Is Tuberculosis Still the Number One Infectious Disease in Korea?

The world experiences two imminent public health events: The Ebola outbreak and the Global Health Security Agenda (GHSA). Since the first case of Ebola outbreak in West Africa was confirmed, the total number of suspected and confirmed cases has increased to 13,241, including 8,142 laboratory-confirmed cases and 4,950 deaths in Guinea, Sierra Leone, Liberia, Nigeria, Mali, Senegal, Spain, and the United States as of November 4, 2014 [1]. The Ebola outbreak in West Africa highlights the urgency for immediate action to establish global health security capacity to prevent, detect, and rapidly respond to biological threats like Ebola. The GHSA was launched on February 13, 2014, to advance a world safe and secure from infectious disease threats and to bring together nations from all over the world to make new, concrete commitments, and to elevate global health security as a national leaders-level priority [2]. The G7 endorsed the GHSA in June 2014. Finland and Indonesia hosted commitment development meetings to spur action in May 2014 and August 2014. Ministers and senior officials from 44 countries and leading international organizations gathered in the White House to make specific commitments to implement the GHSA and to work toward a commitment to assist West Africa with the needed global health security capacity within 3 years.

In 2011, there were an estimated 8.7 million new cases of active tuberculosis (TB) worldwide, of which 1.1 million (12.6%) people were reported to be infected with human immunodeficiency virus (HIV). In 2012, 320,000 deaths (36%) of HIV-infected individuals were related to TB [3]. Recently, 35,000 new cases of TB were reported in the Republic of Korea, with 2,000–3,000 deaths (5/100,000 persons) related to TB each year, which is relatively higher than other countries [4,5].

Korea constructed a national TB control system in 1962, and since then public health centers have conducted several programs on prevention of TB and workshops for registration and management of TB patients; in addition, various camps were also conducted for early detection and treatment of TB patients [6]. Since the first HIV-infected person was diagnosed in 1985, HIV tests have been conducted in public health centers. However, with an increase in income, more coverage of health insurance, and enhancement of private medical institutions, more TB or HIV tests have been performed in clinics and hospitals. As a result, more TB patients and HIV-infected individuals are identified in clinics and hospitals [7].

In this special issue of the Osong Public Health and Research Perspectives, we have collected papers that reported on the recent issues of TB in Korea. Two institutions are introduced in this issue: The Korean National Tuberculosis Association (KNTA) and the Korean Institute of Tuberculosis (KIT). The KNTA set up the KIT in 1970 for fostering research and technical activities. The KNTA/KIT had successfully conducted a countrywide TB prevalence survey from 1965 to 1995 at 5-year intervals. The survey results (decline in TB rates) established Korea as a country with successful implementation of national control programs for TB. The KIT developed the Korea Tuberculosis Surveillance System and the Laboratory Management Information System, both of which were transferred to the Korea Centers for Disease Control and Prevention after its establishment. The KIT functions as a central and supranational reference TB laboratory for microbiological and epidemiological research and provides training and education for health care workers and medical practitioners. Recently, the KIT has expanded its activities to countries such as Ethiopia, Laos, and Timor-Leste to support TB control and prevention. The KIT will continue to support research activities and provide technical assistance in diagnosing the infection until it is completely eliminated in Korea [8].

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Relapse or reinfection is another issue related to TB infection in Korea. A previous study on the factors affecting reinfection of TB proposed a mathematical model [9]. This issue includes a paper to identify the status of relapse/reinfection in Korea using nationwide tuberculosis notification data [10] and trends in the utilization of laboratory tests for TB and mycobacterial diseases in the private sector by analyzing the National Health Insurance database. Kim et al [11] analyzed the insurance data (number and cost) of laboratory tests in relation to TB and mycobacterial diseases from 2007 to 2012. The authors searched utilization information and the number of tests and their cost on the website of the Health Insurance Review and Assessment Service using the code for each test [11]. There is also a study on HIV co-infection of suspected TB cases visiting public health centers [12].

TB is still a burden to national health in Korea, and therefore it is necessary to identify the status and characteristics of TB infection with national data and national institutions for establishing prevention and control policy.

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