used the OCP versus those who only used the HRT. BMD measurements were performed at lumbar spine and hip by DEXA scan and results expressed as percentage gain or loss in bone mass. Records were also compared to evaluate relief from symptoms of estrogen deficiency - hot flushes and night sweats as reported at the follow-up visits. The two groups were compared for confounders such as age, body mass index, smoking, past or family history of bone disease, age of onset of POI.

**Results:** BMD of lumbar spine and femur increased significantly during the treatment with oral HRT compared to OCP \((p<0.01)\). With oral HRT there was 0.8% increase per year at hip and 1.18% increase per year at spine while with OCP there was −0.18% decrease per year at hip and −0.16% decrease per year at spine. There was significantly better suppression of hypoestrogenic symptoms in the HRT group.

**Conclusion:** HRT appears to suppress symptoms of estrogen deficiency and maintain BMD more consistently than OCP in women with POI. Larger studies with prospective designs are needed to confirm these findings.

http://dx.doi.org/10.1016/j.maturitas.2015.02.127

**O43**

The efficacy of an exercise and lifestyle intervention for postmenopausal women living in North Queensland

Fiona Barnett1,*, Rebecca Sealey2, Lisa Simmons2
1 James Cook University, Sport and Exercise Science, Townsville, Australia
2 James Cook University, Townsville, Australia

Exercise has been found to have a positive effect on the health and well-being of postmenopausal women. The aim of this pilot study was to determine whether an eight-week exercise and lifestyle education intervention had an effect on the health status and QoL of postmenopausal women living in North Queensland. This is the first data from an ongoing project.

Participants took part in an eight-week group-based exercise intervention of three sessions per week incorporating aerobic and resistance training in a circuit style format and were given informational handouts on various lifestyle topics for postmenopausal women.

Pre and post-test measurements were taken and included peripheral bone density, resting heart rate and blood pressure, blood lipids and cholesterol, anthropometric measures, upper and lower body muscular strength, cardiorespiratory fitness, menopausal QoL and exercise self-efficacy. At the completion of the intervention, participants were invited to take part in a focus group to explore their experiences of the program.

Fifteen sedentary postmenopausal women volunteered to take part, of which eleven participants completed 90% of the intervention. Participants improved in waist girth \((p=0.00)\), cholesterol \((p=0.00)\), upper body strength \((p=0.00)\), lower body strength \((p=0.05)\), psychosocial \((p=0.01)\) and physical \((p=0.03)\) domains of QoL. Participants enjoyed the shared identity and social interaction of the group-based exercise. They also enjoyed feeling stronger and being able to perform daily activities more easily.

Findings from this pilot study demonstrate that an eight-week group-based exercise intervention is sufficient to achieve improvements in some health status and QoL outcomes for postmenopausal women, although a longer duration may be required. However, participants found the exercise intervention to be a positive experience, providing the motivation needed for future exercise participation.

http://dx.doi.org/10.1016/j.maturitas.2015.02.128

**O44**

Menopausal hormone therapy use in 17 European countries during the last decade

Lieveke Ameye1, Caroline Antoine2,*, Marianne Paesmans1, Evandro de Azambuja3, Serge Rozenberg2
1 Free University of Brussels/Jules Bordet Institute, Data Centre, Brussels, Belgium
2 Free University of Brussels/CHU Saint-Pierre, Gynaecology, Brussels, Belgium
3 Free University of Brussels/Jules Bordet Institute, Medical Oncology and Breast Data Centre, Brussels, Belgium

**Introduction:** The first ‘Women’s Health Initiative’ (WHI) randomised controlled trial assessed use of continuous combined menopausal hormone therapy (cc-MHT). It was prematurely stopped because of an increased invasive breast cancer (BC), coronary heart disease (CHD), stroke and pulmonary embolism risk. Consequently, scientific societies recommended use of MHT at the lowest effective dose for the shortest duration. As a result, a sharp decline in MHT use occurred worldwide.

**Aim:** To report in a uniform way the change in MHT use in European countries. To evaluate whether the variability of the MHT changes were related to some medical indicators.

**Materials and methods:** IMS Health provided MHT sales data for the years 2002 till 2010 for 17 countries. We tested several hypotheses to explain the heterogeneity of MHT use changes.

**Results and discussion:** In 2002, the estimated MHT rate in women 45–69 years old varied considerably between countries ranging from less than 5% to more than 25%. In all countries a profound decrease occurred between 2002 and 2010, ranging from 50% to 77%. By the end of 2010, the MHT uptake was lower than 10% in all countries except in Finland. MHT use change was not correlated to MHT use and prevailing BC incidence at baseline, nor to the number of gynaecologists per 100,000 women or to the level of information about MHT.

**Conclusions:** The global MHT use experienced a sharp decrease in all the analysed countries, although some variability exists. The decrease was unrelated to assessed parameters.

http://dx.doi.org/10.1016/j.maturitas.2015.02.129