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Title: Asthma affects time to pregnancy and fertility - A register based twin study

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Body: Background: Coexistence of infertility and asthma has been observed clinically, and patients with asthma seem more difficult to successfully treat for infertility in terms of becoming pregnant. Objective: The aim of this study was to investigate the association between asthma and infertility in a nationwide population-based cohort of twins. Methods: A cohort of 15.250 twins living in Denmark (aged 12-41 years) participated in a questionnaire study including questions about the presence of asthma and fertility. Differences in time to pregnancy and pregnancy outcome were analyzed in subjects with asthma and healthy subjects using multiple regression analysis. Results: Asthma was associated with increased time to pregnancy ($p=0.010$). The association remained significant after adjustment for age, BMI and socioeconomic status ($p<0.05$), and selectively in subjects above 30 years of age ($p=0.007$). Furthermore, there was a tendency towards more spontaneous abortions among those with asthma compared with healthy women (12.3 versus 9.8%, $p=0.738$). The average number of offspring in the two groups was identical. Conclusion: Asthma prolongs time to pregnancy and tends to induce a higher number of abortions, indicating a systemic disease probably related with systemic inflammation also involving the uterus cavity.