



## Another way to teach family: family nursing game

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**ABSTRACT.** Current paper describes the application of an innovative strategy to teach family, within a hospital context, by sensitizing nurses on the family subject through the use of a game. Given the hospitalization of a relative, the family faces changes in its dynamics caused by the crisis it is exposed to. It is the relevance for including the family within the care process. Since nurses are expected to assume a key role for which they need specific competence to intervene in families when experiencing an eventual crisis. The in-service education becomes a strategy of generating new skills and enhances human capital to improve the quality of nursing care. Considering the importance of including family in the care context, a playful tool called *Family Nursing Game* has been invented for teaching the family, especially by passing a model of family intervention. The strategy is based on the belief of the existence of relationship between game and learning.

**Keywords:** family nursing, hospitalized patient, in-service education.

## Um modo de ensinar família: jogo para enfermagem de família

**RESUMO.** Artigo descreve aplicação de uma estratégia inovadora para ensinar família em contexto hospitalar, sensibilizando os enfermeiros sobre família através de um jogo. Perante a hospitalização de um de seus membros, a família é confrontada com alterações em sua dinâmica com o paciente, daí a relevância da inclusão da família no processo de atendimento e cuidados. O enfermeiro assume neste nível um papel preponderante de competência específica para intervir junto a família de pacientes por ocasião de vivência de possível crise acidental. A educação em serviço, torna-se estratégia geradora de inovadas competências e potencializa o capital humano para a melhoria da qualidade na assistência em enfermagem. Da importância de inclusão da família no contexto de cuidados, criou-se um instrumento lúdico denominado *Family Nursing Game* com o intuito de ensinar família, nomeadamente divulgando um modelo de avaliação e intervenção familiar. Tal estratégia fundamenta-se na convicção da existência de relação entre o jogo e a aprendizagem.

**Palavras-chave:** enfermagem familiar, paciente hospitalizado, educação em serviço.

### Introduction

During the last years, families have received special attention from various scientific fields, especially nursing. This interest comes at a time marked by major structural changes in society and family. The evolution of socio-cultural contexts led to several changes in the family, mainly in its structure and function. Currently, new forms of family organization have emerged including single parents and reconstituted families among others, congregating adults and children without blood ties into new family conformations.

Along with these changes, there is the restructuring of health care, particularly in hospitals, with an emphasis on profitability and usefulness of resources, aiming to return customers to their home

and community as fast as possible. The customers family should have a more significant role in the hospital, mostly as companions in in-patient units for adults, elderly people, women and children. In agreement with Ângelo (2000), the family should be part of health intervention at all stages of the disease and in all care contexts, regardless of the age group of the sick person, pointing to the importance of the relationship between care to the individual and the family context, as an indispensable factor for the comprehensive care of the sick person. With regard to the family, Wright and Bell (2004) state that health professionals, particularly nurses, are not immune to the mechanistic view that fragments care. According to these authors, although today the relationship between family and disease is accepted, the limited impact of this relationship applied to

nursing interventions, in which the family is seen only as part of the background, is still very evident.

In several countries, academic nursing education does not always follow the changes in society and its curriculum frequently distances them from the real problems of the workplace. Recourse to training institutions is essential to develop new skills to maximize the effectiveness of organizations (CÂMARA et al., 2007). On the other hand, nurses practice in meeting families is based on their own experience of caring for their families. Since their knowledge has been obtained from this informal experience, many nurses overlook the need of specific learning with regard to family care. "We all learn about the family when being part of one. Hence, some of us are prone to see ourselves as experts on the family, based on this limited, egocentric point of view" (HANSON, 2005, p. 2). At this point, it was possible to fix concern about planning as an innovative training tool for adults, and thus create moments of deepening reflection and knowledge on the family, with nurses from different working backgrounds from the hospital environment and contribute towards a better family approach. This first stage of the investigation, presented with a more comprehensive study, would respond to the initial unease. 'Is learning with the Family Nursing Game considered useful by nurses to incorporate new concepts about the family?'

#### **The in-service education as a means of knowledge management**

In-service education is seen as a strategy to develop the institutions human resources and to introduce a necessary development dynamics to these companies that should be reactively and proactively working for the qualification of human resources (CÂMARA et al., 2007). "The dynamics of in-service education presents itself as an axis of nursing care reassuring its own professional action, seeking to meet the needs of users [...]" (COSTA, 2004, p. 14). In-service education is intended to work with the theory-practice binomial in solving real problems by contextualizing the knowledge on the complexity of the nursing practice (MENOITA, 2011). Since we are dealing with the question of changing nurses behavior within the complex arena of health changes, we refer to the lesson by Morais (2012, p. 125) who claims that "[...] communication and education are two of the ways to reduce resistance to change [...]" and seek a way to reconcile the innovation (a game) with scientific evidences of nursing care from a strategy used in the training of professionals, in this case, nurses.

#### **The game as an innovative teaching strategy**

Information on any issue is currently available with just one click, which determines the need to rethink how to teach. Nowadays, creating an effective learning environment is not an easy task and this becomes highly complex when dealing with health professionals (LOWENSTEIN, 2011). Innovation is decisive for the success of any intervention, as reported by Shell (2006), because innovative methods attract more interest from professionals and students in their needs. One should remember that learning experiences considered most effective and the most retained information are those transmitted in a unique, innovative and pleasant way.

Royse and Newton (2007) emphasize that we face today the need to maintain attractive and interesting the teaching/learning process, considering the vast amount of information required by nurses in a demanding system under constant changes in procedures for care. However, this challenge is not easy to face. Traditional classes have often been criticized because of the passive teaching method by which students real expectations are frustrated (HERRMAN, 2008). The role of the educator is not to teach a set of knowledge but to help students to find their way and build their own knowledge, facilitating learning and motivating training, because true knowledge must be apprehended and desired and cannot be imposed (DIAS, 2004). Games can meet these requirements, since they are experimental and may provide frequent feedback. In fact, they are a way to motivate, reinforce skills and promote collaboration (JAFPE, 2011).

The literature indicates that the first information on nurses interested in games as a teaching strategy dates back to the early 1980s (BARBER; NORMAN, 1989). Its applicability for nursing education was acknowledged by some studies at this level (BAID; LAMBERT, 2010; BOCTOR, 2013; FIGUEIREDO et al., 2010; ROYSE; NEWTON, 2007; SEALOVER; HENDERSON, 2005), without knowing their applicability to the education of family nursing. Games are experimental and they are a manner of motivating people. It is expected that the participants' learning will last beyond the game itself (JAFPE, 2011).

#### **The family at the hospital**

Within each branch of knowledge one may find several contributions to the concept of the family. It is taken for granted that the family is undoubtedly who its members say they are (WRIGHT; LEAHEY,

2009). This is because the family does not depend on blood ties, but also and especially on affective bonds (RELVAS, 2006). Disease and hospitalization constitute a situation of crisis for the person and family, triggering emotions and conflicts. The concerns that the individual feels, during hospitalization, go beyond the organic area and integrate aspects such as financial problems, family and occupational issues since it is necessary to face a situation that is essentially characterized by uncertainty, and sometimes to take decisions in a short time (SERRA, 2005).

Hospitals have undergone a significant evolution over time, frequently marked by religious, political and social orientations. In most cases and during health care, the family externally surrounds the care process. Since care relationship lies between nurse and patient, the family does not take part. Although, nurses acknowledge the importance of the family in care of health and disease, there has been a limited transfer from theory to practice, justified by the barriers and the lack of clarity of concepts. (SEGARIC; HALL, 2005).

The family intervention should be analyzed through a holistic view, since a disease of one of its members alters the whole family balance, so that nursing care should be directed to the needs of the whole family and not to an individual in particular, considering the impact of disease on all family members, as well as the influence of family interaction on the recovery of the patient. The applicability of this knowledge in the context of care is highly relevant because: "Nursing has a commitment and obligation to include family in health care" (WRIGHT; LEAHEY, 2009, p. 13). The family is not only a resource in the care context care, but an important component of society. "Helping a family implies changes in individual placements" (RELVAS, 2006, p. 15). The success of the intervention stems from a 'new Columbus egg', i.e., the complexity of the intervention is not so much the set of techniques or strategies used, but the difficulty of finding out how we can help make other pictures and create other family albums, without having to throw away or burn the old" (ALARCÃO, 2000, p. 334). In this way, it is unthinkable that the context of care focuses only on the patient, but should be enclosed within a family system.

## Material and methods

Methodology current investigation is a quasi-experimental study used in natural situations in which it is very difficult to meet the requirements of

real experimentation (VILELAS, 2009). This course was implemented at a Central Hospital in northern Portugal, with 100 nurses of the medical services, aiming to reflect and teach concepts about family, and evaluating the game in relation to other teaching strategies employed. Permission was requested from the administration board and the Ethics committee of the institution. Throughout the study, it was possible to safeguard all moral and ethical procedures, and only the nurses that voluntarily agreed to participate were integrated. The game was developed by the authors and was based on a review of the literature and observation of nursing methods to the family as seen in Figure 1.

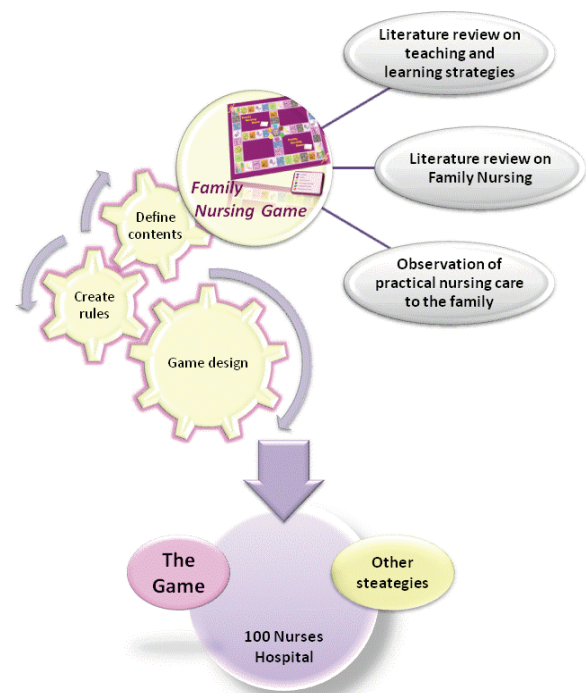


Figure 1. Study design.

In other words, in the first phase, it was possible to observe that the care practices were conducted along with families within the hospital context. Also, a bibliographic review was done on the most appropriate teaching methodologies on adult training.

On the other hand, the contents related to the family were revised to be included in the game. From this first step, it was created the Family Nursing Game with the respective contents and usage rules. The game was called Family Nursing Game. It is a board game in which progress is determined by the capability of the player/team in answering questions about the Family Nursing contents. The cards of this game are organized into

six themes. The cards may acquire different levels of complexity depending on the participating population (Example: level I, beginner; level II, advanced beginner; Level III, expert). In the game application, it is possible to involve between 3 and 30 players, distributed in six teams wearing vests with special colors: orange, yellow, green, blue, pink and brown. Each team receives a family photo, associated to the team's color. After that, they must reacquire the corresponding parts of the puzzle to complete the game. The purpose of the game or the winner is the first player or team to acquire the six pieces of the puzzle given to him/her. The game was performed in groups of no more than 20 players, and they played for about 1 hour.

During the second stage, the game was tested in the medical services of a hospital with a population of about 100 nurses. Along with the game, however, other training strategies were used at different times. Training was developed in a lecture-type room, addressing family's concepts, watching a movie on the importance of the family approach at a hospital context and a virtual space was created for nurses to manifest their doubts with regard to contacts with the family. The participants of the survey were nurses performing tasks in direct contact with the patient and family, and they used the teaching strategies according to their interests. After the implementation of all strategies, an assessment questionnaire was launched. This questionnaire consisted of 20 statements concerning procedure evaluation and training results for each strategy.

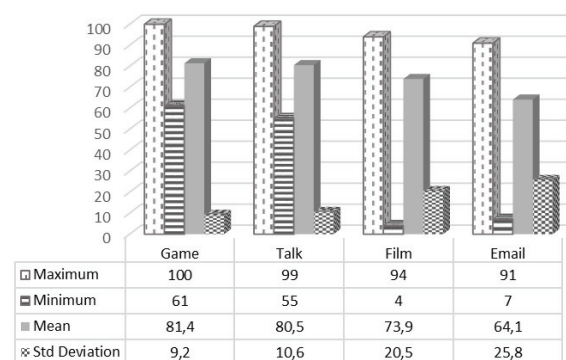
The data were based on statistical tools. The information obtained was kept confidential and the participants were not identified.

## Results and discussion

### Data

The 85 participants that voluntarily joined the study were in the main females (76.5%), at an average age of 30.6 years, minimum age 22 years, a maximum of 48 years and ranged mostly between 26 and 30 years old (56.5%). Thus, they constituted more than 50% of the total number of participants. Regarding the time of professional practice, the average was 7.7 years (standard deviation = 5.25), ranging between 1 and 25 years. The interval between 2 and 5 years (inclusive) is the most representative one (53.6%), followed by the group with more than 12 years of experience (22.6%); the group between 6 and 11 years (20.2%) and, finally, those whose professional time was less or equal to 1

year (3.5%). In the context of academic qualifications, 84 members were graduates, and only one nurse had a master's degree. With regard to training and special context of the Family Nursing, 41% of the members reported they never had a formal training in this area. The 85 nurses of the service that answered the questionnaire, 21.2% participated in E-learning, 40% in the movie; 55.3% in the formal training classes and 68.2% in the game. As already mentioned, the scale consisted of 20 questions on a Likert scale, with the following items: strongly disagree, disagree, neutral, agree, strongly agree and did not participate. In order to obtain a global measure of assessment on the teaching strategies, respective scores (from 1 to 5) were employed. Total score for each nurse was then calculated, ranging between 0 and 100, and performed for each procedure (Figure 2 - Total score of the different strategies).



**Figure 2.** Total score of the different strategies.

Scores of the Family Nursing Game vary between a minimum of 61 and a maximum of 100 points. It presents an average of 81.4, and it has a standard deviation of 9.2. With regard to the training classes, it ranges between a minimum of 55 and a maximum of 99, with a mean of 80.5 and a standard deviation of 10.6. The movie shows a minimum rate of 4, a maximum rate of 94, with a mean rate 73.4 and a standard deviation of 20.5. Finally, the E-learning presents a minimum of 7 and a maximum of 91, with a mean of 64.1 and a standard deviation of 25.8. It is possible to highlight the game, the training, the movie and lastly, the E-learning, according to the rates shown.

On the one hand, current research was guided to teach concepts for the family and nurses at a hospital context and, on the other hand, to validate the game as a useful teaching-learning strategy for nurses. In relation to the participants, it may be underscored that 41% of them never had a formal training on the

family. According to several authors, many nurses do not have any family training, including the assessment strategies and family intervention. Therefore, it was believed that the family study is part of common sense (HANSON; KAAKINEN, 2005; KAAKINEN; BIRENBAUM, 2011). Wright and Leahey (2009) point out that, at any environment of clinical practice, it was useful for nurses to adopt a clear and conceptual framework or family map. These aspects justify the need for intervention at this level. All nurses must be instructed in the way of engaging the families, in the health care, at every area of the nursing practice (WRIGHT; LEAHEY, 2009). Regarding to game evaluation related to other teaching strategies and the use of the questionnaire, it is possible to emphasize the game. Nevertheless, the game was the most popular and best rated strategy, even though the standard deviation assumes a lower rate associated to the game and reflects a lower variability. Thus, the positive values of the game and training may still be observed, and that does not happen either in the movie or in E-learning. The game is a teaching strategy that promotes the interest about the subject, it allows the acquisition of knowledge and skills, contents review and improve attention (HENDERSON, 2005). Regarding the applicability of these strategies in adults, the literature indicates that games are good to meet their needs because they prefer to assume the responsibility by learning and they undertake the integration of their own knowledge (DEYOUNG, 2009; ROYSE; NEWTON, 2007). It is possible to consider a limitation of the study. The route displayed is difficult to predict on the implication on behavior-changing, and these aspects will be investigated in another phase of the research. However, it is expected that, during the Games, the participants' learning is going to last beyond the game itself (JAFEE, 2011).

## Conclusion

In relation to the purpose and objectives of the study, it may be noted that despite the growing recognition about the family's importance in health and disease, many professionals do not hold any training on the family. Only after a new meaning on the family importance about care, it is possible to develop new approaches with the families. It is necessary to develop a training strategy among nurses.

With regard to pedagogical strategies, the game proved to be a valid strategy for the incorporation of new conceptions on the family. In fact, a high level

of satisfaction on behalf of the nurses, in comparison to the class, movie and E-learning, was obtained. The utilized methodology provided to meet the objectives originally proposed and offers the next phase to replicate it within a bigger group. Then, professionals from different contexts will be integrated, coupled to the evaluation of the acquired knowledge and its impact on the practice of care with families. In an era marked by development in which the information is available just at a click away, it is urgent to revise the teaching strategies used in the training of nurses. This research highlighted the use of the game as a pedagogical strategy; thus, it must be incorporated in other studies and other subjects. Finally, it is possible to consider the "Family Nursing Game" as a great ally because it constitutes a powerful tool for motivation, instilling a learning spirit, a stimulus for group interaction, fostering reflection, providing moments for the exchange of experiences, facilitating learning.

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