

**Socio-demographic and lifestyle factors associated with spontaneous abortion among
women attending Thika District level V hospital, Kenya**

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A thesis submitted in partial fulfillment for the degree of Master of Science in Public
Health in the Jomo Kenyatta University of Agriculture and Technology

2011

ABSTRACT

Globally, an estimated 210 million women become pregnant annually and more than 25% of these pregnancies end in abortion or an unplanned birth. While many abortions may result from the desire to delay or avoid pregnancy, it is estimated that 15% to 20% of pregnancies end in spontaneous abortion which may be associated with maternal diseases such as malaria, HIV/AIDS and maternal lifestyle such as heavy caffeine intake before and during pregnancy and exposure to domestic violence. The understanding of the etiology of spontaneous abortion is still limited as few studies have been conducted on the same. Information on the occurrence as well as exposure factors of spontaneous abortion is non-existent in Kenya. The main objective of this study was to determine the socio-demographic and lifestyle factors associated with spontaneous abortion among women attending Thika District level V hospital, Kenya. A cross-sectional descriptive study was carried out in Thika District level V hospital, Kenya that included a total of 196 ante-natal and post-natal women who were systematically selected to participate in the study. A pretested questionnaire was then administered to women within the child bearing age (18-49 years) to determine the level of occurrence as well as exposure factors of spontaneous abortion. Level of occurrence based on “ever suffered” a spontaneous abortion was 28.6%. Having a family history of spontaneous abortion was the only socio-demographic factor significantly ($p < 0.020$) associated with spontaneous abortion. A woman had a 2.4-fold risk (OR= 2.4, 95% CI= 1.135-5.073) of experiencing a spontaneous abortion if she had such a history.

Among the lifestyle factors, coffee intake during pregnancy was significantly ($p < 0.002$) associated with spontaneous abortion with 37.9% of those reporting to have taken coffee during pregnancy experiencing a spontaneous abortion relative to 18.3% of those not taking coffee.

Further research through controlled studies on the quantity and duration of coffee intake that predisposes one to spontaneous abortion is however necessary in order to corroborate these findings. Exposure to X-ray treatments during pregnancy was also significantly ($p < 0.001$) associated with spontaneous abortion with 70% of those who had been exposed to X-rays experiencing a spontaneous abortion. Ante-natal clinic attendance was also significantly ($p < 0.005$) associated with spontaneous abortion whereby there was a decreased risk (OR=0.23; CI= 0.08- 0.69) of experiencing a spontaneous abortion if a woman was attending ante-natal clinic. A significant association ($p < 0.001$) was also observed between malaria and spontaneous abortion. The results of this study provide evidence that several lifestyle factors are associated with spontaneous abortion among women attending Thika District level V hospital. Advice to encourage women to adopt an appropriate lifestyle such as ante-natal clinics attendance needs to be emphasized. The results also provide a basis for further work so that more evidence can be provided on the etiology of spontaneous abortion.