
Abstract

STUDY OBJECTIVES: To compare the demographic, behavioural, and biological correlates of use of hormone replacement therapy (HRT) in women with an intact uterus and women who have undergone hysterectomy.

DESIGN: Cross sectional analysis of data from the Busselton Health Study and the 1994 Healthway-National Heart Foundation Risk Factor Survey.


PARTICIPANTS: 2540 women aged 35-79 years. MAIN

OUTCOME MEASURES: Demographic, behavioural, and biological correlates of use of HRT by hysterectomy status.

RESULTS: In women with an intact uterus, after adjustment for age and place of residence, current use of HRT was significantly associated with having a professional level of occupation, ever use of alcohol, having a history of smoking, and a lower body mass index. Current users of HRT had significantly lower levels of total cholesterol and higher levels of triglycerides than non-users. In women who had undergone hysterectomy, the only non-biological characteristic associated with use of HRT was having a history of smoking. Current users of HRT had lower levels of systolic blood pressure, lower levels of LDL cholesterol, higher levels of HDL cholesterol, and higher levels of triglycerides. The association between use of HRT and participation in exercise, level of systolic blood pressure, level of HDL cholesterol, and total/HDL cholesterol ratio varied significantly by hysterectomy status. After adjustment for age and place of residence, the mean levels of systolic and diastolic blood pressure, body mass index, waist/hip ratio, LDL cholesterol, and total/HDL cholesterol ratio were highest in women who had undergone hysterectomy and were not using HRT.

CONCLUSIONS: Demographic/behavioural and biological correlates of use of HRT varied depending on hysterectomy status. Demographic and behavioural characteristics were more important as selection factors for use of HRT in women with an intact uterus than in women who had undergone hysterectomy. Women who had undergone hysterectomy and were not using HRT had a significantly worse profile for CHD than did women with an intact uterus. These results indicate that any bias in estimates of the protective effect of HRT on risk of CHD in observational studies is likely to depend on the prevalence of hysterectomy within the study population. Hysterectomy status
needs to be taken into account in any studies that investigate the effect of HRT on risk of CHD.