

# A Study To Assess The Knowledge and Attitudes regarding Risk Factors among pregnant Women at selected Hospitals in Indore.

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## Introduction

When it comes to women's health, the preconception period is regarded as a critical time for developing a healthy lifestyle that will benefit both mother and child. Pregnancy is a good time for identifying any existing maternal risk factors, even though it has been well documented that interventions to promote appropriate behaviours in women of reproductive age should be implemented prior to conception and that maternal risk factors should be identified and modified as well [3–6]. Increasing women's knowledge about the dangers of pregnancy and childbirth can have immediate benefits by lowering the incidence of complications, as well as long-term advantages for the health of mothers and children.

Maternal behaviours and a variety of conditions have long been linked to adverse pregnancy outcomes. There is a direct link between lifestyle factors such as smoking and drinking during pregnancy and lower birth weight, preterm delivery and mortality. The increased risk of pre-eclampsia, neurological, cardiac, and orofacial defects, high birth weight, and stillbirth was also associated with maternal weight problems (obesity and gestational diabetes).

Individual risk factors for pregnancy, such as smoking, alcohol consumption, oral health, and obesity, have been examined in a number of studies involving pregnant women and reproductive-age women. However, few studies have looked at multiple risk factors at once. As a result, the current study, which was conducted with a sample of pregnant women, had two primary objectives. The first goal was to determine how well women understood, felt, and behaved in relation to the most important risk factors for mothers during pregnancy. As for the second goal, it was to figure out what influences pregnant women's knowledge and attitudes about the most important maternal risk factors and to create a profile of pregnant smokers.

## Methodology

Women of all ages and stages of pregnancy were included in the cross-sectional survey. They were chosen at random from the ambulatory gynaecological services of five Indore-based hospitals. Single-stage stratified cluster sampling was used to collect the data. In order to get approval from the hospital director and the head of the department of gynaecology, a letter outlining the study was sent to them.

A self-administered anonymous questionnaire was used to conduct the research. After completing the questionnaire in the ambulatory services waiting room, pregnant women had twenty minutes to hand it back in to the researchers. Data on sociodemographic characteristics, knowledge and attitudes about the main maternal risk factors in pregnancy as well as the perception of pregnant women about harming the foetus or newborn

baby as a result of their behaviour were collected through the questionnaire. The self-rating of health was assessed using a ten-point Likert-type scale, with responses ranging from 1 (poor) to 10 (excellent). Each risk factor was tested using closed-ended questions with a yes/no answer format. The open format "agree," "uncertain," and "disagree" was used to gauge a respondent's mindset. Worry was graded on a Likert-type scale of 1 to 10, with 1 representing "not worried" and 10 representing "extremely worried" (very worried). Closed-end questions with dichotomous (yes/no) and open-ended responses were used to assess behaviour. The respondents were given the option to list multiple sources of information and to rate the usefulness of their knowledge about the most important risk factors for pregnancy that they had received. A ten-point Likert-type scale was used, with responses ranging from 1 (inadequate) to 10 (very helpful) (very helpful). Pregnant women were recruited for a pilot study (and their responses were included in the final sample number of the survey). The purpose of this exercise was to determine whether or not the questions were written in a comprehensible manner. No changes were made to the questionnaire following the pilot study.

A letter outlining the study's purpose and goals, as well as assurances about participant privacy and confidentiality, was given to each participant in order to obtain written informed consent. As for minors, the parents of minors provided written informed consent.

## Results

Pregnant women were aware that alcohol (88 percent), smoking (90 percent), obesity (70 percent) and passive smoke (62 percent) could harm the health of the foetus when assessing their levels of knowledge. In contrast, only 56% of the sample correctly identified all of the major maternal risk factors during pregnancy (alcohol, smoking, passive smoking and obesity). Following a multivariate analysis, it was discovered that four variables were significantly linked to an understanding of the most important maternal risk factors. Respondents who were older, those who were very concerned about harming the foetus or newborn baby, and women who were not Italian nationality were more likely to know the main maternal risk factors in pregnancy. The odds of knowing the main maternal risk factors for pregnancy were significantly lower among women who had only completed high school or had less formal education than among those who had earned a baccalaureate or graduate degree.

More than 88% of pregnant women agreed that alcohol consumption, rubella infection, maternal weight gain, and smoking during pregnancy could harm the foetus, according to a study. As a result, 90% of pregnant women agreed that the TORCH complex test should be performed during the first trimester.

Among women polled, only 32% were of the opinion that drinking alcohol during pregnancy can be harmful to the unborn child, as can smoking, passive smoking, and being overweight. Women were more likely to agree if they were aware of the main maternal risk factors during pregnancy, according to multivariate logistic regression analysis. In addition, women with only a high school diploma or less were significantly less likely than those with a bachelor's or graduate degree to agree that alcohol, smoking, passive smoking, and obesity could harm a foetus or newborn baby. With their risky behaviours, only 23 percent of women were extremely concerned about harming themselves or their foetus.

In terms of habits, 8% of pregnant women admitted to smoking, with an average of 5 cigarettes smoked per day. Women who reported drinking alcohol on a regular basis prior to pregnancy (18 percent) were more likely (74.8%) to stop drinking when they became pregnant. More than two-thirds of pregnant women who drank alcohol intend to stop, according to a study published in JAMA Internal Medicine in 2018. During the first trimester of pregnancy, 7.6 percent of women smoked and drank alcohol. Women who smoked during their pregnancies' profiles were analysed using multiple logistic regression. Women who had had at least one abortion and those with a middle school or lower education were found to be more likely to engage in this behaviour than women with a college degree.

In ambulatory gynaecological exams, two-thirds of women (60 percent) said they had received information from their doctor about possible harm to a newborn baby from alcohol consumption during pregnancy, and nearly all women (88 percent) had been informed about the potential harm to a newborn baby from smoking cigarettes. Many women were also told by their doctors that it was critical to maintain a healthy weight (94 percent), lower blood pressure (89.7 percent), and maintain a healthy glucose level (85 percent) during pregnancy (81 percent). During ambulatory gynaecological examinations, only 42.7% of expecting mothers reported that they had received information from their doctor about the potential harm that could result from all of the major risk factors associated with pregnancy (alcohol, smoking, passive smoking and obesity). This outcome was found to be more likely among older women and those who did not believe that they needed more information about maternal risk factors in pregnancy according to the results of multivariate logistic regression analysis.

### Conclusion

According to the findings of this study, pregnant women are ill-informed about the most common maternal risk factors. During gynaecological examinations, pregnant women claim that they are given little information and thus continue to smoke and/or drink alcohol. Our findings point to the necessity of developing interventions to raise awareness of the major risk factors among pregnant women, as well as to help them adopt more appropriate behaviours.

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