Factors influencing women's choice of contraception

Akademisk avhandling

som för avläggande av medicine doktorsexamen vid Sahlgrenska akademin vid Göteborgs Universitet kommer att offentligt försvaras i kvinnoklinikens aula, Sahlgrenska Universitetssjukhuset/Östra fredagen den 27 maj 2011 kl 9.00

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Avhandlingen baserar sig på följande studier:

- I. Lindh I, Blohm F, Andersson-Ellström A, Milsom I. Contraceptive use and pregnancy outcome in three generations of Swedish female teenagers from the same urban population. Contraception 2009;80:163-169.
- II. Lindh I, Andersson Ellström A, Blohm F, Milsom I. A longitudinal study of contraception and pregnancies in the same women followed for a quarter of a century. Human Reproduction 2010;25:1415-1422
- III. Lindh I, Andersson Ellström A, Milsom I. The long-term influence of combined oral contraceptives on body weight. Human Reproduction 2011; doi: 10.1093/humrep/der094 [Epub April 19, 2011]
- IV. Lindh I, Andersson Ellström A, Milsom I. Are combined oral contraceptives effective in the treatment of dysmenorrhea? (Submitted 2011).



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Abstract

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Aims: To describe contraceptive use and to identify factors influencing women's use of contraception in order to improve future contraceptive compliance.

Methods: Contraceptive use, reproductive health, weight/height and smoking were assessed by postal questionnaires distributed to random samples of 19-year old women resident in Gothenburg, Sweden, born in 1962, 1972 and 1982. Longitudinal and cross-sectional comparisons were performed between the cohorts from 1981 to 2006.

Results: Combined oral contraceptives (COCs) were the commonest method used \leq 29 years of age while intrauterine methods were more common later in life. Condom use increased successively over time. Current contraceptive use in 19-year old women from the 82-cohort was higher (78%) and the number of women \leq 19 yr who had been pregnant was lower whereas repeated abortions were higher compared to the 62- and 72-cohorts. Common reasons for cessation with COC's were mental side effects and weight increase. Smoking decreased over time and BMI increased over time and was higher in low socio-economic status areas in the 82-cohort. At 44 years of age there was a difference in contraceptive use and pregnancies between women who had been pregnant \leq 19 years of age compared to those who had not been pregnant as teenagers. The only predictor found for weight increase was age resulting in a gain of 0.45 kg/year. COC use was not a predictor of weight increase (0.072 kg/year). Smokers decreased their weight by 1.64 kg per 15 years. Women from the 82-cohort reported a greater severity of dysmenorrhea. The efficacy of COCs to relieve dysmenorrhea was evaluated using a verbal multidimensional scoring (VMS) system and a visual analogue scale (VAS). COC use and increasing age independently of each other reduced dysmenorrhea.

Conclusion: Choice of contraception was strongly related to age and parity. COC use did not influence long-term weight increase. COC use and increasing age, independent of each other reduced dysmenorrhea severity. The prevalence of smoking decreased over time while body mass index (BMI) increased, in particular in lower socioeconomic status areas.

Keywords: Contraception; reproductive health; body mass index; smoking; socioeconomic status; dysmenorrhea; epidemiology; longitudinal; cross-sectional.