Children under Hemodialysis Treatment for Chronic Renal Failure: Their Expectations from the Hemodialysis Unit

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Introduction

Patients with chronic renal failure require renal replacement therapy for their survival. The advances in these therapies have significantly decreased the mortality rate of patients with end-stage renal failure. Hemodialysis which is one mode of renal replacement therapy, is generally provided in "hemodialysis units" located within a certain hospital department or private clinics. Due to increasing numbers of patients both adults and children, receiving such treatment, new hemodialysis units are required. Separate pediatric hemodialysis units are also being developed for children. The patient on hemodialysis treatment has to spend a considerable time of his life in bed under hospital conditions (i.e. away from home). This may cause additional stress on these chronically ill patients. The situation gets even more disturbing for the children who may have to be away from their parents, homes and also from school. Medical teams seem to be far too busy dealing with medical problems of hemodialysis patients that there is less concern for the social needs of these patients which, however, contribute to their status of well-being. It is, therefore, the aim of the present study to assess the needs of children undergoing hemodialysis treatment by evaluating their expectations from the therapy unit/team so that their conditions may be improved accordingly.

Materials and Methods

A questionnaire was prepared in view of the data collected via personal communications with long-term dialysis patients treated in the dialysis unit of Emergency Hospital, Ankara, Turkey. The questionnaire was designed to assess the expectations of children under hemodialysis treatment using the list of patients' requirements. There were 15 children (8 boys, 7 girls) aged between 6-18 years (mean age: 12 years) taking hemodialysis therapy in this unit and all consented to be included in the study.

Results

According to the results of the questionnaire (Table 1), all children stated that they needed a constant transportation facility provided by the hospital. Ten (67%) patients preferred to be treated in a paediatric hemodialysis unit whereas 5 (33%) elder children were happy to be in an adult department. Six (40%) children were willing to go to school while 9 (60%) did not want to go to school. All children stated that they would be more happy in a comfortable room with TV.

Table 1: The expectations of children under hemodialysis from the dialysis unit

Expectations	**Present** *(n)*	*(%)*	**Absent** *(n)*	*(%)*
Transportation to and from the unit	15	100	0	0
Treatment in a pediatric dialysis unit	10	67	5	33
School attendance	6	40	9	60
TV set in the unit	15	100	0	0
Personal communication	15	100	0	0
Accompaniment of relatives	15	100	0	0
Morning session	13	87	2	13
Decrease in the number and duration of the session	15	100	0	0
Fistula needling by the same person each time	11	73	4	27
Dialysis on the same machine each time	9	60	6	40

They all seemed more peaceful when a member of the therapy team spent time with them either by reading books, playing games or simply by talking. The patients wanted their relatives to be with them during the dialysis sessions. They wanted decreased numbers of dialysis sessions with shorter durations. Almost all patients preferred morning sessions. Nine (60%) children wanted to have dialysis in the same dialysis machine while others did not have any preference. Eleven (73%) patients preferred to have the same nurse to needle their fistula and also to supervise their therapy session.

Discussion

Chronic hemodialysis can be the only treatment for some patients in end stage renal disease. Quality of life in such patients can be further deteriorated due to the long dialysis sessions performed in dialysis units. In the case of pediatric patients the situation can get more complicated with addi-

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tional problems such as school attendance. Though there are several reports in the literature suggesting that not only the quantity but also the quality of hemodialysis units should be increased, few of them seem to focus on pediatric patients. Pediatric patients require intense psychological, emotional, social and academic support which may also have positive impact both on their adherence and response to therapy.

The aim of the present study was to improve the conditions in our dialysis unit for pediatric patients. The first step was to find out the expectations of the patients from the unit and the staff. In order to have their sincere views about the unit a questionnaire was prepared comprising of questions derived from the complaints and/or expectations of the patients stated previously to the staff. The forms were filled up by the only pediatric nephrologist responsible from the unit following a friendly interview with the children. At the time when the study was started the doctor and the children had already had a close relationship which increased the reliability of the data obtained by the questionnaire.

Their expectations seemed to have focused on the improvement of the physical conditions of the unit such as transportation, tv set, morning sessions and fewer and shorter sessions. The results of the questionnaire have clearly shown that the children also complained of lack of social and psychological support such as the absence of their parents or relatives together with the absence of interactive care in terms of playing games, reading books, chatting. An interesting finding was their unwillingness for school attendance which may also reflect their depressed psycological status due to their chronic illness.

After reviewing our data, efforts to improve the physical conditions in our unit were started. The staff was trained for a closer and more firendly relationship with the patients including reading-drawing-chatting-playing sessions for each patient. The relatives of the patients were allowed to stay with them during their dialysis sessions. The unit was reorganized so that every patient would receive his treatment for each session on the same machine while their fistula needling was planned to be performed by the same staff each time, as they wished. Our patients seemed more content and adherent to their dialysis therapy after these changes were made.

Therefore, the therapy team should try to provide their basic needs and fulfill the expectations of these patients and their families. Such an approach would help the patients, their families and also the therapy team to deal with problems and decrease the anxiety.

The results of this pilot study showed that pediatric hemodialysis treatment requires well equipped units where well trained staff aware of the problems of these chronically sick children is employed. We tried to improve the conditions of our unit in correlation with the expectations of our patients. However, there is still much to be done for pediatric hemodialysis patients in our country.

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