Quality of Life in Korean Children with Chronic Kidney Disease

Min Hyun Cho

Department of Pediatrics, Kyungpook National University Children's Hospital,

Daegu, South Korea

In general, quality of life (QOL) can be defined as a patient's sense of well-being and functional outcomes within several life domains including physical, psychological status, and social interaction. QOL should not be confused with the concept of standard of living, which is based primarily on income. As pediatric nephrologists, we encounter a variety of medical problems in children with chronic kidney diseases (CKD). These problems include general symptoms (fatigue and malaise), hematologic problems (anemia and platelet dysfunctions), gastrointestinal problems (anorexia, nausea, and vomiting), electrolyte imbalances (hyperkalemia, metabolic acidosis, hyponatremia, hyperuricemia, and hyperphosphatemia), genitourinary problems, nervous system problems, endocrine problems, musculoskeletal problems, cardiovascular problems, and dermal problems. In addition to these medical problems, however, children face other issues that require attention, including change in body image, excessive medications, side effects, psychiatric problems, growth, and development. If we do not address these issues, normal growth and development in these children cannot be accomplished. There have been several studies on differences of QOL according to treatment modalities such as dialysis and transplantation in children with ESRD. According to a study of QOL in children with ESRD using CHIP-AE, transplantation can produce improved physical activity, better work performance, more satisfaction, and less discomfort compared with dialysis. In another study using the PedsQL module, transplant patients reported better physical and psychosocial health than dialysis patients. In addition, pediatric kidney transplant recipients also reported a higher QOL score than patients in other published studies

including chronic illness cohorts. Some studies have reported a difference in QOL between child-self and parent-proxy reports. Comorbidities including cardiovascular, gastrointestinal, endocrinologic, hematologic, and neurologic disorders can also be a significant factor in determining the QOL in children with CKD.

In 2012, we published a cross-sectional study of the Korean translations of the PedsQL ESRD Module comparing child self-reported and parent-proxy–reported HRQOL of children with ESRD based on a national-wide pediatric ESRD registry, The Korea Pediatric CKD registry. We reported that patients with PD had better QOL than patients with HD in several domains (including “Treatment problems” in the child self-reports and “About my kidney disease” and “Worry” in the parent proxy reports), and transplant patients had better HRQOL than dialysis patients in 1 domain of the child self-report (“Treatment problems”) and in 2 domains of the parent-proxy reports (“About my kidney disease” and “Worry”). However, there were no significant differences in the total QOL scores of the child self-reports between the peritoneal dialysis and transplant patients.

In conclusion, we should consider QOL assessment an essential factor for achieving normal growth and development in children with chronic diseases including CKD. Although various assessment tools for children have recently been developed, a QOL instrument optimized for use in our country should be developed to overcome the language problems and cultural gap.