노인재활 게시일시 및 장소 : 10 월 18 일(금) 08:30-12:20 Room G(3F) 질의응답 일시 및 장소 : 10 월 18 일(금) 10:00-10:45 Room G(3F)

P 1-35

The characteristics of falls in the elderly population in urban and rural area in Korea

Myeongkyu Kim^{1*}, Yeo Joon Yun¹, Si-Bog Park¹, Mi-Soo Jang², Eun-Woo Nam², Sung-il Cho³, Sin Kam⁴, Bo Youl Choi⁵, Mi Jung Kim^{1†}

Hanyang University Medical Center, Department of Rehabilitation Medicine¹, Hanyang University Medical Center, Biostatistical Consulting and Research Lab, Medical Research Coordinating Center², Seoul National University, Department of Epidemiology, Graduate school of Public Health³, Kyungpook National University Medical Center, Department of Preventive Medicine⁴, Hanyang University Medical Center, Department of Preventive Medicine⁵

A fall is an unintentional and sudden position change that causes a person to move quickly towards the ground. Injuries due to falls have a more serious impact on the elderly, and those cause socioeconomic losses. Researchers thought characteristics of falls would vary from region to region. However, there are few studies about regional differences of falls in Korea. Thus, this study aims to analyze whether there is any differences in the characteristics of fall in urban and rural areas.

A questionnaire-based survey was conducted involving 2,012 elderly who lived in Guro-gu (Seoul), Yeongdeungpo-gu (Seoul), Yangpyeong-gun (Gyeonggi-do), Dalseong-gu (Daegu), and Jung-gu (Daegu) from September 1, 2015 to October 2, 2015. This questionnaire includes demographic characteristics and many factors about fall experience in the past. Yangpyeong-gun and Dalseong-gu were classified to rural area, and remaining three areas were classified to urban area.

Rate of fall in lifetime in urban and rural area were 69.4% and 79.0%, respectively. Rate of fall in past one year in urban and rural area were 62.9% and 69.3%. Most common cause of fall was slippery floor in both groups (32.0% in urban and 40.7% in rural area). In the city area, rate of collision (11.4%) and stumbling on the door sill (13.5%) were higher than rural area (7.7% and 7.1%). Summation of monthly fall rates from November to March was 41.5% in the urban area and 33.3% in the rural area. Falls occurred the most in the afternoon in the city (58.1%), while in rural area the most occurred in the morning (46.9%). The majority of respondents said that they were walking at the time of fall in both groups (78.1% in urban and 63.3% in rural area). Cement (41.0%), soil (19.0%), and tile (16.1%) were the most common materials of floor in the urban area at the time of fall, and cement (38.3%), soil (27.1%) and linoleum (15.7%) in rural area. Patients were wearing running shoes (58.5%) the most or bare foot (17.1%) in the urban area at the time of fall, and running shoes (41.4%) and slippers (24.5%) the most in rural area.

The incidence rate of injury after falls (85.7% in urban and 83.5% in rural area) and the rate of visits to medical institutions (56.7% in urban area and 59.3% in rural area) were similar. Among those visiting medical institution after fall except the case of hospitalization, patients mostly visited outpatient clinic (54.1% in urban and 64.5% in rural area) and oriental clinic (35.1% in urban and 11.7% in rural area).

This study showed that there are some differences in the characteristics of falls in urban and rural area. The authors hope that the results of this study are used for making fall prevention education programs and policies suitable for local characteristics of falls.