Mini Review

Diabetes Education Through Play: Insights for Nursing Practice

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Abstract

Type 1 Diabetes is one of the most common chronic diseases in childhood and demands several care tasks in order to achieve glycemic control. Nurses must develop educational approaches to provide youth with education and positive behavioral outcomes. This paper describes two play-based strategies used in nursing practice for diabetes education: The Therapeutic Play and the Interview with Puppets. These play-based strategies offer nurses the opportunity to give voice to their pediatric clients, talk about children’s perceptions and overcome challenges in patient-provider communication.

Keywords: Type 1 diabetes; Diabetes education; Play and playthings; Play-based strategies; Pediatric nursing

Abbreviations: T1D: Type 1 Diabetes; TP: Therapeutic Play

Introduction

One of the most common chronic diseases in childhood that exposes children to daily invasive procedures is Type 1 Diabetes (T1D). Youth with T1D and their caregivers constantly receive information about the numerous care tasks needed for maintaining normoglycemia (e.g. healthy eating habits, taking daily insulin injections, or correcting hypoglycemia episodes). Some of these tasks are eased by technology use, such as administering insulin through continuous insulin infusion systems or replacing finger sticks by glucose sensors [1]. However, optimal glycemic control remains a challenge for children and adolescents with T1D and their families, regardless technology use [2]. In this sense, nurses must develop educational approaches to provide youth with education and positive behavioral outcomes. The act of play is considered the means by which a child can naturally develop emotional, social and cognitive abilities [3]. Understanding the importance of meeting this need is extremely valuable to health care professionals such as nurses who are very present at potentially stressful situations to children. By recognizing the need of play, nurses must facilitate children participation in different types of play while in the hospital or clinic. This practice facilitates bond and helps the child to associate nurses with pleasurable activities, and not only with procedures that cause pain and discomfort [4,5]. This paper describes two play-based interventions for diabetes education delivered by nurses that might be implemented in health care settings as part of nursing activities: The Therapeutic Play and the Interview with Puppets.

Therapeutic play (Therapeutic play)

The use of toys as an instrument of nursing care dates from the late 1960s, with Professor Esther de Moraes, professor of Pediatric Nursing at the University of São Paulo School of Nursing in Brazil. Professor Moraes introduced into her nursing classes recreational activities in hospitals [6]. The denomination Therapeutic Play (TP) was established in 1974 [7]. In 1980, new knowledge about the theme emerged and strengthened the theoretical bases redefining nursing actions in the use of TP activities [8]. A TP session can be defined as structured play to help the child release anxiety generated by experiences that are atypical for the age group – experiences that can be stressful and require more than recreation play to resolve the associated anxiety 8. There are three types of TP [9]:

a) Physiologically Enhancing Play in which a child’s biophysical conditions physiological capacities can be enhanced (e.g. playing trumpet as respiratory exercise);

b) Dramatic or cathartic play, to allow a child to externalize experiences hard to be verbalized and to facilitate the expression of feelings, needs and fears;

C) Instructional Play, whose purpose is to prepare the child to undergo invasive procedures.

To perform a Dramatic TP session, the nurse offers a toy’s kit to the child that might include: arts materials for drawing/ painting, geometric blocks, dolls representing the child, the family and the health care team, pacifier, baby bottle, toys such as cars or cellphone and medical equipment, for example, thermometer, stethoscope, syringes and measuring tape. The toys included in the kit can vary according to the TP session purposes. For example, a Dramatic TP session might investigate emotions related to T1D onset giving toys and medical devices that
remind the child about the diabetes management in the hospital [10]. In the Dramatic TP session, the child is invited to play, and his/her refusal should be respected. The session can happen in a calm and safe place, such as the playroom or bedroom. The presence of a caregiver will depend on the child’s preference. Nurses must advise the caregivers about the purpose of the TP activity and ask for their cooperation. Rules such as session length (15-45 minutes) and return of toys at the end of TP activity should be pre-established with the child. It is the child who identify and decide how to use toys. One should not interrupt or accelerate the play, neither guide how the child should play. Nurses will participate upon the child’s request. Reproducing verbal expressions, returning questions to children, observing and writing down their behaviors are also part of the Dramatic TP technique. Lastly, the child must be notified when the session is about to be over so he/she can finish playing [11]. To perform an Instructional TP session, the toys’ kit must include materials related to the procedure the child will undergo [12]. It is essential to have dolls with appropriate fabric, preferably washable. The nurse should present the materials to the child and tell a story involving the same procedures will be done, prior to or concurrent with a demonstration. For example, the nurse can teach a child how to monitor his/her blood glucose by showing how to alternate the dolls’ fingers in each prick. The child should be invited to participate without being forced and any initiative/help that he/she demonstrates should be commended. Children should be encouraged to repeat the demonstration at the end of the story to assess what meaning they are giving to the procedure. The child’s preparation using Instructional TP may last minutes, hours or days, depending on the complexity of the procedure and the characteristics of youth.

Interview with Puppets (Interview with Puppets)

Puppets have been used by children to play for several years. They were incorporated in folklore of many countries and over the years the literature has pointed its use as pedagogical instrument to facilitate data collection in pediatric practice and research [13-15]. Nurses can use puppets in diabetes education sessions with children in outpatient clinics or in hospitals. The use of puppets in children hospitalized due to acute complications or poor glycemic control that demands close monitoring to identify the problem etiology. By constructing a scenario to use with puppets, nurses can prepare an environment similar to the children daily life. The communication among nurses and children using the puppets may enhance the child involvement in health care and promote his/her expression of feelings, emotions and storytelling of current events through a personal point of view. When using puppets, children can also imitate any person they want, which allow them to express thoughts of people they lived with, helping nurses to understand any kind of relationship that influences the diabetes management. There are many ways to construct a puppet scenario. One example is a mobile scenario, made of colored fabric with open windows that allows the communication in both sides of panel. Figures representing people (parents, teacher, siblings, friends, health professionals), devices (insulin pump, insulin pens, glucometer), places and leisure activities can be used to characterize the scenario according to the child desires [16]. An apron with drawings representing places such as house, school or hospital is another example of scenario that can be used during puppets simulation.

Nurses might choose mouth puppets or finger puppets to interact with the child, depending on what kind of scenario and health care setting puppet simulation will take place. Both, child and nurse will use a puppet and sit nearby the scenario. The nurse asks the child to select a place (house, school or hospital) to visit. The child chooses figures to characterize the scenario and the nurse can “break the ice” introducing herself/himself, inviting the child to start a conversation. Based in factors considered relevant to diabetes management through diverse scenarios of real life, the nurse encourages the child to express daily experiences in living with diabetes. To succeed using the puppet strategy, it is essential that nurses uses puppets actively, changing his/her voice, using body movements, acting as a visitor in the environment chosen and evolving the child in the scenario and conversation. Expressions of joy, doubt, surprise and curiosity are very important to the child’s immersion in the activity.

Conclusion

The therapeutic play and the interview with puppets are examples of play-based strategies delivered by nurses in diabetes education. It is important to nurses to be familiarized with the techniques and requirements to perform each approach in order to plan the intervention according to the child’s needs to better manage the diabetes. These play-based strategies offer nurses the opportunity to give voice to their pediatric clients, talk about children’s perceptions and overcome challenges in patient-provider communication. Consequently, diabetes education through play can empower children with diabetes to actively participate in their health care.

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