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Psychological impact of chronic kidney disease among children and adolescents: Not rare and not benign

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Children with kidney disease and their families should be educated about the importance of potential benefits of routine psychological evaluations through the chronic kidney disease course. Peer groups of children with chronic kidney disease enable participants to share their experiences and support each other during this time of maturation.

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The child, from the time of toddlerhood through school age and adolescence, is rapidly changing, not only in physical growth but in emotional and sexual growth. Chronic kidney disease (CKD) may affect these facets of the maturing child.

Children with CKD often experience a series of body habitus changes from the condition itself and from the immunosuppressive therapy used to treat it (1-4). Polyuria and polydipsia, with subsequent enuresis; kidney disease-related edema; CKD-related growth impairment; and devices placed in the body, including those used for feeding or dialysis access, all influence the

physical, emotional, and sexual growth of these children (5-9). These physical side effects distinguish them from their peers and take a toll on self-esteem.

CKD also places particular demands on a child's social life. Children wish to be with their peers in and out of school, playing sports, attending school outings, and participating in other activities with classmates and friends. Physician appointments, dialysis sessions, and home medication therapy cut into that social time. These children may become more and more isolated, making peer acceptance a bigger issue. Data on school performance have shown that children

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with CKD are at risk for impairment. The etiology of this deficit appears to be multifactorial, with the neurological side effects of the disease itself and the associated treatments, as well as school absences, all potentially playing a role.

There must be an ongoing research and clinical focus on the emotional impact of the illness. The child with kidney disease, like the adult with the condition, needs to be treated as a “whole person,” with the physical and emotional effects of the disease addressed. In the last three decades, the physical health of children with progressive CKD and end-stage renal disease (ESRD) has improved with advances in nutrition, medical care, and transplantation. Further research using kidney disease-related measures reveals that the condition significantly influences patient and family perception of chronic quality of life (4, 5). Unfortunately, many children with CKD still receive suboptimal psychological care and psychological disorders associated with the pediatric CKD are not being detected early enough to initiate treatment and reduce the future disability.

Given the condition’s effects on the physical and emotional well-being of this vulnerable patient population, steps must be taken to provide intensive and ongoing psychological support of the child with kidney disease and the child’s family, including siblings (4,5, 10). The interventions should utilize the managed care system to educate the health care providers by focusing on prevention and early detection of the serious mental health disorder.

Pediatricians and pediatric nephrologists as well as other health care providers such as nurses and social workers remain the cornerstone for early detection and intervention. They may assume the supervisory role of direct patient care, provide emotional support and perform or supervise follow-up activities.

Children with kidney disease and their families should be educated about the importance of potential benefits of routine psychological evaluations through the CKD course. Peer groups of children with CKD enable participants to share their experiences and support each other during this time of maturation. Similarly, kidney camps offer children with CKD, ESRD, or a kidney transplant the chance to come together for a typical camp experience while also enjoying the fellowship of those who know exactly what it means to be a child living with kidney disease (8,9). Those children who are frequent inpatients can derive additional benefit from hospital-based school systems that help them keep up with their studies and from interactions with child life specialists who are tuned into the concerns and needs of children with CKD (7).

Conflict of interest

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