



Letter

Smoking Status on Bone Health and Osteoporosis Prevalence

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Dear Editor,

I would like to comment on the study by Kim [1] that investigated the effects of smoking status on cardiopulmonary function, maximum oxygen uptake, and obesity in middle-aged and older office workers in Korea. The study presented interesting and important findings on how smoking increases the risk of cardiopulmonary disease. However, if the patient stops smoking to reduce the risk of cardiopulmonary disease, an increased appetite attributable to smoking cessation, may lead to obesity. Therefore, Kim [1] concluded that smoking cessation should be accompanied by nutritional advice to reduce the risk of both cardiopulmonary disease and obesity.

In addition to the risk of cardiopulmonary disease and other diseases caused by smoking that were mentioned in Kim's article [1], osteoporosis was not cited. Smoking adversely affects bone health by reducing bone mineralization [2] which can lead to osteoporosis, and subsequent bone fractures. Furthermore, a meta-analysis study found that smoking substantially increases the risk of bone fractures [3].

Since people with Asian ethnicity already have an elevated risk of bone fractures it is important to be aware that smoking will further exacerbate the risk of osteoporosis in the study population from Seoul, South Korea. Moreover, the Asian Federation of Osteoporosis Societies [4] projects that by

2050, the number of bone fractures caused by osteoporosis, specifically hip fractures, which have the most severe consequences, will have an overall increase of 2.85-fold in Korea (2.94-fold increase in men and 2.80-fold increase in women). Osteoporosis is projected to raise medical costs with spending for hip fractures rising from current spending of \$64.5 million up to a projected cost of \$183.6 million by 2050. Additionally, the Asian Federation of Osteoporosis Societies has called for Korea and other respected members of the federation, to make osteoporosis a national health priority; increase osteoporosis awareness through education for the prevention and treatment of osteoporosis [5].

In conclusion, where Kim [1] suggested that education about smoking cessation should include nutritional advice for cardiopulmonary disease and obesity, I would like to respectfully recommend adding bone health to the nutrition advice given because smoking also contributes to osteoporosis and consequently, bone fractures.

Nutritional advice for promoting bone health, such as information on how to consume foods and drinks high in calcium and vitamin D (or the use of supplements), as recommended by the NIH Consensus Development Panel on Osteoporosis Prevention, Diagnosis and Therapy [6]. Nutritional advice promoting bone health could improve public health by reducing the prevalence of osteoporosis, and the

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associated health care costs of bone fractures in Korea.

Conflicts of Interest

The author has no conflicts of interest to declare.

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