

Original Article

An Analysis of Nursing Students' Experiences about Handmade Nursing Dolls during Nursing Education

Emel Demir, PhD

Associate Professor, Health School of Mustafa Kemal University, Hatay, Turkey

Correspondence: Associate Professor Emel Demir, Health School of Mustafa Kemal University, 31100 Hatay, Turkey e-mail: emelteksoz@hotmail.com eteksoz@mku.edu.tr

Abstract

Background: This study is based upon an experimental procedure, designed to educate nursing students to develop their care skills by making dolls with disposable medical equipment. Through the dolls, the main aim was to entertain and offer the child patients facilities during hospitalisation. Students were first asked to produce dolls and then to narrate the stories as related to the experiences of children using the dolls.

Aim: This study aim develop student nurses' perspectives towards learning to become a paediatric nurse, as revealed through the content of their written nursing doll stories and handmade nursing doll.

Methodology: An interpretive, constructivist approach was used to collect, analyse and report results in line with narrative inquiry. Forty-six third year nursing students were recruited from undergraduate nursing programme.

Results: The stories about dolls extracted from the nursing students were combined and systemically categorised according to their common meanings to provide an understanding of the overall process. Key themes emerged relating to the insight and learning of student nurses and the paediatric journey they had experienced, including the nature of health and diseases children grow and development through therapeutic dolls.

Conclusions: The anticipated contribution of this study to learning and teaching practices is related to how nursing dolls with their storytelling could be an alternative and innovative approach for understanding the paediatric training experience.

Keywords: Nurse Education, Nursing Doll, Nursing Story, Storytelling Model.

Introduction

Storytelling is an influential way in nursing education to promote best learning by reflecting on nursing students' experiences. The main goal of storytelling was to teach nursing students to take notes from courses and practices, and to turn them into a cohesive story (Wood, 2014). Stories collected in this way in nursing education, and supporting students to reflect on their experiences can deepen emotional awareness (Paliadelis & Wood, 2016). There are many different stories in literature, such as digital stories, stories from the medical record, the patient, family members, and health care members (Davidson, 2004; Jordal & Heggen, 2015; LeBlanc, 2017; Paliadelis & Wood, 2016; Schwartz & Abbott, 2007; Wood, 2014). Nursing students' stories about their handmade nursing dolls are a relatively new innovative storytelling model. Making handmade

nursing dolls by nursing students may be a new method for realizing this goal, combining theoretical and clinical learning as well as developing students' perspectives. The study is carried out to create a learning methodology and new innovative storytelling model from paediatric nursing experiences and practices.

Background

Stories provide a common form of experience and a rich content for nursing care practice (Gidman, 2013). Stories, as a teaching and learning strategy, include understanding experiences and designing plans of caretaking (Gidman, 2013; Ideas, 2015; Paliadelis & Wood, 2016). In sum, literature promotes the storytelling to help students to be better prepared for the real clinical practice (Gidman, 2013; Mabbett, Jenkins, Surrudge, Warring, & Gwynn, 2011;

Paliadelis & Wood, 2016; Schwartz & Abbott, 2007; Wood, 2014).

Clinical studying and learning environments must be incentive, if nursing students are to work in a new field like paediatric nursing (Paliadelis & Wood, 2016). Nursing students should have extensive experience of dealing with illnesses of children, the ability to convey skills, and also to make interventions to meet children's needs (Bradley, 2003; Davies, 2008). However, nursing students have limited practice and knowledge necessary to transfer into paediatric nursing (Lin, Wu, Lin, & Lee, 2014). There is a need for innovative teaching strategies which can help students learn about and understand the field of paediatric nursing (Petty, 2017). Experience and practice of using stories are valuable for offering best quality teaching supportively in this field (Ideas, 2015). Stories in paediatric nursing education have not been explored adequately. So, there is little information how to teach and learn about this topic in paediatric nursing. Alternative educational tools can be used within the framework of innovative teaching strategies to develop greater understanding and practice of this stories (Davidson, 2004; Petty, 2017).

Storytelling in a study context is part of narrative approach, but this approach is even less prevalent within the specialty of children' nursing education, the focus of the current literature. Within the literature, the field of neonatal care and for children with cancer had created more research about narration (Akard et al., 2015; Laing, Moules, Estefan, & Lang, 2017; Macpherson, 2008; Petty, 2017). This study aim develop nursing student' perspectives towards learning to become a paediatric nurse, as revealed through the content of their nursing doll stories. The aim also evaluate in order to capture their reflections of the new innovative storytelling model which included stories their handmade nursing dolls.

Methodology

This study has a qualitative design using narrative approach. Lazarus (2006) described the narrative approach as a method for evaluating and promoting subjects' reframing of emotional experiences, with a focus on the process of this reframing. Through this process, one can explore an individual's emotions and delve into the essence of the topic of interest. The narrative approach has been utilized in a variety of fields,

including sociology, psychology, medical science, and cultural anthropology (Toyama & Honda, 2016).

Participants: Sample selection in narrative approach is driven by the need to ensure that the full variation in the ways hand making dolls and hand writing stories is experienced is captured. Forty six nursing students was gathered from School of Health of a university on south of Turkey. All students were in the third year of an undergraduate nursing programme and have already studied children health or disease as part of paediatric lesson including autumn and spring term for 8 month 2015.

Ethical considerations: Ethical approval for this study was obtained from the University Ethics Committee. Nursing students were asked for their verbal consent about sharing their nursing doll pictures and their nursing stories.

Procedures: The procedures used comprised the following stages: Stage 1. Nursing dolls are made by nursing students, Stage 2. The cohesive story creation about nursing dolls, Stage 3. Thematic analysis

Stage 1. Nursing dolls are made by nursing students: Participants were supplied gauze and cotton as the main material for toy making by researcher. In this stage, we wanted the nurses to imagine a child. And then the nursing students made dolls of their dream' child that these 46 nursing dolls have included 24 different type of disease that relationship systems on body. The nursing dolls were also implemented 19 nursing care (e.i. intravenous, intramuscular, nasogastric catheter, electrocardiogram, monitoring, phototherapy, tracheostomy, post-op care, urinary catheter, gypsum care, oxygen therapy, steam therapy, hospitalization) by nursing students (see detail Table 1).

Stage 2. The cohesive story creation about nursing dolls: Participants were given semi-structured toy story form, such as, the name of the nursing doll, how to use of nursing doll, and the disease history of the nursing doll as a story. The participants created a cohesive disease story for their nursing dolls.

Stage 3. Thematic analysis: Analyse of theme of narratives was done by using the framework of Braun and Clarke (2006). Thematic analysis is suited for the current study as this is concerned with the content of a story, the 'what' rather than 'how' it is told. Nursing doll stories were

investigated to identify the meanings embedded within them and similar statements were brought together into categories through a constant iterative process. The nursing doll stories extracted from the nursing students nursing dolls

were combined and summarized according to their common meanings to provide an understanding of the overall process of reframing. The results of this analysis were “themes.”

Table 1 Handmade nursing dolls characteristics

Systems	Diseases	Symptoms	Nursing Cares
Genetic Diseases	Down Syndrome	Alopecia	Intravenous
Respiratory System	Simian Twin	Urticarial	Intramuscular
Musculoskeletal System	Sickle Cell Anaemia	Petechial	Nasogastric catheter
Oncological Diseases	Thalassemia	Hypoxia	Electrocardiogram
The Circulatory System	Bronchitis	Macroglossia	Monitoring
Immun System	Respiratory Tract Obstruction	Low-set ear	Phototherapy
Urinary System	Upper Respiratory Tract Infections	Slanting	Tracheostomy
Infectious Diseases	Pneumonia	Strabismus	Post-Op Care
Nervous System	Femur Fracture	Jaundice	Urinary catheter
Haematological System	Congenital Hip Dislocation	Siamese twins	Gypsum Care
New-born Diseases	Rickets	Femoral fracture	Oxygen Therapy
Chronic Diseases	Leukemia	Hydrocephalus	Steam Therapy
	Lymph Cancer	Genetic carrier	Hospitalization
	Heart Disease		Inpatient Care
	Urticarial		Nursing Image
	Urinary Tract Enf		Eye Drug Application
	Diarrhea		Blood Transfusion
	Varicella		Wound Care
	Measles		Colostomy Care
	Skull Fracture		
	Hydrocephalus		
	Meningitis		
	Epilepsy		
	Diabetes		

Results

The nursing doll stories whose nursing students gathered in-depth feedback on hand made nursing dolls. Three main themes emerged from these nursing doll stories: “Paediatric nurse care”, “The children health” and “The children disease”. Paediatric nurse care theme, most of

dolls included least a nursing care application that especially intravenous care. Student nurses usually describes the good nurse figure for children in nursing doll stories. Patient children who cared to nurse are very critical but the nurse as a Saviour enters the nursing doll story. The student nurses as a good student are described drugs and administration in this way they learned

paediatric lesson in the story. Below are some examples of these stories for this theme:

“Ostomy doll who escapes fighting in Syria is refugee. She who has strabismus is 10 years old. She was wounded with a bullet while running away. She broke her leg while she was trying to escape. When she came to Turkey she was hospitalized that colostomy opens in abdomen. Long long time, her treatment and care continued in the hospital and also home. Winter was very hard, and then she had pneumonitis. She was hospitalized again in intensive care unit. She was treatment with mechanical ventilator for 15 days. It was open tracheostomy. Ostomy's treatment is continued for a long time.” (Ostomy nursing doll story: Nurse TA).

“Anaemia doll is patient with anaemia. He is 7 years old. He looks palley that his lips and hands. He always has pain attack, so it was treatment with analgesic the serum. If we want to get his serum out, he starts crying. If we get her serum back on, she stops crying. Despite all this, he is very happy because he has a good nurse in the hospital.” (Anaemia doll story: Nurse SE).

“Photo Yellow doll is a normal new-born. After it was born, it had jaundice which is treated with phototherapy. Phototherapy is important for the treatment of a baby. Nurses.... Be careful, because we must protect the eyes and also genital organs. Photo Yellow is specially nursing doll for phototherapy care (Photo Yellow doll story: Nurse AE) (Picture 1).

Picture 1: Photo Yellow Doll



The children disease theme, a lot of dolls are described what type of disease. Nursing students not only showed knowledge about children disease but also they showed nursing skills on

their dolls. Student nurses are described with the diseases of the most prominent features in nursing doll story. Despite the disease, the children are happy in their story. Below are some examples of these stories for this theme:

“Heart doll is new-born that have ASD (Atrial Septal Defect). When he was born, he was so sick. He quickly is hospitalization, he was operated heart surgery. He was cared new-born intensive unit. His health is good now, will be better than day and day.” (Heart doll story: Nurse AK) (Picture 2).

Picture 2: Heart Doll



“Two people who has relationship decided to marry. But they didn't had genetic screening test before they married. Not only they don't know it that carriers of sickle cell anaemia, but also they will have a sick children. When their baby was born, it is a sickle cell anaemia. Unfortunately, baby needs to receive treatment for her entire life, so baby's arms made from the serum of hose and filial. Parents' faces were made by two colours (dark and light) to show that they are both carriers, baby's colour is dark because it is patient.” (Sickle cell anaemia Family doll story: Nurse DK).

“Simian doll is a new-born with down syndrome. When it was born, their family was shocked, and family didn't want to accept it. But they don't know anything about Down syndrome baby. It is so cute. It has a macroglasia in her mouth, but she will use this to smile for her entire life. It has characteristics: slanting eyes, ears of lower adherent, the simian line in the hands, thick-short flattened nose and neck”. (Simian doll story: Nurse PÇ) (Picture 3).

Picture 3: Simian Doll

The children health theme, the nurse students are described a nursing doll as a normal child or a nurse in their story. This dolls are like this education material. The student nurses' knowledge that grow and development lesson in first term were made to show nutrition, grow and development, vaccination on paediatric nurse. Below are some examples of these stories for this theme:

"Anatomy doll is a very healthy child who is 8 years old. She is aware of the benefits of nutrition on her body. Each card is showed to describe the relation between function of the organs and feeding. She is very clever because she knows anatomically the location and function of the organs. She also knows what to eat and what not to eat." (Anatomy doll story: Nurse HU) (Picture 7).

"Florence Nightingale doll is a good nurse who has a toy in her one hand and has a syringe on her other hand. She has a balloon which is made from a glove and a paper for the children so that she can draw on it. She uses therapeutic play on paediatric nursing care." (Florence Nightingale doll story: Nurse GÇ) (Picture 8).

Discussion

Dolls have been the subject of several studies from different areas, especially in healthcare and education. They concluded that doll also is essential in a paediatric nursing context (Li, Chan, Wong, Kwok, & Lee, 2014; Orland-Barak & Wilhelem, 2005). Li et al. (2014) study was used doll demonstration on obtaining vital signs for the child, doll demonstration on receiving

anaesthesia and oxygen gas therapy, doll demonstration on intravenous therapy in the operating theatre. Another studies showed that alone use of the doll was insufficient to develop an understanding of parenting skills during their undergraduate paediatric attachment and also its very beneficial using figures representing hospital teams (Bath, Cunningham, & McIntosh, 2000; Campos, Rodrigues, & Pinto, 2010). The use of dolls in this study is the basis of the stories as the new innovative storytelling model. Stories of nursing dolls in our study are researched understanding knowledge and practice on paediatric education. The findings data showed that the role of nursing dolls in learning various strategies for paediatric lesson. Orland-Barak and Wilhelem (2005) study' findings revealed that student nurses gave importance to the action rather than interacting; in other words a focus on skill acquisition rather than a rich content of learning. We can say in this way power of our study in paediatric education.

The nursing doll stories was reflected paediatric lessons' knowledge and skills for nursing students in paediatric education. Christiansen (2011) study showed the many ways of students experience patient digital stories with variable outcomes of learning. This supports that stories have the potential to bring the listener and story teller together and reveals the urge to share same feelings. At its most effective the nursing doll stories should be seen as an opportunity develop a new and unknown perspectives and to create different learning strategies. Certainly, it was understood that the studies about narratives and/or stories from student nurses would be of great benefit to the teaching and learning practice by educating others (Melincavage, 2011; Orland-Barak & Wilhelem, 2005; Petty, 2017). As reported through the experience of these nurses, the creation of a healing environment such as this storytelling increases quality of life and recovery of sick children. Also it has provided social support for the parents of sick children (Riet, Jitsacorn, Junlapeeya, Dedkhard, & Thursby, 2014). Similarly, the result of our study also showed that these nursing doll stories provided a new way to support for these children in the paediatric field.

The new innovative storytelling model can be as a paediatric lesson learning strategy. The themes in the learning studies emphasize in the narratives how the content of paediatric should

be unique. A sum themes in nursing stories was showed to provide lessons content: the paediatric lesson about children health and disease (theoretic and practise). The stories created in this study consists of personal learning experiences of individual students who interacting with sick children, for example, according to health and diseases knowledge or nursing care used, systems in the body in this area. Maia, Ribeiro, and Borba (2011) study showed it important to accomplish and students' experiences associated with teaching and learning on dolls, besides the experiences of implanting this care form in different care scenarios. The nursing students usually were used disease and care scenarios such as cancer. Similarly, most of research in literature is about disease children group as a cancer. This research demonstrates that educational – related causes of this stressful experiences for nurses and suggested that pre-registration education would be better in preparing nurses for the future (Jestico & Finlay, 2017). This is consistent with studies that suggest that nursing students are capable of taking different approaches to their learning and how learning opportunities are constructed and supported will significantly influences students' learning. The most important step in carrying out evidence-based nursing practice is to assess the potential implementation of an evidence-based innovation in clinical settings.

Conclusion

The research outcomes of this study described of the different ways in which nursing students experience of nursing dolls and make sense of nursing doll stories. These nursing students have entered a new field that offers different and specialised opportunities for learning. Undergraduate nursing students can learn from the journey that they have taken through this new learning experience.

The nursing doll and nursing doll storytelling have been used as a teaching strategy with the current nursing students in this area of children's nursing. Through a process of storytelling and doll making, reflection nursing students can also generate new insights that have the potential to transform their developing sense of paediatric nursing professional identity. At their most effective nursing dolls with nursing doll stories are powerful learning tools that offer students an opportunity to transcend their own personal

frame of reference and engage with the reality of children. However nursing students can vary in how and what they learn and through an identification of the critical aspects of this variation valuable insights are generated into the teaching and learning principles. The anticipated contribution of this study to learning and teaching practice relates to how nursing doll with their storytelling could be an alternative and innovative approach for understanding the paediatric lesson experience through the eyes of learners.

Acknowledgements: We thank the participants in this study and the Hatay Health School, Mustafa Kemal University.

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