

2008 and 2009 in the Selska Valley, Slovenia. Of participants, 26 were women (ages 59–86) and 14 men (ages 57–82). Self-report data and physical assessments were recorded for each individual. We used linear regression to explore associations between frailty and these variables. Significant associations ($p=0.05$) were found between frailty and age, being female, height, length of residence in the village, self-reports of negative health effects including poor overall health, feeling tired, and negative future health expectations. When effects of age and sex were controlled, significant associations were again found between frailty and multiple self-reports of poor health and painful or reduced activity level. In conclusion, this paper explores possible interactions of lifestyle factors and frailty across cultures and calls for further cross-cultural frailty research.

Key words: *physiological variation, frailty, old people, Selška valley, Slovenia*

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REPRODUCTIVE HISTORY IN RELATION TO FATNESS IN THE MENOPAUSE TRANSITION

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The occurrence and the timing of the reproduction-related events, as menarche and menopause, as well as the characteristics of menstrual cycles and reproductive life, as gestations, lactation, child-caring behaviour, etc. are mainly controlled by the neuroendocrine system. The progressive and regressive changes of the neuroendocrine system through the female life cycle contribute not only to the age-changes of the reproductive system and reproductive behaviour but also to considerable changes of the female body structure. The importance of studying the relationship between the reproductive variables (age at menopause, characteristics of menstrual cycles, fertility) is increasing nowadays, since (1) many diseases (e.g., obesity, cardiovascular disorders, breast, ovarian and uterine cancers, etc.) seem to be related to the characteristics of reproductive life and (2) the increasing knowledge about this complex relationship could help to improve the effectiveness of the health prevention programs. The main purpose of the present analysis was to analyze (1) the relationship among some indicators of reproductive history in women (aged 40–65 ys), and (2) the reproductive variables in relation to the characteristics of fatness indicators (fat mass and its distribution) in the menopause transition. Data on the age at menarche and menopause, the pattern and regularity of menstrual cycles before and during menopause, the number and timing of pregnancies and their outcomes, the incidence of breast feeding, the regularity of menstruation, gynaecological or obstetric problems and contraceptive usage were collected by questionnaires. Salivary progesterone and estrogen (as 17beta-estradiol) levels were assayed using IBL ELISA kits. Subjects were divided into premenopausal, early and late perimenopausal as well as postmenopausal subgroups on the basis of the menstrual cycle characteristics and sexual hormone levels. The main results of the present analysis of the relationship between the reproductive factors and fatness indicators during the menopause transition revealed that (1) age at menarche did not show any association with subsequent fatness, nor did age at menopause; and (2) parity, menopausal status and the age at menopause were associated with the fatness indicators. The study was supported by the Hungarian National Foundation for Science (OTKA grant K83966).

Key word: *menopause, menarche, body fatness, Hungarian women*

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