

therapy (HRT) should be initiated in individual menopausal women.

**OBJECTIVES:** This research examined the correlations of symptoms with the scores of a generic QoL instrument, the Psychological General Well-Being Index (PGWBI). Correlations were also examined between menopausal symptoms and age. The subjects included 155 Italian menopausal women who were either on HRT for less than 12 months or were being considered for HRT. Menopausal symptoms were measured by Kupperman's index.

**RESULTS:** Kupperman's index correlated significantly with the PGWBI global score ( $r = 0.49$ ;  $p < 0.0001$ ) and all six domains ( $r = 0.34$  to  $0.48$ ;  $p < 0.0001$  for each). By contrast, Age was not correlated with the PGWBI global score ( $r = 0.11$ ;  $p = 0.19$ ) and PGWBI domains except Depression with which a weak but significant correlation was observed ( $r = 0.16$ ;  $p = 0.05$ ). Observed differences in correlation suggest that menopausal symptoms are a major factor of impairment of QoL of women independently of age. Though these findings confirm the well-known association between impairment of the emotional well-being and age, the latter did not reach significance and was less than the association with menopausal symptoms in this sample ( $r = 0.16$  versus  $r = -0.47$ ).

**CONCLUSION:** These findings show that menopausal symptoms are associated with impairment of general and psychological well-being and QoL of women whereas age is not necessarily associated with decline in general QoL. Furthermore, severity of menopausal symptoms was found to be more important for the emotional well-being of women than age.

#### PWM4

### THE RELATIONSHIP BETWEEN NOTTINGHAM HEALTH PROFILE DOMAINS AND CLINICAL CHARACTERISTICS OF WOMEN WITH ESTABLISHED POSTMENOPAUSAL OSTEOPOROSIS

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**OBJECTIVE:** The purpose of this research was to explore the relationships between the Nottingham Health Profile (NHP) and clinical characteristics of patients with established postmenopausal osteoporosis. The NHP is a generic, self-report health status measure consisting of 38 items comprising six domains: energy level, emotional reactions, physical mobility, pain, sleep, and social isolation.

**METHODS:** Data were collected in the Multiple Outcomes of Raloxifene Evaluation (MORE) study, a randomized, placebo-controlled clinical trial of raloxifene in 7705 postmenopausal women who had low bone mineral density (BMD) and/or prevalent vertebral fractures. Of the MORE study subjects, 2545 completed the NHP. This analysis was part of a substudy that evaluated the

baseline data of 781 subjects from various sites. Associations of NHP domain scores with age, femoral neck and lumbar spine BMD, and number of nonvertebral and vertebral fractures were estimated using Spearman correlations. The relationships of NHP scores with the number of nonvertebral and vertebral fractures were evaluated using Kruskal-Wallis tests.

**RESULTS:** Older subjects had lower levels of physical mobility ( $p = 0.0004$ ). The number of nonvertebral fractures was associated with less physical mobility ( $p = 0.0001$ ) and greater pain ( $p = 0.0194$ ). The number of vertebral fractures was associated with less physical mobility ( $p = 0.0001$ ), more pain ( $p = 0.0052$ ), and lower energy level ( $p = 0.0285$ ).

**CONCLUSIONS:** These findings suggest that fractures in patients with established postmenopausal osteoporosis have a significant impact on health-related quality of life.

#### PWM5

### COMPARISON OF QUALITY OF LIFE SCORES BETWEEN MENOPAUSAL WOMEN AND AGE-MATCHED PEERS

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Currently, no consensus has been reached in the field of quality of life (QoL) research on the impact of menopausal symptoms on QoL in aging women. Published studies on relationships between menopausal estrogen depletion and mental health status, using different measurement approaches, have yielded conflicting findings.

**OBJECTIVE:** The purpose of this study was to describe quality of life (QoL) in Italian women with menopausal symptoms compared to age-matched women from the general Italian population.

**METHODS:** Data were collected using baseline Psychological General Well-Being Index (PGWBI) scores from 155 women participating in a clinical trial and from 231 women participating in an epidemiological study. The PGWBI is a well validated and widely used self-administered instrument. The 22 items assess psychological and general well-being of respondents in six QoL domains: anxiety, depression, positive well-being, self-control, general health, and vitality. The six subscale scores can be summed to provide a global score.

**RESULTS:** Overall, poorer psychological well-being scores were reported by Italian women with menopausal symptoms compared to age-matched women from the general Italian population. Significantly poorer scores were found in the global score ( $p < 0.0001$ ) and in all six domains ( $p < 0.0001$  for each) except general health ( $p < 0.1537$ ).

**CONCLUSION:** The results of this study suggest that the presence of menopausal symptoms in aging women is associated with an impaired quality of life in comparison to the general female population. Additional research is