The incidence rates of influenza-like illness during three influenza seasons (2011-2014) in a community cohort study

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This study aims to describe the epidemiology of influenza-like illness (ILI) and to estimate the incidence rate of ILI in several communities in South Korea, over three influenza seasons.

Since 2011, the Community Respiratory Health Survey has been continuously monitoring ILI in 3 community-based cohorts. At the beginning of the season, baseline study took place; Nov. 2011 in Chungju and Ulsan, and in Dec. 2012 in Seoul. For each cohort, approximately 1,000 individuals (age 6 months over) from randomly selected 300 households were recruited. On a weekly basis, participants were asked via telephone interview whether they had ARI (acute respiratory illness) or ILI; from May to October, interview took place every second week.

The annual Age-standardized rate (ASR) of ILI per 1,000 populations were 2.3 (95% CI 1.8-2.9) and 3.5 (95% CI 2.7-4.3) in Chungju and Ulsan, 2011/2012 season. In 2012/2013 season, ILI incidence rate were 3.0 (95% CI 2.9-3.1) and 5.5(5.4-5.7) in Chungju and Ulsan. The ASR of ILI per 1,000 populations in Seoul was 12.7 (95% CI 12.5-12.9) per 1,000 populations in 2012/2013. From 44th week 2013 to 29th week 2014, the incidence rates were almost doubled in Seoul and Chungju due to the epidemic of influenza. In Chungju and Ulsan, ILI incidence rates were 4.3(95% CI 4.2-4.5) and 9.0 (95% CI 8.8-9.2) per 1,000 populations. In Seoul, ILI incidence rate of the 2013 season was 21.2 (95% CI 20.9-21.5) per 1,000 populations. The influenza-like illness incidence rate is highest in age 0-6 years and varies by regions. During the 2013/2014 season, the incidence rates of ILI in Chungju, Ulsan, and Seoul were greater than those from other two seasons due to the pandemic of influenza.

Biography

Soung Hoon Chang has completed his MD at the age of 25 years from Korea University College of Medicine and has completed PhD at the age of 40 from Korea University College of Medicine. He is the director of Department of Preventive Medicine, Konkuk University School of Medicine. He has published more than 200 papers in reputed journals.

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