

Educational and nursing problems of parents of children with stoma

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Abstract

In children, it is usually one of the stages of treatment of lower alimentary congenital defects. Such patients require long-term professional medical and nursing attention as well as solicitous care of the parents at home. The aim of the study was the analysis of educational and nursing problems that are faced by parents of children with stoma, the influence of a nurse on the quality of their care, and determination of nurse educational assignment in preparing the parents for the care at home. The study was performed in the group of 30 parents of children, 0-2 years old, with lower alimentary congenital defects who had intestinal stoma inserted in 2003. The questionnaire revealed that the main causes of the stoma were Hirschsprung disease (40%), anal atresia (37%), perianal fistula, intestinal perforation and necrosis (10% each). All responders stated that the knowledge acquired in the ward was of great help while nursing a child at home. The results showed that above 80% of parents had the opportunity to change the stomal sacks by themselves, once or more times, in the presence of medical staff. Skin changes (33%) were the most common complications in case of stoma, which could encounter for inappropriate care. Other complications included hemorrhage (20%), prolapse (13%), and stoma narrowing (10%).

Key words: stoma, nursing, child.

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Introduction

The intestinal stoma is a purposeful connection of the large or small intestine and the surface of the abdominal integuments. An emerged stoma is situated in the frontal wall of the abdomen, seen as a vivid red cone of the intestinal mucous membrane, protruding in the abdomen integuments [1]. In children, it is usually one of the stages of treatment of lower alimentary congenital defects. Medical staff plays an important role in preparing parents for taking care of their children. The main task of the medical personnel is to arouse a feeling of co-responsibility for the health of the child and active participation in the process of care. Parents should know how to deal with the stoma, change stomal sacks, communicate with the child and cope with problems of everyday life. It is very important to determine the level of parents awareness, their needs in order to help them. Parents' motivation, argumentation, abilities to learn and transfer information are also essential [2].

The aim of the study was the analysis of educational and nursing problems of the parents of children with stoma, parents' emotional problems, and the influence of a nurse on the nursing process.

Material and methods

The study group consisted of 30 parents (67% of women and 33% of men), aged 20-50, of children at the age up to 2 years old with the emerged intestinal stoma, hospitalized or ambulatory treated in Białystok, Warsaw, and Poznań in 2003. The questionnaire containing 30 questions concerning educational and nursing problems was the examination tool. The results were analyzed statistically, interdependences were considered significant at $p < 0.05$. The graphic analysis was performed in Excel program.

Figure 1. The causes of stoma formation

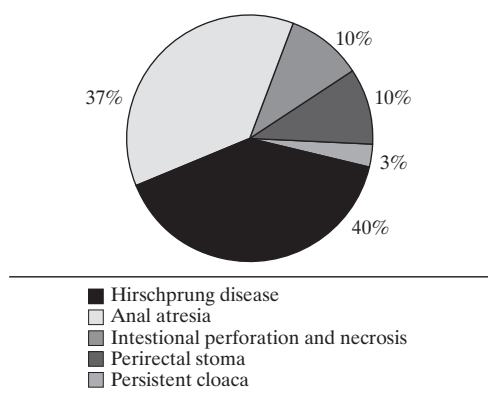
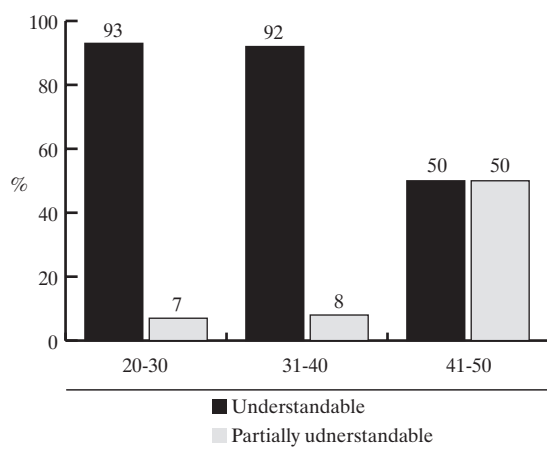


Figure 3. Parental age and understanding the information on stoma care



Results

The parents 20-30 years old comprised 50% of the study group, 43% were 31-40 years old, 41-50 years old constituted 7% of parents. The majority of parents finished secondary schools (49%), 29% – technical schools, and 16% of parents graduated from higher education schools. The main causes of the stoma were Hirschsprung disease (40%) and anal atresia (37%) (Fig. 1). The mean time of stoma at place was about 1.5 years. It turned out that 93% of parents were informed of the necessity of stoma in their children, whereas 7% did not obtain any information about it. However, all the parents were instructed how to take care of a child with a stoma. Adequate information was obtained by 53% of the responders in the first 24 hours after the operation, 40% – before discharging, and 7% – before the operation. More than 80% of parents claimed the information given by a nurse was understandable, whereas only 17% did not fully understand the message. Thus, the correlation was found between the level of education of the parents and the range of information they understood; the more educated the parents were, the more they understood (Fig. 2). It was also

Figure 2. Parental education and understanding the information on stoma care

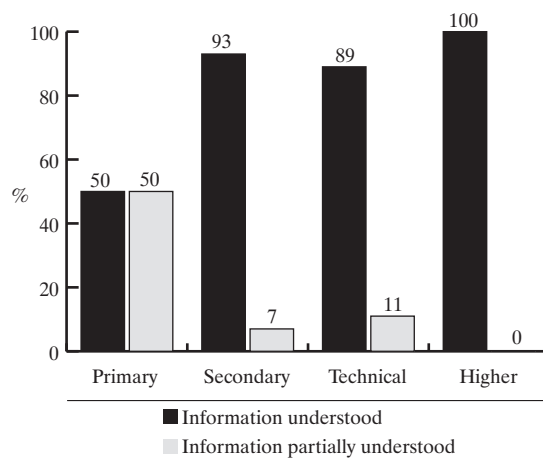
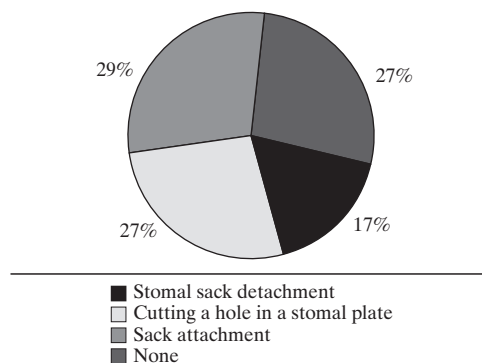


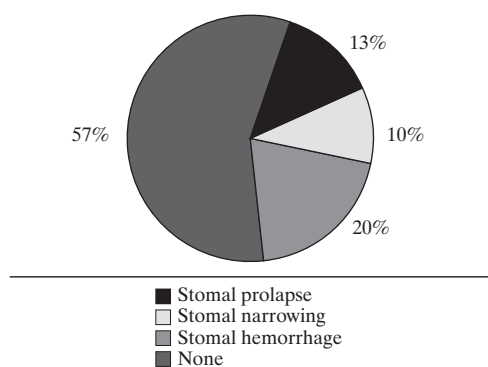
Figure 4. Most problematic activities connected with stomal management



revealed that understanding was related to the age. The younger responders (20-30 years), were the more they (93%) understood the nurse's instructions. The oldest group of responders (41-50 years old) understood the instructions only in 50% (Fig. 3). All responders claimed the information they were given by the nurse helped them to take care of their children at home. The data presented that more than 80% of parents changed the stomal sacks in the ward in the presence of the nurse. Out of this group, 67% of responders changed the sacks several times. Only 20% of the parents maintained that they were not allowed to change the stomal sacks in the ward.

The examination showed that dealing with stomal sacks could be difficult for parents. Only 27% of responders did not have any problem with the sacks, whereas 30% found it difficult to cut the hole in the stomal plate and accurately apply the stomal sack to the abdominal integuments (Fig. 4). More than a half of responders (53%) changed the stomal sacks once a day (in accordance with the instructions) and they could do with the number of sacks they had per month. However, 47% changed them several times a day and they did not have enough sacks per month. The skin changes around the stoma and the causes of

Figure 5. Stomal complications in children



their occurrence were evaluated. There were 67% of responders who did not report any changes of the skin around the stoma, which could be evidence of a proper care. The cause of skin changes was improper protection of the stoma (80% of responders) or allergy to stomal plate (20%). Those who confirmed the occurrence of skin changes in their children comprised 33%. There were other complications concerning the stoma itself occurring in 40% of children; 20% revealed hemorrhage from the stoma, 10% – the stoma narrowing, and 13% – prolapse of the stoma (Fig. 5). The sacks should be changed once a day, in the evening after the bath, which does not provoke any stressful situation and is treated as a part of nursing activities and most parents (86%) confirmed that the children were calm during the change. The frequency of stomal change and its causes were analyzed and the issue of a month limit of the sacks was considered. Almost a half of responders (47%) said they changed the stomal sacks several times a day, which led to the sack depletion. The rest (53%) changed them once a day, i.e. in accordance with the instructions and the number of stomal sacks for this group was satisfactory. The main cause of excessive use of the sacks was, according to more than 60% of responders, the leakage of intestinal contents under the plate. However, the rest of parents sought the cause in inability to use the sacks properly. Thus, the difficulties in coping with stomal equipment are due to insufficient practice. Another issue was the analysis of factors influencing the improvement of parental care at home. According to 50% of responders, the number of stomal sacks should be increased, whereas 30% claim that parents' training is more important. Moreover, the responders thought that meetings and the exchange of information among the parents of children with stoma could be profitable and helpful.

Discussion

Stoma formation in children is usually a part of the treatment of lower alimentary tract congenital diseases. Such children require long-term, professional medical care, increased supervision and abilities of the parents [3]. The main causes of

the stoma were Hirschsprung disease (40%) and anal atresia (37%). Perforation and intestinal necrosis were observed in 10%. The issues of educational and nursing problems were touched upon in the study. Similar studies were performed in Bydgoszcz in 5 children with temporal stoma (with low birth weight) due to necrotic intestinal inflammation [4]. The mean duration time of stoma in children in study groups was similar and continued for about 1.5 years. It depended on many factors, such as body weight and health condition. Introducing the knowledge on the subject and conveying the instructions in a suitable way are a crucial issue concerning confidence in the medical staff and parents' anxiety. Rybakowa et al. points to a well prepared conversation with parents as an important solution for both sides [5]. Parents have the right to co-decide about the process of the diagnosis and treatment of their children as soon as they are taken to hospital [6]. The duty of the nurse is to prepare the parents for their care of the child at home, give as much information as she can about the stoma and its management. Adequate information was obtained by 53% of responders in the first 24 hours after the operation, 40% – before discharging. Barczykowska et al. claimed that parents should be prepared for taking care of their children as soon as possible but gradually. Thus, the nurse should give theoretical details as well as practical ones concerning the stoma operation and skin management [4]. The level of understanding depends on the parents' education and age. Our study confirms this dependence, as 50% of the study group with primary education did not follow the instructions. As far as the age is concerned, the younger group did not have any problem with understanding the information conveyed by the nurse. Thus, there is a necessity of choosing appropriate forms and didactic methods for particular groups of parents. According to Świącka et al. parents expect honest and accessible information concerning both the health condition of a child and the management of the stomal equipment. It was revealed that 97.8% of parents required instructions on the child's hygiene, its activities and nutrition. It proved that 95% of parents have confidence in the nurse's knowledge and help [7]. Trojanowska et al. conducted a similar study, however, not limited to a particular disease. According to their investigations, 51.5% of parents maintained that information concerning nursing the child was satisfactory but only to a certain extent. A positive answer was given by 42.4% of responders [3]. It is essential to gain knowledge and skills to nurse a child at home. Świącka maintains that it is also important to explain the purpose and pattern of all actions taken for the child [7]. Barczykowska et al. proved how crucial it was to learn to change the stomal equipment in the ward for nursing a child at home [4]. Hemorrhage from intestinal mucous membrane or prolapse of the stoma, solved by the parents by themselves, were among complications observed by responders. Only 10% concerned the narrowing of intestinal stomas. There are numerous studies conducted by both pediatric and adult surgeons that describe stomal narrowing as a result of inflammation around the stoma. Such a condition can require repeated surgical intervention. Sawicz-Birkowska analyzed early and late complications in children hospitalized. She observed operational wound dehiscence and marginal necrosis of the emerged intestinal wall in 14.8% of neonates with emerged colostomas. Among late complications, 27.79%

revealed: intestinal mucous membrane prolapse, infection and maceration of the skin around the stoma, and stomal narrowing [8]. Snarska, and other surgeons stated in their studies that properly established stoma guaranteed its good functioning and prevented complications [1].

The study confirms that parents' education plays an essential role in managing children with stoma at home. A textbook "Nursing the stomas in children" can be helpful in this process and can facilitate it.

Conclusions

1. Learning practical skills to nurse a child with stoma is very important in managing the child at home.
2. Understanding of information given by a nurse depends on the age and education of parents.
3. The quality of home care can be improved by increasing the number of training sessions and meetings of parents of children with stoma and increasing the limit of stomal sacks.

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