

ABSTRACT

CHARLES UNIVERSITY IN PRAGUE

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Title of thesis: **Osteoporosis management at general practitioners level**

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Osteoporosis, the most prevalent human skeletal metabolism-based disease, is manifested by the weakened bone micro-structure and its lowered endurance against mechanical impacts which results to the higher fracture incidence. Nowadays it is considered to be a lifestyle disease. Continuous rise of osteoporosis incidence and prevalence may become even more rapid in the future and could overwhelm the public healthcare system. Post-menopausal women and elderly people are threatened by an involutional osteoporosis. In Czech Republic, the principal provider is general practitioner, who ensures comprehensive healthcare for his patients. In order to do so, because of the present limitations, he has an obligation to cooperate with and to adress his patients to certain specialists – osteologists, endocrinologists, internists, orthopedists and gynecologists.

We conducted a cross-sectional questionnaire study. Questionnaires were sent to 1 500 random-selected general practitioners in the two-round postal procedure from September to November 2014. The obtained data were evaluated by PASW 18.0 software (version 18.0.1, IBM Corporation, Armonk, NY, U. S., 2009). We conducted frequency and relation analysis, statistic significant was considered at $p < 0,05$.

We have received back 551 filled questionnaires, overall return-rate was 37 %. Respondent's average age was 53 years, average lenght of professional practice was 25 years. Gender is represented by 62,6 % of women and by 37,4 % of men. Women consider their role in osteoporosis treatment to be more important ($p = 0,012$). Average knowledge score reached 7,7 out of 15 points (51 % of total amount), average assessment score reached 2,68 out of 4 points (67 % of total amount), average

management score reached 2,86 out of 4 points (71,5 % of total amount). The most important perceived barriers in the fight against osteoporosis were considered impossibility to prescribe selected medicines (60,7 %) and financial limits imposed by health insurance companies (43,9 %). Information sources considered by more than 80 % GPs as accessible are the following: guidelines for GPs (91,5 %), professional literature (90,4 %), workshops and conferences (85,1 %) and manufacturer's information (80,0 %). Each of these sources is used regularly or at least sometimes by more than 90 % of respondents. We observed a positive correlation in GP's knowledge and use of these information sources, furthermore, positive correlation was found also for e-learning information source ($p = 0,005$). Use of manufacturer's information did not correlate with knowledge ($p = 0,266$). Osteoporosis assessment score correlates with use of workshops and conferences ($p = 0,010$) and e-learning ($p = 0,002$).

As expected, more women than men took part in the survey, the results also showed better knowledge in women ($p = 0,027$). GP's knowledge did not correlate with the length of professional practice. When it comes to risk assessment, active approach is more frequent than passive, furthermore, activity is in positive correlation with the self-percieved importance in osteoporosis treatment ($p < 0,001$). This follow-up study showed a change in the final order of barriers in GP's osteoporosis-related healthcare delivery percieved as most important, also its overall importance has decreased.