



## Prevalence of Atypical Presentation of Older Adults with Infectious Diseases at the Emergency Department of Srinagarind Medical School Hospital and their Associated Factors

Natthida Tansangworn<sup>1</sup>, Panita Limpawattana<sup>1</sup>, Thapanawong Mitsungnern<sup>2</sup>, Pariwat Phungoen<sup>2</sup>

<sup>1</sup>Department of Internal Medicine, Faculty of Medicine, Khon Kaen University, Thailand

<sup>2</sup>Department of Emergency Medicine, Faculty of Medicine, Khon Kaen University, Thailand

**Background and Objectives:** Older adults are the large group of patients who visit the Emergency Department (ED). Classic symptoms of illnesses among older adults are usually lacking which lead to delayed or missed diagnosis. This study aim to determine the prevalence of atypical presentations among older adults with infectious conditions at the ED and to identify factors associated with these presentations.

**Methods:** Medical records of 183 patients aged >65 years with infectious diseases who attended the ED of Srinagarind Medical School Hospital in 2013 were randomly reviewed. Demographic data, presenting symptoms and diagnosis were collected and were analyzed using descriptive statistics. Regression analysis was used to analyze the variables with the outcomes.

**Results:** The prevalence of an atypical presentation was 35% (64 out of 183 cases). Pneumonia was the most common diagnosis (30%). Four risk factors associated with atypical presentation were identified; complicated urinary tract infection (UTI) (odds ratio (OR) 4.54, 95%confidence interval(CI) 1.75,11.78, p=0.002), cancer (OR 2.64, 95%CI 1.07,6.53,p 0.04), dementia (OR 6.66, 95%CI 1.47,30.11, p=0.01) and pulse rates >90 beats/minute (OR 2.06, 95%CI 1.01,4.22, p=0.04) whereas infective diarrhea was a protective factor (OR 0.27, 95%CI 0.09,0.8, p=0.02).

**Conclusions:** Atypical presentations of infectious diseases in older adults were common. Risk factors associated with these conditions were complicated UTI, cancer, dementia, and increased pulse rates.

