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## Technical Report

### Characteristics of women currently using hormone replacement therapy in rural areas of Styria, Austria

#### Summary

*There are no clear-cut guidelines on "hormone replacement therapy". Each women should be individually counselled regarding her risks and then given "therapy". We studied a rural population in Styria that uses non-contraceptive hormones. Our analyses were based on data drawn from a cross-sectional health survey between 1995 and 1996. Our study sample comprised 499 women 40 to 65 years old; 97 of the women were using hormones (19,4%). According to the univariate analysis, women currently using hormones had a higher level of psychosomatic complaints, a higher frequency of health check-ups and visits to physicians, and reported a higher use of vitamin supplements than the nonusers. The results are significant. Compared with other studies, the direction of the selection effect is inverse. Doctors attribute complaints to the perimenopausal status of the women and prescribe hormones in the hope of alleviating the problems. Medical interventions may interfere with possible alternative ways of coping with the menopause allowing for change in different aspects of a woman's life.*

There is no clear-cut information about hormone replacement "therapy" that care providers can give to perimenopausal women<sup>1-2</sup>. Each woman should be individually counselled regarding its benefits and risks so that she may make an informed decision about its use<sup>3</sup>. We studied a rural population in Styria with the objective of describing the correlates of using non-contraceptive hormones.

Our analyses are based on data drawn from a cross-sectional health survey conducted in 10 rural com-

munities of Styria between 1995 and 1996. In this study a random sample of non-institutionalized inhabitants aged 15 years and older was selected from the population registry. A total of 2185 participants, 1291 women and 894 men, comprising a 10% sample of the 10 communities, gave a personal interview. Following a questionnaire, the interviews surveyed socio-demographic data, health and risk behavior, health complaints, chronic diseases and the utilization of preventive and restorative services.

In our study we used the data for 40 to 65 year-old women. The study sample comprised 499 women (mean age 51,1; SD 7,6), 97 hormone users (mean age 53,6; SD 5,3), making up 19,4%, and 402 nonusers (mean age 50,5; SD 7,9). The following characteristics were included: educational level, marital status, body mass index, self-reported health status, psychosomatic complaints, frequency of health check-ups and visits to physicians, regular physical activity, cigarette smoking, use of analgesics and vitamin supplements.

We statistically analyzed the data set with SPSS/PC. Univariate analysis using Mann-Whitney-U-test was conducted comparing hormone users and nonusers on the variables listed above. Logistic regression analyses were applied to these variables in order to control for age.

According to the univariate analysis, women currently using hormones were older ( $p \leq 0.0001$ ), reported worse health status ( $p \leq 0.0045$ ), and a higher level of psychosomatic complaints ( $p \leq 0.0024$ ), had a higher frequency of health checkups ( $p \leq 0.0006$ ) and visits to physicians ( $p \leq 0.0002$ ), and reported a higher use of vitamin supplements ( $p \leq 0.0143$ ) than the nonusers. The differences in characteristics such

as educational level ( $p \leq 0.55$ ), marital status ( $p \leq 0.51$ ), body mass index ( $p \leq 0.72$ ), cigarette smoking ( $p \leq 0.34$ ), regular physical activity ( $p \leq 0.087$ ), and the use of analgesics ( $p \leq 0.063$ ) were not significant. The significant results of the logistic regression analyses are shown in Table 1.

There are striking differences in the characteristics of hormone users and nonusers in these communities. The direction of the selection effect is inverse compared to other studies on this issue<sup>4-5</sup>. In this rural population, older women with a larger number of psychosomatic complaints, and a higher frequency of health check-ups and visits to physicians, currently use hormones. Possibly, doctors thus hope to help women with complaints because they attribute them to their perime-

Variables	OR <sup>a</sup>	p <sup>b</sup>
Psychosomatic complaints	1,58	0.0064
Health check-ups	1,44	0.0003
Visits to physicians	1,04	0.0033
Use of analgesics	1,30	0.0155
Use of vitamin supplements	1,23	0.0086

<sup>a</sup> Age adjusted odds ratios, <sup>b</sup> p-value.

**Table 1.** Differences in characteristics of users and nonusers ( $n = 499$ ).

nopausal status. A possible limitation of this study is that menopausal status has not been assessed; however, hormone replacement is only prescribed from the start of the perimenopausal period. Approaches to the improvement of health are severely limited when

focusing on single organs only, rather than on a woman's whole physical, mental and social well-being. Medical interventions may interfere with possible alternative ways of allowing for changes in different aspects of a woman's life.

## Zusammenfassung

### Charakteristika von hormonsubstituierenden Frauen in ländlichen steirischen Regionen

Es gibt keine eindeutigen Richtlinien über die „Hormonersatztherapie“. Am häufigsten ist die Empfehlung, die individuelle Risikosituation der Frau zu berücksichtigen und danach zu therapieren. Wir untersuchten in diesem Zusammenhang Merkmale von hormonsubstituierenden Frauen in einer ländlichen Region. Die Analyse wurde mit Daten aus einer Gesundheitsstudie durchgeführt. In unsere Arbeit wurden 499 Frauen im Alter von 40 bis 65 Jahren untersucht; davon substituierten 97 Frauen Hormone (19,4%). Folgende Merkmale waren in der univariaten Analyse signifikant: Substituierende Frauen hatten mehr psychosomatische Beschwerden, häufiger Gesundenuntersuchungen und Arztbesuche und substituierten häufiger Vitamine als Frauen, die keine Hormone einnahmen. Die Resultate stehen im Gegensatz zu anderen diesbezüglichen Studien. Möglicherweise attribuieren Ärztinnen und Ärzte psychosomatische Beschwerden als Perimenopause und „therapieren“ dementsprechend mit Hormonen. Ganzheitliche Sichtweisen in der Behandlung von Frauen in dieser Lebensphase wären hier von grosser Bedeutung.

**Résumé****Caractéristiques des femmes sous traitement hormonal substitutif dans une région rurale de Styrie**

Le traitement hormonal substitutif (THS) ne connaît pas de règles générales. La recommandation la plus fréquente est de tenir compte des risques individuels de la femme et d'appliquer une thérapie adéquate. Dans ce contexte, nous avons examiné les caractéristiques des femmes sous hormonothérapie substitutive habitant dans une région rurale. L'analyse est basée sur les données d'une étude de santé. Notre travail a porté sur 499 femmes âgées de 40 à 65 ans, dont 97 sous THS (19,4%). Les caractéristiques significatives de cette analyse univariée sont: Les femmes sous THS souffraient plus souvent de douleurs psychosomatiques, visitaient plus souvent le médecin, faisaient plus souvent des examens médicaux et prenaient plus souvent des vitamines substitutives que les femmes sans THS. Les résultats sont contraires aux autres études à ce sujet. Il est bien possible que les docteurs et doctresses attribuent les douleurs psychosomatiques à la péri-ménopause. Cela mène à une prescription d'hormones. Une vue globale concernant le traitement des femmes pendant cette période de leurs vie serait d'une grande importance.

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