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NURSES' PERCEPTION ON THE DIFFICULTIES AND INFORMATION NEEDS OF FAMILY MEMBERS CARING FOR A DEPENDENT PERSON

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ABSTRACT: The transition of dependent people from hospital to the home is a situation that generates stress for them and for the family. This descriptive, exploratory study with a qualitative approach aims to identify the perception of nurses about the difficulties that face a family caring for a dependent person, including information needs, and with reference to applicability of use of educational technology. The data were collected through semi-structured interviews with 14 nurses of a hospital and two health centers in the region of Porto, Portugal. The majority of participants were men, with average age of 32.64 years, and an average of 9.86 years' experience of exercise of the profession. The nurses identified needs for information for the development of competencies in the areas of knowledge of instruments related to the self-care of moving, turning and changing place, and the utility of use of educational technology. It is concluded that mastering the areas of knowledge identified would facilitate the construction and application of educational technology for family members caring for a patient

DESCRIPTORS: Community health nursing. Caregivers. Educational technology.

PERCEPÇÃO DOS ENFERMEIROS SOBRE DIFICULDADES E NECESSIDADES INFORMACIONAIS DOS FAMILIARES CUIDADORES DE PESSOA DEPENDENTE

RESUMO: A transição das pessoas com dependência do hospital para casa é uma situação geradora de estresse para elas e para a família**.** Este estudo exploratório, descritivo, com abordagem qualitativa, teve como objetivo conhecer a percepção dos enfermeiros sobre as dificuldades, necessidades informacionais e aplicabilidade da utilização de tecnologias educacionais dos familiares cuidadores de pessoa dependente. Na coleta de dados, realizaram-se entrevistas semiestruturadas com 14 enfermeiros de um hospital e de dois centros de saúde da região do Porto. Os resultados revelaram participantes majoritariamente homens com média de idade de 32,64 anos e tempo médio de exercício profissional de 9,86 anos. Os enfermeiros identificaram necessidades de informação para o desenvolvimento de competências nos domínios do conhecimento instrumental relativos aos autocuidados alimentar-se, virar-se e transferir-se e utilidade do uso de tecnologia educacional. Concluiu-se que os domínios dos conhecimentos identificados facilitariam a construção e aplicação de tecnologia educacional para familiares cuidadores.

DESCRITORES: Enfermagem em saúde comunitária. Cuidadores. Tecnologia educacional.

PERCEPCIÓN DE ENFERMEROS SOBRE LAS DIFICULTADES Y NECESIDADES DE INFORMACIÓN DE LOS CUIDADORES DE FAMILIARES DE PERSONAS DEPENDIENTES

RESUMEN: La transición de personas con dependencia del hospital hacia la casa es una situación estresante para ellos y sus familias. Este estudio descriptivo exploratorio con abordaje cualitativo tuve como objetivo conocer la percepción de los enfermeros sobre las dificultades, necesidades de información y aplicabilidad del uso de tecnologías educacionales por los familiares cuidadores. Para la recolección de datos se realizaron entrevistas semiestructuradas a 14 enfermeros de un hospital y dos centros de sanidad de Oporto. Los resultados han mostrado participantes en su mayoría hombres con edad media 32,64 años y 9,86 años de media de ejercicio profesional. Los enfermeros han identificado necesidades de información para el desarrollo de competencias en los dominios del conocimiento instrumental relativos al auto-cuidado alimentarse, girar en la cama y transferirse y utilidad del uso de tecnología instrumental. Se concluyó que las áreas de conocimiento identificadas facilitarían la construcción y aplicación de tecnología educativa para familiares cuidadores.

DESCRIPTORES: Enfermería en salud comunitaria. Cuidadores. Tecnologia educacional.

INTRODUCTION

The beginning of the 21st century has seen a significant increase in the number of people aged 65 or over. Europe as a continent is in a process of progressive aging. In 2060, one in every three Europeans will be over the age of 65, and the number of elderly people over 80 will increase from 23 to 62 million.[1]

In Portugal, demographic aging is also characterized by a gradual increase in the number of senior age groups and a reduction of the young population. This population dynamic points to a demographic transition that is unprecedented in history,[2] resulting in declines and co-morbidities that lead to dependence, one of the great problems in the process of aging.

In the European Union (EU) the "European Year for Active Aging and Solidarity between Generations" has emerged as a proposal for action – a benchmark for statement of national strategies for integrating social and health policies.[1-2] Recent health policies in Portugal emphasize the role played by the family in support for elderly people who are dependent, and highlights the importance of formal structured education and the development of partnerships with family carers.[3] In line with this trend, it is estimated that the Portuguese Continuing Care Network (RNCCI) needs 12,198 health professionals in 2020, i.e. an increase of 58.8%, with a highlight for the nursing-professional group, which will need 5,229 people, in contrast to the 2,240 existing in 2010.[4] The priority objectives of the EU's third Health Program, for 2014-2020, are: To increase innovation in health, to improve people's access to existing information and resources, to improve the quality of health and safety of the patient and to improve knowledge of health.[5]

The EU report *Growing the Silver Economy in Europe*[1] states that a greater involvement by professionals and organizations is needed in preparing elderly people and family carers with the necessary skills and competences. Education of adults and informal learning will be the principal targets. Professionals must be encouraged to build these routes in their educational material. Nursing professionals are in a privileged position to supply creative and innovative solutions, that can contribute health gains to the daily life of patients, families, organizations and communities, and also the profession itself.[6] This is because they take care of every type of patients, families and communities, and also they are in touch with the various health services and personnel of other professional sectors.[6]

Nurses have a very important role in ensuring that innovations can be implemented and adopted by giving their feedback on appropriateness and utility, contributing with suggestions on their adaptation to local circumstances and needs.[6]

In today's society families provide, at home, increasingly complex care to the dependent person. In a study carried out to characterize the person dependent on self-care, it was shown that, in relation to the degree of dependency when compared to the global scope of self-care, 7.9% of people were totally dependent, 91.7% had some degree of need for help from another person and 0.4% needed only equipment.[7]

Self-care is understood to mean: "A group of activities executed by the person himself: Dealing with what is necessary for maintaining him/herself, maintaining himself operational, and dealing with the basic and intimate individual necessities and the activities of daily life".[8:41] However, when there is an incapacity of the person to take care of him/herself for reasons of illness, age or lack of funds, the person may need help from professionals, family members or friends. For this reason, a dependent person is understood to mean one who needs help from another person, or needs equipment, to carry out the activities of daily life.[9-10] The definition of family carer has been given to a person of the family, or a friend, not remunerated, who has assumed personal responsibility for organization and provision of care to the dependent person.[11]

Due to the requirement and complexity of this new role for which the family is not prepared, a significant involvement and responsibility of the families in provision of care is necessary.[12-13] If the person is dependent during hospitalization, the nurses supply the family carers with essential tools for acquisition of knowledge and abilities in caring for the dependent person at home. The provision of these services requires, in most cases, a complex level of knowledge and skill on the part of family carers. For this reason, it is important that the health professionals should develop teaching strategies that are appropriate to the concrete needs of family carers.[12-13]

In the present world health scenario it is of fundamental importance to train family carers with knowledge and competencies. This process of development of knowledge, capacities and skills takes time. It is important to monitor and maintain a 'coaching' relationship so that the carers develop the necessary skills.[14] Thus, the role of the carer family should merit a special attention from the nurses in

the sense of responding to their needs, which are largely related to the provision of care, but also to needs of a psychological, social and spiritual nature. It has been stated that "promotion of the well-being of the carers and prevention of crises merits special attention from health professionals, since it is on them that the patients who are under their responsibility, and also responsible for their remaining in the community, depend".[11:62]

Family carers experience a deficit of information and skills, that is to say, they need training in competencies. They are obliged, frequently, to learn by trial and error, causing lack of confidence and low perception of efficacy, which makes the transition to the new role more difficult.[13,15] The family carer, thus, should be the focus of the nurse's attention in the sense of giving importance to implementation of interventions in the area of learning of skills and acquisition of knowledge.

Several studies[13,16-17] that have been made on this area of issues show that family carers' principal difficulties in caring for dependent people are essentially the instrumental needs, needs for acquisition of knowledge, management of feelings resulting from the family member's situation of dependence, difficulty in accessibility of the health services, and the little help provided by the household service.

Another study[18] points to lack of support at a practical level, often related to the lack of information and communication between health professionals and family carers – who seek a considerable quantity of information centered on their needs and on improvement of the quality and support of the health care. The instrumental competencies in the self-care areas of feeding, positioning and transfer are indicated by family carers as the areas of knowledge in which they have the greatest disposition to participate with the nurses during the hospitalization.[13,19] Feeding self-care is defined as "taking solid and liquid foods and placing them in the mouth"; the self-care of turning is described as "moving the body from one side to the other and from front to back, turning", and transfer self-care as "moving the body from one place to another".[8:42]

This study is part of a doctorate project, the objective of which is to contribute, through educational technologies, to the development of knowledge and competencies in family carers. It is also aligned with the European Innovation Partnership on Active and Healthy Ageing (EIP-AHA). The EIP-AHA argues the need for an inter-disciplinary and inter-sector approximation to identify and eliminate barriers that might interfere in the development of an active and healthy aging process.[20] It is part of the C2* group: Development of Interoperable Independent Living Solutions (EIP-AHA), of the European Commission**. Thus, the proposed objective of this study was to become aware of nurses' perceptions about the difficulties, information needs and applicability of the use of educational technologies by family members caring for a dependent person.

METHOD

This is an exploratory, descriptive study with a qualitative approach, carried out in two health centers and a hospital of the region of Greater Porto, Portugal. The project was approved by the Research Coordination Office (DEFI) and by the Ethics Committee of the Porto Hospital Center (CHP) under reference n. 157/11 (107-DEFI/137-CES). The rules of conduct of the Helsinki Declaration were obeyed, and confidentiality of the data collected was guaranteed. Fourteen nurses were involved who agreed to participate in the study voluntarily, signing the Informed Consent Form.

The data was collected in 2011, through a semi-structured interview for the purpose of becoming aware of the difficulties that family carers of dependent individuals express to the nurses, and to place them in a hierarchy, within the scope of the three elements of self-care: Feeding, changing location and turning. Social-demographic information was also collected on the participants, which included data on age, gender, academic skills, time of professional activity and professional title. Of the 14 nurses, six (42.9%) worked in health centers and eight (57.1%) in the hospital.

The interview had six questions. The first aimed to discover the nurse's perception on the typical difficulties of family carers in taking care of dependent people in the self-care of feeding, turning and changing location. The second question sought to know the main questions, doubts and uncertainties that were put to nursing professionals. The third question aimed to identify the causes of re-hospitalizations. The fourth, the reasons for abandonment of the role of carer. The fifth question sought the opinion of the nursing professionals on the importance of the existence of informative web-

* https://webgate.ec.europa.eu/eipaha/library/index/show/filter/actiongroups/id/787
** http://www.esenf.pt/pt/i-d/projetos-internacionais/intent-care/

sites (educational information tools) for disseminating and helping family members in subjects relating to care of dependent people. And the sixth question asked what specific contents the professionals considered important for including in these websites.

The interviews were scheduled in accordance with the nurses' availability, in their own working hours and locations, and lasted on average an hour. Following authorization by the nurses, the interviews were recorded, for subsequent analysis, and transcribed in their totality for informational support. Each set of spoken responses was identified by the initials EP followed by numbers from 1 to 14, in the order of their having been interviewed. In the content of each interview, the header of the document identified the number of the interview, the date and the period of its duration. Analysis of content was in three time phases: Pre-analysis; exploration of the material and treatment of the results; Inference; and Interpretation.[21] "Studies [...] will be productive to the extent that the categories are clearly formulated and well adapted to the problem and to the content (to be analyzed)".[22:124] Without any categories previously defined *a priori*, an initial complete reading was made of the information collected. Subsequently, phrases or paragraphs were examined, leading to a focus on searching for opinions and concepts. In this process of codification, the categories and sub-categories were named, after which the relations between them were established, having recourse to the use of the International Classification for Nursing Practice (ICNP)[8] to help in clarification of concepts. The construction of the categories was defined in accordance with the analysis based on the questions under study. The decision on choice of a given segment of text in a category was based on observation of indicators relating to that category. On the basis of these procedures of analysis and interpretation of information, analysis spreadsheets were prepared containing the various questions and respective categories identified arising from each one of the questions. The social-demographic data were analyzed using a descriptive statistical resource.

RESULTS AND DISCUSSION

Characterization of the nurses

(57.1%) of the participants were male and six (42.9%) female, aged from 23 to 45, with average age of 32.64. Seven of them (50%) were married and seven single. Their average time in the profession was 9.86 years, with minimum one and maximum 17 years. Six (42.9%) held undergraduate degrees (*licenciatura*), and others had postgraduate degrees: six (42.9%) had *lato sensu* post-graduation, two (14.3%) had Master's degrees, one in Nursing Sciences and one in Community Nursing.

In terms of professional category, six (42.9%) were generalist nurses, four (28.6%) graduate nurses and four (28.6%) were specialists. The most important areas of specialization were: Community, with two (14.3%); Rehabilitation, with two (14.3%); Medical-surgical, with one (7.1%); and Maternal Obstetric Health, with one (7.1 %).

In terms of professional experience, two (14.3%) of the nurses had experience of work in health centers, seven (49.85%) in hospital care, and five (35.5%) showed experience in both the contexts of care.

Results were analyzed based on a detailed examination of the interviews in accordance with the objective of the study, resulting in decision on two dimensions: The dimension of the family carer, with three categories, and the dimension of the role of the nurse, with two (Table 1)

Table 1 - Characterization of the dimensions, categories and sub-categories of the interviews with nurses

Role of the family carer		Role of the nurse	
Category	**Sub-categories**	**Category**	**Sub-categories**
Awareness	- Knowledge - Beliefs - Feelings	Knowledge	- Transmission of information
Instrumental competence	- Good execution - Limitations - Prevention	Execution of role	- Commitment - Limitations
Resources	- Economic - Material - Physical - Community		

In terms of the meanings attributed by the nurses on the needs and difficulties of family carers faced with the situation of caring for a dependent person, in relation to the role of the carer, in the category *Awareness*, in the sub-category *Knowledge*, some interviewees said that family carers have a deficit of knowledge about how to feed through a nasogastric tube, and on the self-care of change of position, and turning – as described in these narratives:

[...] *the greatest doubts that I have noted are about gastric stases, in the contents, whether the patient should be made to lie down, whether to feed, or not* [...] (EP6).

[...] *they* [*family members*] *often don't even have a notion of how to move a person from place to place or what it is that they should be doing* [...] (EP10).

In reality, one of the great concerns of the person who gives care is to be able to feed his/her family member adequately, and the need for feeding through a nasogastric tube requires specific knowledge. Another concern, expressed by family carers, is related to the acquisition of knowledge on how to turn and move the dependent person, without causing damage, and without demanding too much effort from the person doing it. Several studies[9,13,17,19] agree on these difficulties and a need for training in these areas of self-care, in which the carers report needs for learning how to acquire this information (need for information/training), and learning to carry out tasks (difficulties in the provision of care).

In relation to the sub-category *Beliefs*, the statements said that family carers had beliefs about certain aspects of care:

[...] *they think that having content is always good, principally with some more elderly people* (EP7).

[...] *some family members think that the person, because they are dependent, has to keep quiet* [...] (EP9).

[...] *family members who think that they could not give soup through the tube, they gave milk mixture and did not give the soup* (EP8).

The beliefs held by carers have been identified in various studies.[13,17] In one,[15] nurses reported the nursing actions that would make it possible to identify the carers' disposition to develop competencies: Discussion of their beliefs and the values that are inherent to exercise of the role; Orientation of the family member providing care to contact the social assistant, in the sense of being helped to mobilize home support; and encouraging that family member to seek, in the nurse, an available resource.

Over the course of the responses it was possible to conclude that family carers, given their personal characteristics, have difficulty in learning due to the aspects relating to feelings of fear and anxiety:

[...] *having to take care of the person's mother, or someone very close, the carer is afraid of hurting or causing offence* (EP9).

[...] *just this alone already frightens the majority of people* [...] *increasing the anxiety* (EP10).

This subject, of the management of the feelings associated with the act of caring by the family members, has also been portrayed in several studies, which evidenced that family carers report difficulties in learning to live with the dependent person and in learning to manage the emotional difficulties that arise from the provision of care. The feelings are related to the carers' lack of information/education/orientation.[13,15]

The nurses' opinion in relation to *Instrumental competence* (knowing how to operate), which the family carers report, is that the main difficulties felt by them relate to feeding through a nasogastric tube, preparation of the food, transfer from bed to chair, and in turning the patient – a member of his/her own family – over. In the sub-category *Good execution*, the following difficulties are described in the interviews:

[...] *there is a difficulty in the technique and we explain, but since they don't have enough strength, they have a difficulty in sitting up* (EP8).

[...] *or they don't pass the soup well, and the tube gets blocked* (EP3).

We highlight a report that agrees with this, in a study,[14] showing that some carers, in spite of having received information, continued to report insecurity at home, in instrumental care involving aspiration of secretions and feeding through nasogastric tube.

Aspects that are involved in instrumental competence are also evident in the sub-category *Limitations*:

The person who is caring is elderly, already suffers back pain, already suffers in so many ways and does not succeed in doing a good job (EP6).

[...] *the physical limitations* [are inhibiting factors in caring for the dependent person] (EP5).

[...] *We stimulate them to do and to learn, but sometimes this is difficult because they don't want to learn* (EP10).

The characteristics of age, the physical limitations and the motivation of the family carer are also present in some studies as factors inhibiting performance of the role of carer.[14,19] Indeed, it is necessary to support family carers by providing information,

motivation or substitution of their needs, promoting their health and preventing complications that might arise from their execution of their role.

The sub-category *Prevention* refers to the process of caring, the omission of preventive care in relation to prevention of dehydration and bed sores:

[...] *most of the patients are aphasic and the* [family members] *do not even remember to give water* [...] (EP2).

[...] *there are family members who leave their patients the whole night without being positioned* [...] (EP6).

Studies on this subject area point to identical reports on prevention of dehydration and pressure sores.[11,23] On the factors influencing nursing care in prevention of pressure sores in home service, the issues of human resources, and lack of time, for prevention also emerged from the interviews, along with lack of material resources and training; and involvement of the family carer, including the partnership with other professionals, was seen as important.[23]

In the category *Resources* the four sub-categories *material, economic, physical* and *community* emerged. It was stated that there are various types of resources. One of the interviewees reported seeing an increasingly lower availability of family carers' funds and time for accompanying the patient, and that the social supports should be strengthened when the carer is in an active professional situation:

[...] *if the carer is elderly, he/she will have availability and always be at home; if it is the wife or husband, if it is a person who has an active professional life, then he/she does not have this availability, and sometimes there is a shortfall in care* [...] (EP3).

[...] *these family members see themselves as alone, with lack of support, they don't have resources, they don't have beds, technical means* [...] (EP5).

In relation to economic resources:

[...] *they have few economic resources* [...] (EP1).

In relation to physical resources:

[...] *the place where the patient is is extremely small, there is no place to put an armchair, the bed is tight up against the wall* [...] (EP2).

And on the community: [...] *there is a greater need for information on the resources of the community* (EP3).

This need on the part of family members for access to the existing resources of the community is expressed in several studies,[11,15] which say that the access to the resources of the community that provide formal support is often limited, not adequate for the needs of the carers, and even sometimes that the rules of functioning are badly understood.

In relation to the dimension of the role of the nurse, the category *Knowledge* stands out, subdivided into the sub-category *Transmission of information*, in relation to feeding through the nasogastric tube (optimization and handling of the tube), and the self-care of transfer and turning, as shown in these comments:

[...] *we teach the technique of injecting air and placing the ear on the stomach to hear the sound and it is very easy because they perceive perfectly* (EP1).

[...] *the doubts that are raised are to do with the therapeutic regime, medication* (EP13).

The role of the nurse in instruction and in training of the family carer is also important for acquiring skills in caring for the dependent patient:

[...] *we start by demonstrating, and afterward we go on to training and, as a rule, they leave here with a perception of auto-efficacy, showing learning of skills and knowledge relating to the technique of administering the food* (EP4).

The category *Execution of the role* also emerged from the narratives, divided into *Commitment* and *Limitations*, as expressed as follows:

[...] *on the part of the nurse there is more work in making carers aware that they will be capable of administering the medication, the food through the nasogastric tube* [...] (EP4).

[...] *a lot of work is needed to do this type of teaching and to supervise whether they are carrying it out properly or not* (EP2).

Some interviewees said that there are certain limitations in the role performed by the nurse: [...] *sometimes we don't have consideration about the level of schooling/education of the people we are talking with, and we don't adapt* (EP7).

[...] *the nurses go there, they see the tensions, the heart rate, they can give an opinion, but this alone is not enough* (EP3).

Some studieshave demonstrated the great importance for the role of nurses in preparation of the dependent person's and the family carer's return home in the sense of helping them to deal with the difficulties in various areas relating to the role that they have to carry out.[13,23] The need is emphasized for nurses to improve their performance in the aspects related to communication, complying with the family members' various levels of knowledge.

In relation to the interviewees' opinion on the occurrence of re-hospitalizations of the dependent person, the nurses interviewed considered that these are in the majority of cases due to worsening of their state of health and scarcity of home medical sup-

port. The clinical situations most indicated as cause of re-hospitalization were aspiration pneumonia, dehydration and respiratory infections:

[...] *the majority of our re-hospitalizations are aspiration pneumonia* (EP7).

[...] *there is no upward progress, there is no mobilization,* [...] *there is pneumonia, bronchitis* (EP2).

The nurses said that, due to the lack of timely support of the health professionals in good time through the health centers, and since it is these that in practice should accompany the dependent person, having resource to hospitals is often a substitute for home consultations. This is portrayed in the responses of two interviewees:

[...] *hospital admissions would be avoidable if they had the medical help in good time* (EP5).

[...] *they have difficulty in asking for home doctor visits* (EP9).

These factors are highlighted in a study[24] on this subject which also considered it important to make health professionals sensitive to the need for anticipating the needs of family carers and the dependent person.

Abandonment of the role of family carer was, according to the nurses' point of view, related to overburdening of the family carer –

[...] *overburdening of the carer* (EP4) –

– and to lack of social support:

[...] *the majority do not have, and never had support of the community or don't know how to use the resources* (EP14).

The problem of abandonment of the role of family carer is very much associated with overburdening of the family carer, a problem already reported in various studies.[10,24]

In relation to the nurses' opinion on the trends of use of the new technologies with support/complement made available to family carers to assist in caring for the dependent person at home, the following comments were put forward:

[...] *the websites and interactive tools I think are very important* [...] (EP1).

[...] *Us doing occasional teaching is one thing, having this all set out to resolve doubts is another* [...] (EP3).

When questioned about the inclusion of subject areas in development of educational technology, interviewees said:

[...] *that they are relevant to self-care, feeding, positioning – and information about social networks, health units, the resources that exist in the community* (EP1).

[...] *to have a website where they could find videos demonstrating some techniques and some areas of teaching* [...] (EP7).

The interviewees also said that in development of the tool, the knowledge that users have should be taken into account:

We have worked with some elderly people for them to learn to use the internet [...] (EP3).

[...] *older people don't go to the internet, the channels for seeking information are different and they vary with the socio-cultural economic status* [...] (EP4).

Participants recognize the importance of the existence of educational technologies to help family carers. As for the content to be included in their development in such a way as to respond to the needs in this area, the majority of the nurses interviewed referred to the categories mentioned above. It is also clear from some studies that there is a need for creation of resources in support of family carers in such a way as to ensure that they keep on carrying out the role and also to ensure the safety of the care given. This demonstrates the need for nurses to be involved in the creation of innovative support programs, of information and training directed to family carers, to lead to the improvement of health services and of health results at a local level, and also to perform a critical role in the task of continued innovation in healthcare.[6,25-26]

Also, a study on nurses[14] suggests a need for studies to monitor how information and communication technologies can be used as an available resource, making it possible to give help, in good time, to the questions that family carers ask at home – since technology resources are increasingly used as means for training of family carers in caring for dependent people.[25]

Thus, it is important that health professionals who work in providing care to dependent people and to their family carers should be disposed to become aware of and practice other teaching strategies, in particular the creation of technological resources that would make it possible to minimize re-hospitalizations and abandonments of the role of carer, enabling interaction and the formation of links with family carers, and consequently providing safety in the care given.

CONCLUSION

This study has reported the perception of nurses about the difficulties and information needs of family carers looking after dependent people. The responses described difficulties and needs for information in the

domains of becoming aware, instruments and means of support from the community. The nurses stated that these difficulties are directly connected with aging as a factor – the increasing dependence of the population; and the personal and psychic conditions of family carers: limitations in carrying out the role, beliefs, feelings of fear and anxiety.

Thus, all the professionals interviewed considered that in practice and due to the increase in the number of dependent elderly people, family carers need to be instructed on how to take care of dependent people in the three areas of self-care *feeding, turning* and *changing of position*. These difficulties are at the basis of many re-hospitalizations, due to worsening of the state of health of the dependent person, and the deficiencies of the support in the home. The nurses considered that often abandonment of the role of family carer is due to tiredness and lack of social support. Training of the carer should be part of nurses' educational strategies, as a way of improving the results of training and the quality of care.

The nurses indicated, as a health challenge and an imaginative and innovatory strategy, the use of an educational technology made available to family carers as a complement to the instruction offered by themselves. They also considered that the contents to be included in such a technological development should cover the domain of knowledge, instruments, and the resources existing in the community, aiming to provide information adapted to the needs of family carers. The study confirmed the importance of a technological-resource support for family carers, and we believe that this resource could contribute to better performance of nurses in orientation and training of family carers to make them better qualified in the care they provide. It is proposed that there should be more studies on this subject, and that educational technology tools on nursing should be developed.

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