Pattern of Use and Patient's Perceptions of Phytoestrogens for Postmenopausal Symptoms

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Background. Use of food supplements containing phytoestrogens among postmenopausal women is increasing, especially after the publication of the unfavorable risk-benefit profile of Hormone Replacement Therapy in prolonged therapies (Rossouw et al., 2002). Although phytoestrogens are often perceived safe, evidence for overall positive risk-benefit profile is weak and their status of food supplements does not encourage studies to obtain new evidence or specific information on the correct dosage and duration of the therapy. Moreover, the chance to buy them by user's initiative does not facilitate surveys on their prevalence and pattern of use.
Aim. To describe pattern of use and self-reported positive and negative perceptions of phytoestrogens for postmenopausal symptoms.
Methods. A structured questionnaire was administered to women who were buying food supplement containing phytoestrogens. The survey involved women attending 22 pharmacies located in the Bologna area (400,000 of inhabitants). Questionnaire was structured in 3 sections: (a) socio-demographic information; (b) pattern of use (e.g., duration and frequency of therapy), (c) perceived benefits and adverse events. Differences in positive and negative perceptions, between short-term (<1 yr of treatment) and long-time users (≥1 yr of treatment) were assessed by standard chi-square test ($p < 0.05$).
Results. Data on 190 post-menopausal women (aged 38-77) were collected. Out of these, 35% reported high level of cholesterol, 18% hypertension, 11% circulation disorders, and 4% breast cancer diagnosis, before starting phytoestrogens. Phytoestrogens had been advised by a specialist (gynecologist or endocrinologist) in 52% of cases, followed by pharmacist (19%). Women stated to use phytoestrogens to reduce hot flashes (79%), insomnia (15%), mood disturbances (14%), and prevent osteoporosis (15%). The majority (59%) took phytoestrogens routinely, whereas 28% in 3 month-cycles. In term of therapy duration, 47% of women were considered short-term, and 53% long-term users. Among positive perceptions, no difference was found between groups for palpitation reduction (37% of case, p=0.96) and mood improvement (51%, p=0.75); a slight difference was reported for hot-flashes relief (68% in short-term *vs.* 81% in long-term users; p=0.05). Negative perceptions were reported more frequently in the long-term group, but this difference was statistically significant only for edema (6% in short-term *vs.* 17% in long-term users; p=0.03), and not for other effects: swelling sensation (10% *vs.* 21%; p=0.08), somnolence (7% *vs*. 10% p=0.60), fatigue (4% *vs*.11% p=0.13).
Conclusion. The pattern of use of phytoestrogens for postmenopausal symptoms is heterogeneous, and women overall find these substances to be beneficial; especially for relief of hot-flashes with a long therapy duration. Other positive perceptions, instead, are mitigated with a long-term use. Negative perceptions with a long-term therapy appear as estrogen-like effects. Differences in reported perceptions may be in part attributable to heterogeneous composition of products, which can contain other active substances added to phytoestrogens. Physicians should routinely ascertain the use of phytoestrogens in post-menopausal women, in order to recognize possible adverse effect and to avoid potential interaction with other substances.

Rossouw et al. (2002). *JAMA.*; 288, 321-333.