

Perceptions of nurses as health educators held by children and adolescents based on their artwork

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ABSTRACT

Purpose: To evaluate perceptions of nurses as health educators held by children and adolescents aged 4 to 17 years based on their artwork.

Materials and methods: 514 children's drawings were analyzed. Titled "With a Nurse for Health," drawings were submitted from all over Poland, coming from hospital recreation centers, schools, art studios, sick children, children with special needs, and healthy children.

Results: Children created images of nurses engaged in a detailed range of professional duties, including

delivering care to children and attending to children's personal hygiene. The drawings portrayed the nurses delivering first aid care for cases of injury, bleeding, and fractures, as well as applying or changing dressings. Nurses were depicted in hospital rooms, nurse's offices, and emergency rooms.

Conclusion: We believe that the analysis of children's artworks can help in the planning of health programs aimed at children.

Key words: children, artworks, health, nurses

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INTRODUCTION

Nurses care for the sick and injured in hospitals, where they work to restore health and alleviate suffering. Nurses also increasingly work to promote people's health and to prevent illness in all communities [1-4]. Health promotion-related issues have recently been written about extensively in the nursing education literature [5-8]. School nurses' views have a tremendous impact on whether they incorporate health-related concepts in their daily practices, influencing the types of health promotion they engage in. Behavior and lifestyle are crucial determinants of health, illness, disability, and premature mortality. Smoking has been shown to cause lung cancer. Smoking, diet, and physical inactivity are important risk factors for cardiovascular disease [9]. Childhood obesity has been associated with the incidence of type 2 diabetes among adolescents as well as neurological, endocrine, cardiovascular, pulmonary, gastrointestinal, renal, musculoskeletal, and psychosocial complications. Overweightness and obesity are problems particularly in the U.S. and Europe. Increased physical activity has been associated with increased life expectancy and decreased risk of cardiovascular disease. Physical activity produces overall physical, psychological, and social benefits. Every day, school-aged children and teenagers should engage in at least 60 minutes of moderate- to vigorous-intensity physical activity to ensure healthy development [10,11]. Young children are usually active, but even young children can spend a lot of time being inactive watching TV or videos or playing computer games. Early childhood education programs should include health promotion activities. Even in children aged 7-10 years, attention should be paid to developing positive attitudes towards hygiene and health [12-14]. Although the preschool years have been identified as an ideal time for teaching children about health and for establishing positive beliefs and behaviors, little research has been carried out on health education for young children. The teaching methods of health education include: games, field trips, role-playing, reading materials, audiovisual materials, and drawings [1,15]. Children, who base their judgments on their personal experiences and observations, are a highly impartial source of opinion about the nursing profession.

Children's drawings present their knowledge about various phenomena, people, and situations. Drawing is a form of artistic expression through which children can convey their thoughts and feelings before verbalizing them. Apart from its expressive value, drawing has a specific communicative value and contains certain codes that combine many meanings [16]. It is also a way

of relating with others as well as the world around them, enabling them to fantasize, role play, and search for solutions. The method of drawing analysis has long been used in psychology, pedagogy, and recently in medicine to determine perceptions of the surrounding reality, its phenomena, and the mutual relations between these elements [17]. When analyzing children's drawings, the following aspects are taken into consideration: the size of the artwork, placement of persons or objects, detailing, line quality, shading, color and overall impression [18]. We have used this method in the field of nursing to investigate the image of the nurse that arises as a result of the relationship between nurses and the receivers of nursing services (children).

Children's artwork is of interest to many researchers who are convinced that art allows children to manifest their feelings - expressing joy, delight, sadness, resentment, fear, or despair - to express their expectations, and demonstrate how they see themselves and the world around them [16, 19,20]. Children's drawings may also be useful in assessing a child's emotional state and development. For example, a timid child who is uncertain of her or his abilities may draw thin, light lines with numerous interruptions, while a child with egocentric characteristics uses a thick, precise, clear and continuous line [16,20,]. Varied pressure throughout a drawing with jagged strokes is indicative of unstable behavior and aggression, whereas relaxed, free-flowing, but controlled strokes suggest good adjustment. A child's drawing is also a reflection of his or her mindset, and the child's relationship to the environment may be revealed through the colors used [16,19,21]. Sometimes we get the impression that the colors of drawings are random, because they have nothing to do with what we see around us. However, this is not so. When drawing, a child may use only his or her favorite colors, for example, drawing a blue mouth and green hair. Objects and characters that he or she doesn't like may be drawn in dark, sad, unclear, or very intense colors, covering the entire page [16,19,22]. It should also be emphasized that for a child, it is sometimes much easier to draw something than to talk about it, especially if it is something painful. Drawing allows the child to illustrate something he or she cannot verbalize or express in any other manner.

The aim of this study was to evaluate perceptions of nurses as health educators held by children and adolescents aged 4 to 17 years based on their artwork.

MATERIALS AND METHODS

In total, 514 children's drawings were analyzed. These drawings, titled "With a Nurse for

Health," were submitted from all over Poland, coming from hospital recreation centers, schools, art studios, sick children, children with special needs, and healthy children. Participation in the competition was voluntary. The regulations of the competition required that parents of the participating children give their permission for the processing of personal data in accordance with the regulations of the Polish Act on the Protection of Personal Data. Parents of all children who participated in the competition gave such permission. The artworks were made using various techniques: torn paper collage, batik, wax scratch, coloring pages, poster paints, and watercolors. Detailed analysis of the drawings submitted by the children was the basic method used in the research. Competent judges estimated the value of the pictures, as the given phenomenon is difficult to measure in a precise quantitative way. The consistency of evaluation increases when it is possible to compare evaluations by at least two judges. In order to avoid too much subjectivity in the evaluation of the drawings, three independent "competent judges" were appointed. The panel consisted of three nurses who had been educated in the arts or had dealt with art outside of the nursing profession. The Ethics Committee at the Medical University of Białystok, Poland approved the study. Informed consent was obtained from the participants' parents.

RESULTS

198 artworks (38.5%) were from children aged 11 to 14 years old, 180 (35%) from children aged 7 to 8, and 53 (10.3%) from 15 to 16 year olds. The remaining 83 artworks (16.1%) were completed by children from 4 to 7 years old. The artworks were divided into groups depending on the subject. 104 (20.2%) of the drawings showed the nurse in a hospital room, nurse's office, or emergency room. Nurses were engaged in various activities related to the care of children, but also offered their hands or extended consolation (Figure 1).



Figure 1.

Many of the artworks presented nurses administering injections – 115 (22.4%) of the drawings depicted this - and children were depicted receiving vaccinations in 33 (6.4%) drawings (Fig. 2).



Figure 2.

Some drawings also portrayed nurses delivering first aid care in the case of injury, bleeding, or fractures, and applying or changing dressings – there were 52 works (10.1%) depicting this theme (Fig. 3).



Figure 3.

Nurses participating in therapy sessions by administering drugs orally and by other methods was illustrated in 52 works (10.1%), measuring temperature, height, weight, or blood pressure in 31 works (6.3%), setting up a new drip in 28 works (5.4%), and helping someone to get up or move in 16 works (3.1%). Other drawings portrayed nurses

delivering care to children by attending to children's personal hygiene in 11 works (2.1%) and taking them on walks outside in 17 works (3.1%). (Fig.4)



Figure 4.

Nurses provided instruction about healthy nutrition or the dangers of smoking and drinking alcohol in 434 works (86%). (Fig.5)

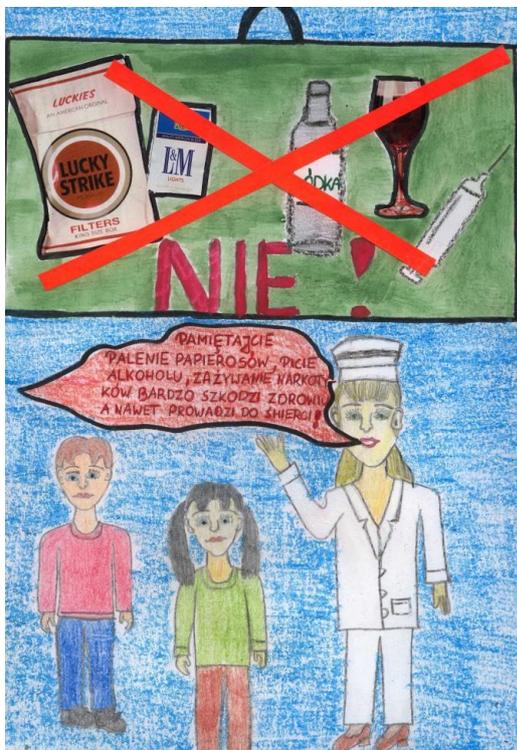


Figure 5.

29 of the artworks (5.6%) showed a nurse promoting active lifestyles by recommending sports and physical activities including playing football, riding a scooter, skiing, and hippotherapy. (Fig. 6)



Figure 6.

28 of the drawings (5.4%) showed nurses feeding or caring for infants. Some of the artworks showed nurses conducting their patients to a signpost labeled "Health" or included an inscription on a bed that said "We are getting healthy."(Fig. 7)



Figure 7.

The drawings also portrayed nurses helping children to make the right choices. One drawing showed a nurse leading a child held by the hand down a path toward health past lots of diseases such as measles, influenza, and mumps. At the end of the road was a smiling sun. Several artworks showed nurses physically examining patients or providing psychological comfort. (Fig. 8)

Nurses also appeared as good fairies who can change fate by using a syringe as a magic wand. (Fig. 9)

Children treat nurses as a second mother, a person worthy of trust. Nurses are portrayed smiling, and their faces display kindness and sensitivity. The drawings often depicted children in nurses' arms, or indicated that their hearts were devoted to the care of sick children. (Fig.10)



Figure 8.



Figure 9.

DISCUSSION

To our best knowledge, this is the first study on the perceptions of nurses as health educators according to Polish children and adolescents as shown in their drawings. In one previous report, Ślusarska et al. [23] analyzed 182 artistic creations by children focusing on the nursing profession.

When creating an image of a nurse, the young artists presented a detailed range of professional duties, aspects of the child–nurse relationship, and a prognostic vision of new activities that may be put into practice in the future. The authors concluded that the collected study material should be used not only by nurses

participating in the care of children, but also in the vocational education of nurses to achieve a more



Figure 10.

complete preparation of candidates in terms of their performance in their future profession. These findings are partially in agreement with our results.

In our study, we used the media of drawing to allow children to express an existing or imagined attitude towards nurses as health educators. Moreover, all of the works that reflected the quality of the patient–nurse relationship were created by hospitalized children. These drawings were distinctive in terms of their composition and originality. The atmosphere in which they were presented was particularly warm, very friendly, and involved loving characters. Another distinct aspect of the drawings may be reflective of the Polish society and its respect for tradition. Although Polish nurses gave up the tradition of wearing the nurse's cap at work in the 1980s and the 1990s, the symbol was still vividly present in the children's drawings, even though they likely never witnessed a nurse wearing such a cap considering their age. Nevertheless, almost all of the drawings presented such an image of the nurse.

The artistic output of children can certainly be viewed as an expression of their feelings. This approach can be used to assess children's feelings on discussed issues. Children use drawings to quite willingly express their personal emotions and attitudes towards the people and things that they encounter in their everyday life [15, 17, 23]. The validity of the drawing-based test is based on the experience of the researchers and numerous psychological theories. Therefore, the interpretation of the results is not simple. Moreover, the specific results do not constitute the child's definite opinion about the examined person, but only a certain set of assumptions that are meant to explain his or her condition and serve as a remedial means [23, 24].

Children's drawings have potential as a mental health screening aid for health care practitioners in the primary care setting [21]. Self-portrait drawings can be used in school-aged children as a screening technique for emotional

well-being, anxiety, and depression. Yet, according to Tielsch and Allen [20], children's drawings are not diagnostic and cannot be used as the sole indicator for anxiety or depression; however, two or more emotional indicators may serve as a signal to the clinician that further psychiatric assessment and referral are needed. Clearly, describing pain is difficult.

Therefore, we can utilize a child's love of drawing to allow them to use this outlet to reveal worrisome issues. Kortessluoma et al. [22] examined how hospitalized children express pain through drawings. A comparison was made between the drawings of hospitalized children and that of healthy control groups with respect to the thematic content and the cognitive and emotional characteristics of pain. The hospitalized children showed a lower level of cognitive capacity than the healthy controls. Furthermore, the control group of children revealed a higher level of emotional disturbance than the hospitalized children. The drawings of the hospitalized children frequently depicted medical procedures, whereas the drawings of the healthy controls depicted more consoling human and family relations. These findings are partially in agreement with our results.

Interestingly, some drawings showed the nurse involved in the patient's physical examination. This demonstrates the expanding role of nurses on the therapeutic team in Poland. The nurse cannot be identified solely by the performance of traditional nursing activities. Indeed, she can make a diagnosis, and the stethoscope is used by more care givers than just the doctor.

Based on the assessment of the children's artworks, we can establish that they are aware of the tremendous role the nurse plays in strengthening health. They take care of patients in the hospital and administer medications, injections, and vaccines.

Nurses are involved in taking all kinds of measurements (e.g., blood pressure, temperature, weight, and height), feeding, and the physical examination of patients. The children's artworks showed a general trend toward recognition of modern nursing, which includes the role of patient education.

A nurse is often involved in the diagnostic examination of a child. She supports the child mentally when problems occur in the sphere of bio-psycho-social help. She watches night and day over the most expensive and valuable resource on the planet - human life.

We believe that the analysis of children's artwork can help in the planning of health programs aimed at children. The use of new methods in the process of health education, such as drawings, is an innovative idea that can be applied in the education of nurses. Our results confirm that children are

interested in health education and understand the meaning of a healthy lifestyle.

CONCLUSIONS

1. Children are aware of the important role of nurses in their efforts in health education.
2. In the artwork, the nurse is depicted as smiling, full of kindness and sensitivity while standing at the children's beds.
2. We believe that the analysis of children's artwork can help in the planning of health programs aimed at children.

Conflicts of interest

We declare that we have no conflicts of interest.

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