JCK Session

Session 01 (II-JCK01)

Surgery

Chair: Kisaburo Sakamoto (Mt. Fuji Shizuoka Children's Hospital, Japan)

Chair:Xu-ming Mo (Department of Cardiothoracic Surgery, Chidren's Hospital of Nanjing Medical University, China)

Chair: Tae-Gook Jun (Thoracic and Cardiovascular Surgery, Samsung Medical Center, Sungkyunkwan University School of Medicine, Republic of Korea)

Sat. Jul 10, 2021 9:00 AM - 10:30 AM Track5 (Web開催会場)

[II-JCK01-4]Trends in congenital heart disease mortality in Japan, China, and Korea, 1990-2019: an analysis using data from the global burden of disease study 2019

OHao Zhang¹, Hao Zhang² (1.Shanghai Children's Medical Center, Shanghai Jiaotong University School of Medicine; Shanghai Institute of Pediatric Congenital Heart Diseases, National Children's Medical Center, China, 2.Heart center and Shanghai Institute of Pediatric Congenital Heart Disease, Shanghai Children's Medical Center, National Children's Medical Center, Shanghai Jiaotong University School of Medicine, Shanghai 200127, China)

Background A comparative analysis of congenital heart disease (CHD) mortality is lacking for Japan, China and Korea.

Methods CHD mortality estimates were obtained from the Global Burden of Disease study 2019. We utilized an age-period-cohort model to estimate overall annual percentage change in mortality, annual percentage change from 0-4 to 65-69 years and period (cohort) relative risks.

Results In 2019, the age-standardized mortality rate of CHD (per 100,000 population) was 0.80 in Japan, 2.67 in China, and 0.62 in Korea, with the largest annual reduction observed in Korea (-3.95% per year) and followed by Japan (-2.71%) and China (-0.99%). Although the age distribution of deaths from CHD is gradually shifting from the pediatric (under 20 years) to the adult population (over 20 years) in all three countries, the majority of deaths (~70%) in China remained concentrated in children under 5 years of age. Mortality reductions were generally favorable in younger age groups except for those >50 years of age in China. Decreasing relative risks of mortality were observed in successively younger birth cohorts and over the study period for all three countries.

Conclusion In the past 30 years, there are noticeable progress in reducing CHD mortality in Japan, China and Korea, but China still faces significant challenge to catch up with the other two countries.