A model of congenital heart disease screening in elementary school children

Kachaporn Nimdet
Suratthani Hospital, Thailand

Congenital heart disease (CHD) is the most severe form of congenital malformations, which increases the morbidity and mortality risks. Early diagnosis not only provides optimal therapy but can also prevent complications. The availability of pediatricians is scarce, especially in rural areas in Thailand. Therefore, healthcare officers and nurses who work in primary healthcare hospitals have an important role on healthcare services in communities, for example, to treat uncomplicated diseases, provide vaccination and perform yearly physical examination in elementary schools. Accordingly, implementation of CHD screening through existing healthcare services should enhance the possibility of early diagnosis. The CHD screening model was established to provide physical examination skills related to cardiovascular diseases for healthcare officers and nurses, for early CHD detection. Three steps of the model include: participation in the training program, consisting of the study of common CHD, clinical manifestation and practical examination; screening in the elementary school that they were responsible for during the study period and; re-evaluating the children suspected of having CHD by pediatric cardiologists. At the screening process, checklists of common manifestations, including the history and physical examination of CHD, were provided to facilitate the screening. Of 23,633 children in 179 elementary schools, a total of new diagnosed 38 CHD children were detected by healthcare officers and nurses and confirmed diagnosis by pediatric cardiologists. One year after participation, five more CHD cases were recognized and treated. This study emphasizes that utilization of an effective model provides the opportunity of detection and optimal therapy for CHD.

Biography

Kachaporn Nimdet has over 8 years of experience as Pediatric Cardiologist at Suratthani Hospital, the cardiac center in the south of Thailand. She has been a principle lead in developing and implementing the entire service system for children with heart diseases and transcatheter intervention for CHD patients in the cardiac center. Her research interest includes development of strategies for screening CHD in rural areas with the aim to provide early diagnosis and therapeutic intervention.

kachaporny@yahoo.com

Notes: