ASSOCIATION 治療

Available online at www.sciencedirect.com

## **ScienceDirect**

journal homepage: www.hkpj-online.com



**EDITORIAL** 

## Musculoskeletal pain in postmenopausal women—Implications for future research



Musculoskeletal (MSK) pain is a prevalent public health problem that adversely affects the physical function, productivity, and healthcare utilization of the sufferers [1,2]. There is growing evidence that middle-aged women are likely to experience MSK symptoms around their menopausal period [3,4]. Depending on the types of MSK pain, the estimated prevalence rates of MSK pain in postmenopausal women ranges from 53.5% to 85.0% [5–7]. The common locations of MSK pain include, pain over the neck, lumbar, hip, and knee regions [4]. Importantly, many of these sufferers develop chronic or recurrent MSK pain beyond the menopausal period [3], which poses a substantial burden on the individual and society alike.

Although the causes of MSK pain in menopausal women are multifactorial (e.g., age, body mass index, or depression) [3], it is thought that the increased incidence of MSK pain in menopausal women may be partly attributed to ageing and gradual depletion of female hormones (e.g., oestrogen). Specifically, reduced oestrogen production may lead to multiple musculoskeletal changes—osteoporosis, sarcopenia (loss of skeletal muscle mass), and muscle weakness [8]—which result in muscle-joint pain.

Although prior research has investigated the prevalence rates and risk factors of MSK pain in Caucasian [3], Asian [4], and Arabic postmenopausal women [7], their results cannot be generalised to women of other ethnicities. Given the continuous increase in life expectancy in Africa [9], it is paramount to investigate the prevalence rates of different types of MSK pain in African postmenopausal women. These findings can help guide policymakers in allocating resources and help clinicians develop specific treatment programmes to meet the needs of this growing group of women. In this issue of the *Hong Kong Physiotherapy Journal*, Ogwumike et al [10] conducted a population-based survey on 310 Nigerian postmenopausal women and revealed that low back pain (61.0%) and lower extremity pain (52.9%) were the two most prevalent types of MSK pain among

postmenopausal women. Additionally, they found that increased waist/height ratio (a measure of central obesity) was consistently associated with a higher risk of low back pain or lower extremity pain. These findings corroborate that obesity is closely related to MSK pain in postmenopausal women regardless of ethnicity [3,4]. Future longitudinal studies are warranted to characterise the psychosocial and physical risk factors for developing chronic/recurrent MSK pain in menopausal women of different ethnicities so that appropriate treatment/education can be provided to mitigate their modifiable risk factors. Studies should also be conducted to determine the optimal interventions for treating MSK pain in menopausal women given the complex psychological and physical challenges that they face.

## References

- [1] Bingefors K, Isacson D. Epidemiology, co-morbidity, and impact on health-related quality of life of self-reported headache and musculoskeletal pain—a gender perspective. Eur J Pain 2012;8:435—50.
- [2] Lubeck DP. The costs of musculoskeletal disease: health needs assessment and health economics. Best Pract Res Clin Rheumatol 2003;17:529—39.
- [3] Braden JB, Young A, Sullivan MD, Walitt B, LaCroix AZ, Martin L. Predictors of change in pain and physical functioning among post-menopausal women with recurrent pain conditions in the women's health initiative observational cohort. J Pain 2012;13:64—72.
- [4] Gao HL, Lin SQ, Wei Y, Chen Y, Wu ZL. The effect of age and menopausal status on musculoskeletal symptoms in Chinese women aged 35–64 years. Climacteric 2013;16:639–45.
- [5] Borker SA, Venugopalan PP, Bhat SN. Study of menopausal symptoms, and perceptions about menopause among women at a rural community in Kerala. J Midlife Health 2013;4:182—7.
- [6] Bairy L, Adiga S, Bhat P, Bhat R. Prevalence of menopausal symptoms and quality of life after menopause in women from South India. Aust N Z J Obstet Gynaecol 2009;49:106–9.
- [7] Lu J, Liu J, Eden J. The experience of menopausal symptoms by Arabic women in Sydney. Climacteric 2007;10:72–9.

A2 Editorial

- [8] Lautenbach GL, Petri M. Women's health. Rheum Dis Clin North Am 1999;25(3):539—65.
- [9] Oghagbon EK, Giménez-Llort L. Sustaining increase in life expectancy in Africa requires active preventive measures against non-communicable diseases. Open J Prev Med 2014;4: 283–92.
- [10] Ogwumike OO, Adeniyi AF, Orogbemi OO. Musculoskeletal pain among postmenopausal women in Nigeria: association with overall and central obesity. Hong Kong Physiother J 2015 [Epub ahead of print].

Arnold Y.L. Wong, PhD \*
Department of Rehabilitation Sciences, The Hong Kong
Polytechnic University, Hong Kong Special Administrative
Region

\*Department of Rehabilitation Sciences, The Hong Kong Polytechnic University, 11 Yuk Choi Road, Hung Hom, Hong Kong Special Administrative Region.

E-mail address: arnold.wong@polyu.edu.hk