

## PREFACE

One of the most important indices in the national health care field is infant mortality rate. More than 50% of infants who die are neonates, and most neonatal deaths occur in premature infants, especially in more immature and weak infants with very-low-birth-weight of less than 1.5 kg (VLBWIs). Therefore, globally, the survival rate of VLBWIs is acknowledged as a representative achievement index of neonatal intensive care in a nation. Recently Koreans have been facing a serious issue of an extremely low total birthrate. Therefore, efforts to improve survival and prognosis of VLBWIs can be one of the best strategies to overcome this serious national problem.

The recent development of neonatal medicine along with neonatal intensive care markedly improved the prognosis of high-risk newborns in Korea. Despite this, the mortality and morbidity rates among VLBWIs vary according to individual neonatal intensive care unit and need to be improved. Because VLBWIs comprise only <1% of the total annual live birth population, as observed since the earlier period, other advanced countries have organized a national or international network for VLBWIs to improve neonatal care and medicine. Finally, in Korea, the Korean Neonatal Network (KNN) was established in 2013 by the Korean Society of Neonatology with the support from the Korea Centers for Disease Control and Prevention. The KNN started to accumulate extensive data for VLBWIs via the national multicenter web-based registry, which is equivalent to 70% of the total number of VLBWIs born annually in Korea. Therefore, the KNN generates population-based data on VLBWIs for an appropriate health care policy, to facilitate active multicenter clinical trials to improve the quality of neonatal care, and to improve neonatal medicine in Korea ultimately.

This issue of JKMS supplement titled “Neonatal Medicine in Korea; Very-Low-Birth-Weight Infants Update” provides recent updates regarding neonatal medicine in Korea, especially focusing on VLBWIs. The first part of this issue comprises articles regarding unique systems and perspectives of the KNN. The second part consisted of the results of epidemiologic analysis on recent mortalities and major morbidities of VLBWIs using the KNN data. It also includes studies about health care utilization of preterm infants following discharge from the neonatal intensive care unit in Korea.

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**Yun Sil Chang, MD**

Guest Editor,

Editor in Chief, Neonatal Medicine

Department of Pediatrics, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea