

Prevalence of Tobacco Smoking and Accuracy of Self-Reporting in Pregnant Women at a Public Hospital for Women and Children

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Abstract

Introduction: Denial of smoking status by pregnant women presents a missed opportunity for referral to smoking cessation programmes that are shown to be effective in helping them quit smoking. **Materials and Methods:** A cross-sectional epidemiological survey was conducted to detect the true prevalence of active smoking pregnant patients and the accuracy of self-reporting, investigate the sociodemographic risk factors and test the knowledge of pregnant patients on adverse effects of smoking. This involved 972 antenatal patients of a maternity hospital where participants completed a sociodemographic data survey and answered a knowledge questionnaire. Urine cotinine testing was carried out after informed consent. **Results:** The prevalence of active smokers was 5.2% (n = 50) with 3% (n = 29) being light smokers and 2.2% (n = 21) being heavy smokers. This was significantly higher than self-reported active smoking status of 3.7% (n = 36; $P = 0.02$). The Malay race, being aged less than 20 years and not having tertiary level qualifications independently increased the likelihood of being an active smoker. Knowledge of the adverse effects of smoking was generally good with a mean total score of 8.18 out of 10 but there were differences amongst the non-smokers, passive smokers, light smokers and active smokers ($P = 0.012$). **Conclusion:** While the prevalence of active smoking among pregnant women is low in Singapore compared to other countries, this study substantiated the unreliability of self-reporting of smoking status in the pregnant population which could complicate referral to smoking cessation programmes. The lower awareness of the harms of smoking during pregnancy among smokers highlights a potential area for improvement.

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