pregnant women who smoke than in those who do not, and the risk increases with the number of cigarettes smoked per day [5]. A higher number of miscarriages occur in active smokers during pregnancy than in nonsmokers, and several studies showed that passive smoke exposure increases the risk of miscarriage by 11% [6]. This study provides insight into the knowledge of health risks associated with active and passive smoking during pregnancy among women who smoked prior to pregnancy. The percentage of smokers at the time of conception in this study who continued to smoke during pregnancy was 53%, which is higher than that reported in Japan (30.4%), Greece (38.7%), and the United States (45.7%) [7-9], but lower than Russia (59.7%) and Turkey (61.7%) [10, 11]. The rate of smoking cessation triggered by pregnancy also differs between each surveyed country, but in all of them, more than one-third of women quit smoking.

More than 60% of participants in this study were not aware of the specific health risks but were aware that passive smoking is detrimental to health. No association between knowledge of the health risks of passive smoking and smoking behavior among pregnant women was observed. Similarly, a report from Mongolia that biochemically defined smokers and nonsmokers based on the amount of cotinine in their urine found that knowledge of passive smoke exposure was not related to smoking status [12]. A study from Korea also failed to find an association between the knowledge of health risks of passive smoking and smoking behavior among women, with men being the exception in this case [13]. Another study reported that the majority (86%) of pregnant women knew that passive smoke exposure was harmful during pregnancy; however,

their knowledge of the specific impact on fetal health was limited [14].

In Mongolia, there is a lack of anti-smoking public health initiatives at the national level and studies conducted on smoking during pregnancy are limited; hence, this issue remains challenging. In this study, we aimed to clarify the association between smoking behavior during pregnancy and knowledge about the health risks associated with active and passive smoking among female smokers prior to pregnancy in Mongolia. In conclusion,

smoking during pregnancy is highly prevalent in Mongolia and is associated with a lack of knowledge of the health risks associated with active smoking. Furthermore, awareness of the effects of smoking on maternal and fetal health is a strong motivator for smoking cessation [15]. Therefore, adequate public health advisories regarding the general adverse effects of smoking, but also with a focus on maternal and fetal health are required. To promote smoking cessation during pregnancy in Mongolia, it is also necessary to disseminate information on the health effects associated with smoking regardless of educational status.

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