IMPORTANCE OF USING THERAPEUTIC TOYS IN CARE OF CHILDREN WITH DIABETES TYPE 1

ABSTRACT

Objective: to report the efficacy of a therapeutic toy as an instrument to be used in the care of children with diabetes mellitus type 1. Method: descriptive study with qualitative approach and report of the experience, developed by members of the Extension Project “Therapeutic Toy: a new look by pediatric nursing” at the University Hospital Lauro Wanderley - UFPB. The nursing consultation occurred in April 2011 with a male six-year-old child recently diagnosed with diabetes type 1. For recording data and the reactions of the child and family, regarding the technique of the therapeutic toy, a specific form of the institution, the book of Nursing Consultation Registration and a field diary were used. Results: during nursing consultation, two therapeutic toy sessions were held, one was instructional one the other dramatic. The use of this technique favored greater interaction between the nurse and the child, enabling the last to assimilate properly the situation experienced. Conclusion: this study allowed reflecting on the importance of using a therapeutic toy in assisting children with diabetes type 1, because it is a valuable tool for parental guidance regarding the therapy to be provided to children and to prepare them for a painful routine procedure (Dextrofix and insulin therapy), also helping in the process of resilience. Descriptors: child, diabetes mellitus, assistance, games and toys.

RESUMO

Objetivo: relatar a eficácia do brinquedo terapêutico como instrumento a ser utilizado na assistência à criança portadora de diabetes mellitus tipo 1. Método: estudo descritivo com abordagem qualitativa e relato de experiência, desenvolvido pelos integrantes do Projeto de Extensão “Brinquedo Terapêutico: um novo olhar da enfermagem pediátrica” no Hospital Universitário Lauro Wanderley-UFPB. A consulta de enfermagem ocorreu em abril de 2011, com uma criança do sexo masculino, de seis anos de idade com diagnóstico recente de diabetes tipo 1. Para registro dos dados e das reações da criança e da família diante da técnica do brinquedo terapêutico, utilizaram-se um impresso próprio da instituição, o livro de Registro de Consulta de Enfermagem e um diário de campo. Resultados: durante a consulta de enfermagem, foram realizadas duas sessões de brinquedo terapêutico, uma instrucional e outra dramática. A utilização da técnica favoreceu uma maior interação da enfermeira com a criança, permitindo que esta assimilasse de forma adequada a situação que estava vivenciando. Conclusão: este estudo permitiu refletir quanto à importância da utilização do brinquedo terapêutico na assistência prestada à criança portadora de diabetes tipo 1, por ser um instrumento valioso na orientação dos pais quanto à terapêutica a ser instituída à criança e no preparo dela para uma rotina de procedimentos dolorosos (Dextrofix e insulinoterapia), auxiliando-a no processo de resiliência. Descriptores: criança; diabetes mellitus; assistência; jogos e brinquedos.

RESUMEN

Objetivo: narrar la eficiencia del juguete terapéutico como instrumento a ser utilizado en la asistencia a niños con diabetes tipo 1. Método: estudio descriptivo, con enfoque cualitativo y relato de experiencia, desarrollado por los integrantes del Proyecto de Extensión “Juguete Terapéutico: una nueva visión de enfermería pediátrica” del Hospital Universitario Lauro Wanderley-UFPB. La consulta de enfermería ocurrió en abril de 2011, con un niño de sexo masculino, de seis años de edad y con diagnóstico reciente de diabetes tipo 1. Para el registro de los datos y de las reacciones del niño y de la familia frente a la técnica del juguete terapéutico, se utilizaron un formulario propio de la institución, el libro de Registro de Consulta de Enfermería y un diario de campo. Resultados: durante la consulta de enfermería fueron realizadas dos sesiones de juguete terapéutico, una de instrucción y la otra dramática. El uso de la técnica produjo una mayor interacción de la enfermera con el niño, permitiendo que éste assimilase de manera adecuada la situación que estaba viviendo. Conclusión: este estudio permitió reflejarse sobre la importancia del uso del juguete terapéutico en la asistencia dada a niños con diabetes tipo 1, por ser un instrumento valioso en la orientación de los padres en relación a la terapéutica realizada con el niño y en prepararlo para una rutina de procedimientos dolorosos (Dextrofix y terapia de insulina), ayudándolo en el proceso de resistencia. Descriptores: niño; diabetes mellitus; asistencia; juegos y juguetes.
INTRODUCTION

Diabetes mellitus is part of a group of metabolic diseases and its main characteristic is hyperglycemia, which results from defects in secretion and/or the action of insulin. This disease is generally associated with a number of complications, dysfunctions and insufficiency of multiple organs. Currently, diabetes mellitus is considered one of the most important public health problems. This is due to the number of people affected and incapacitated, mortality and high costs of control and treatment of complications of the disease.2

The International Diabetes Federation (IDF) calls attention to the growth of the incidence of diabetes type 1 among children in pre-school stage, which is about 3% a year, while diabetes type 2 -previously regarded as an adult disease- has grown to alarming proportions in children and adolescents. Related factors are sedentary lifestyle, obesity and bad eating habits, in addition to late and inadequate diagnoses, with serious consequences for children.2

The incidence of diabetes in Brazil is of seven new cases per 100,000 children and adolescents under the age of 20, and in the general population the risk of developing the disease is 0.4%. Diabetes type 1 has two peak incidences, namely: the first at pre-school stage, period of greatest susceptibility to viral infections and the second in adolescence, when the growth hormone increases resulting in insulin resistance.3

Primary health care should act to prevent and treat confirmed cases of diabetes, seeking the reduction of risk factors such as, sedentariness; obesity; and unhealthy eating habits. At the same time, it has to aim at the identification and treatment of patients at high risk for diabetes (primary prevention); the identification and treatment of cases not yet diagnosed (secondary prevention); and strengthening the control of cases already diagnosed, aiming at the prevention of acute and chronic complications (tertiary prevention).3

The treatment of diabetes mellitus involves a number of factors that modify the patient’s lifestyle. It is complex, painful and demands self-discipline. Possible treatments involve insulin therapy; reeducation of eating habits; knowledge about the ability of insulin self-use; self-control of blood glucose and regular physical activity. In this sense, family and friends support is vital to the success of the therapy.4

When diabetes affects children, therapy becomes much more complicated, because, as stated earlier, it is a painful and continuous treatment. It requires adequate knowledge about the disease and commitment to the therapy prescribed, in order to prevent complications and improve children’s quality of life.5

Glycemic control and the use of insulin is a difficult routine to be experienced by both the child and the family, mainly for those children in pre-school stage who do not understand the necessity of the procedure. They feel punished by parents for something wrong they might have done. The use of a therapeutic toy helps children to understand this reality, minimizing the trauma resulting from continuous and painful interventions in their daily life.

The dynamics of the therapeutic toy helps children in understanding the procedures to which they will be submitted. It allows externalizing their feelings of pain and anxiety, accepting and cooperating with the treatment. In addition, it favors social, emotional, intellectual, and therapeutic development from the moment that it decreases stress, fear and anxiety.6

The technique consists of developing sessions that last from 15 to 45 minutes, in which children receive information about what will be done to them through dramatization with the materials used in the procedure. This preparation must be performed by a professional of the team that has already established a trust relationship with the child.7

This study aims to report on the effectiveness of the therapeutic toy as an instrument to be used for assistance to children with diabetes mellitus type 1.

METHODOLOGY

It is a descriptive research with qualitative approach of experience reporting type developed by members of the Extension Project “Therapeutic Toy: a new look by pediatric nursing”, of the Pediatric Outpatient Clinic at University Hospital Lauro Wanderley, in the city of João Pessoa, state of Paraíba.

Therapeutic toy sessions occurred during a nursing consultation held in April, 2011, with a male six-year-old child, with recent diagnosis of diabetes mellitus type 1. For recording data and the reactions of the child and the family, regarding the therapeutic toy technique, a form of the institution, as well as, the book of Nursing Consultation Record book and a field diary were used.
DESCRIPTION OF THE CASE

The child object of this research, called I. M. S. in this study, was male, aged six years, resident in the municipality of Duas Estradas, state of Paraíba. He was brought by her mother and her aunt for medical consultation at the Pediatric Outpatient Clinic at University Hospital Lauro Wanderley. The mother and the aunt reported that the child showed weight loss and was excessively hungry and thirsty. After the anamnesis was performed, laboratory tests were required.

In a return visit, after laboratory examinations assessment (Fasting Glucose: 374mg/dl; Glycated hemoglobin: 6.5%), diabetes mellitus type 1 was diagnosed. After the consultation, the child and the family were forwarded to the nurse in the outpatient clinic in order to receive proper guidelines. They were duly informed about the insulin therapy technique; the signs of hyperglycemia and hypoglycemia; the importance in changing eating habits and performing physical activity during the treatment of diabetes; the complications arising from the disease; and the importance of family support to the child.

RESULTS AND DISCUSSION

The reception of the family was held in the first nursing consultation, because the relatives arrived quite anxious and distressed by the discovery of the disease. Active listening took place, seeking to understand the feelings of the family and the child regarding this new reality. It was observed that the mother and the aunt were afraid of the child’s future and the therapy to be performed. The doubts relating to the disease and the importance of following the treatment correctly were explained, because such conduct would lead to a better quality of life of the child.

The diabetic children families face anxiety of the loss caused by the disease. Diabetes is a treatable disease in the family environment, requiring the involvement of the whole family, in order to implement an effective care of children, preventing possible complications.

The insulin therapy procedure was explained to the mother, the aunt and the child with the help of the dramatic and instructional therapeutic toy and the session lasted for about 40 minutes. A doll called Guigi, a glucose meter, tapes, insulin syringes and insulin were used. The story dealt with the symptoms of the disease and the treatment to be performed to the child, with the demonstration of Dextrostix and delivery of insulin, in order to prepare the family and the child to perform the procedure at home. The story must be used during interventions to children, because it is a natural instrument of information about their reality.

I. M. S., the mother and the aunt were invited to participate in the game by performing on the doll the procedures previously performed by a nurse. The mother and the aunt showed their skill in measuring the correct amount of insulin as prescribed, as well as the correct technique of delivery. A study reveals that since care for children with special needs - such as diabetes type 1 - is intense, constant, continuous and complex, it can become a generating source of stress and oppression to the main caregivers, who feel responsible for the care, since they are affectively involved.

Parents are a source of reassuring support for children at that age. When children realize that their parents are anxious, annoyed or insecure, they tend to have their fears increased. On the other hand, when children realize that their parents are confident, they show more tranquility.

Due to the age of I. M. S. (six years), the doll and the syringe were only offered, so that the child could perform the delivery of insulin; which was done with great satisfaction. The observation and handling of toys allow greater familiarity of children with hospital materials and consequent reduction of their fears.

Dextrostix was used at the end of the session, followed by the delivery of insulin to the child by the nurse. After the procedure was finished, it was again asked I. M. S. to perform the procedure - to which he had previously been submitted - on the doll. This allowed the child to flow out the feelings experienced during the procedure. In spite of being disconsolate, I. M. S. performed the procedure on the doll without showing any anger or embarrassment. This experience enables children to confront their reality and makes room for asking questions about their condition and the materials used.

Another study showed that playing can transform the environment by favoring children care, in an atmosphere of support and recognition of their needs; it can turn care into playing. In addition, the authors point out that the therapeutic toy is a tool that fosters care integrity; helps children to accept treatment and establishes channels that facilitate communication between children, professionals and the companions. In this study, all these aspects were identified in
the assistance to the child with diabetes type 1.  

**CONCLUSÃO**

Diabetes has affected an increasing number of children and adolescents throughout the world and in Brazil it is considered a public health problem. Because it is a chronic disease, therapeutic success requires effective involvement of families, taking into consideration children’s dependency to them.

Treatments includes eating habits reeducation, exercises and insulin therapy, the latter being considerably painful by the frequency with which it is performed. The use of a therapeutic toy can be a great ally in the preparation of the child for the procedure and also in relieving the tension generated by the frequency and nature of the procedure.

The use of the therapeutic toy technique favored greater interaction of the nurse with the child and the family, allowing the adequate assimilation of the situation experienced by accepting to perform the procedure required on the doll (delivery of insulin).

This study allows for reflection on the importance of using a therapeutic toy as a significant tool for the care of children suffering from diabetes type 1. It prepares them for the routine of painful procedures (Dextrotix and insulin therapy), aiding in the process of resilience and also as a way to guide parents on the therapy performed on children.

It is expected that this study motivate nurses to employ the technique of the therapeutic toy in their daily care activities related to children suffering from diabetes mellitus, in order to minimize the impact of the disease and its treatment, reaffirming the principles of humanization regarding the assistance to the binomial child/family.

**REFERÊNCIAS**

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