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The apprehensions of hospital workers regarding guidance in the care of people experiencing home enteral nutrition

Apreensões de trabalhadores hospitalares sobre orientações para o cuidado de pessoas em nutrição enteral domiciliar

Abstract

Objective: To analyze the understanding of hospital workers with regards to the guidance for the care of adult and elderly people in home enteral nutrition. **Methods:** qualitative approach through hermeneutic-dialectic intervention, guided by the Theory of the Diffusion of Innovations. A single meeting, mediated by a focus group in a workshop, was held in August 2018, together with the interdisciplinary team of a public teaching hospital (n = 14 participants). Textual records resulting from the workshop were analyzed in semantic categories. **Results:** Participants had an average time of 11 years in the teaching hospital. 50% had a postgraduate degree. Conditioning factors for qualified hospital discharge guidelines were related to routine and teamwork difficulties, such as interaction and communication between the different categories, and to difficulties regarding the continued care in the network of health services, due to the fragmentation of the attention services. The teaching-service integration was pointed out as a potential for overcoming these limitations. **Conclusion:** The approach allowed the recognition of contextual conditions for hospital teams to guide the home care of people with tubes and enteral nutrition, conditions which may coincide with those in similar settings and increase the scarce national scientific production on the subject.

Keywords: Patient discharge. Enteral nutrition. Health knowledge, attitudes, practices. Patient care time. Educational Technology.

Resumo

Objetivo: Analisar apreensões de trabalhadores hospitalares sobre orientações para o cuidado de pessoas adultas e idosas em nutrição enteral domiciliar. **Métodos:** Abordagem qualitativa por intervenção hermenêutico-dialética, orientada pela Teoria da Difusão de Inovações. Realizou-se encontro único, mediado por grupo focal em uma oficina de trabalho, em agosto de 2018, junto à equipe multiprofissional de um hospital público de ensino (n=14 participantes). Registros textuais resultantes da oficina foram analisados por categorias semânticas. **Resultados:** Participantes reportaram tempo médio de atuação de 11 anos no hospital de ensino; 50% apresentavam pós-graduação. Aspectos condicionantes para orientações qualificadas na alta hospitalar e no cuidado doméstico permearam dificuldades relacionadas à rotina e ao trabalho em equipe, como a interação e a comunicação entre as diferentes categorias; dificuldades relacionadas ao cuidado continuado em rede de serviços de saúde devido à fragmentação dos pontos de atenção. A integração ensino-serviço foi apontada como potencialidade para a superação dessas limitações. **Conclusão:** A

abordagem permitiu reconhecer condições contextualizadas para orientação ao cuidado domiciliar de pessoas com sonda e nutrição enteral, a partir das equipes hospitalares, que podem coincidir com cenários similares e também incrementar a produção científica nacional sobre o tema, ainda escassa.

Palavras-chave: Alta do paciente. Nutrição enteral. Conhecimentos, atitudes e práticas em saúde. Equipe de assistência ao paciente. Tecnologia educacional.

INTRODUCTION

Enteral nutrition is a resource for individuals with insufficient food intake or other limitations. It refers to the administration of industrialized or homemade diets through enteral tubes or through stomata placed directly in the digestive tract, if it is partially or entirely functional.¹ Maintaining this alternative pathway for feeding after a hospital discharge is referred to as Home Enteral Nutrition Therapy (HENT). The care for people going through HENT implies in changes in their home lives and in their relationships with relatives and caregivers.^{2,3} Difficulties of the patients and their relatives and/or caregivers with regards to the HENT can lead to health complications and hospitalizations.³

Nearly 460 patients per million people in the US and 40 patients per million people in Spain are estimated to depend on HENT.^{4,5} However, despite the relevance of the team, an integrative review found that few Brazilian studies discuss the safe management of enteral feeding tubes and their implications in care.⁶ Among the publications analyzed, most addressed this condition in critical patients and in nursing teams in intensive care units.

The quality of the guidance for hospital discharges, and the existence of health services that give support to continued home care, are essential to give support to people undergoing HENT. From this perspective, the training of patients, relatives, and caregivers becomes more relevant, and the importance of this guidance is discussed.

The interdisciplinary hospital teams can use educational resources or teaching materials to make communication easier. The use of educational technologies to develop the skills and autonomy of people has been encouraged in the field of health. Health technologies aim to directly improve healthcare and promote more adequate health conditions.^{7,8}

One of these technologies, the educational video, makes it possible for an individual to reproduce with coherence all the content transmitted.^{7,9} However, to elaborate an educational video that can give support to the HENT in the Single Health System (SUS), some barriers against the diffusion and adoption of this technology in health services must be overcome.

Brazilian public teaching hospitals have the mission to develop research and learning, and are viable settings for the development, evaluation, and diffusion of innovations and technologies,^{8,10} such as the elaboration and validation of educational videos. One of the stages of the creation of an educational video is the pre-production stage, which includes the creation of a script and of a storyboard. These are based on safe scientific evidence and should be coherent to the setting where they are used.⁷

This research is part of one of the stages of the elaboration of an educational video to give support to the discharge and to the continued care of people undergoing HENT. It seeks to understand the context and the needs of the setting where it will be developed. It raises the question: *How do hospital workers absorb the guidance regarding discharging and offering continued care to home enteral nutrition? What challenges are found and what is the perceived potential for the daily management of this condition?*

To answer this question, the theoretical framework chosen was Rogers's Theory, which considers that the dissemination of innovation depends on innovation itself, on the way it is communicated, the channels, and the time. This theory is divided in 4 stages. Stage 1, the stage of knowledge, includes the need for change and the incorporation of innovations in the system; stage 2, the stage of persuasion, is related to the advantages that result from the change and adoption of the innovation; stage 3, the stage of decision, considers the adoption or rejection of the proposal for changing and incorporating the innovations; and

finally, stage 4, the stage of confirmation, is related to the dissemination of the outcome, the reorganization of the system, and the incorporation of the innovations.¹¹

This work will analyze in detail stage 1 of Rogers's Theory: the knowledge stage. This research has the potential to impact on the quality and safety of healthcare in both hospital and home environments and can contribute to diminish the complications related to the mismanagement of enteral nutrition. The objective of this work was analyzing the apprehensions of hospital workers regarding guidance to care for people with home enteral nutrition.

METHODS

This is a qualitative approach, seeking to assess experiences and express particularities.^{12,13} The method used to produce data originated from a hermeneutic-dialectic intervention,^{13,14} carried out through a focus group in a workshop. The organization of the workshop was based on an experience reported by Camargo et al.¹⁴

The workshop took place in August 24, 2018, in a single encounter lasting for 200 minutes, with a 20-minute break. The following dimensions were considered: (a) theoretical-conceptual approach to the theme; (b) practical definition of problems with regards to the concepts; and collective construction of viabilities to overcome the problems found. The process sought to articulate strategies, from discursive ones to artistic expressions, seeking to create a space for exchange that could sensitize the participants of the focal group for the theme being discussed.¹⁴

The setting of the study was a large-sized (332 beds) general public teaching hospital — a macro-regional reference for high-complexity care in the *Triângulo Sul* region of the state of Minas Gerais. The guiding group, previously trained to mediate the focus group, was made up of a professor of the course of Nutrition, who worked in association with the public teaching hospital, two resident nutritionists, one nurse (master's degree student), and one nurse who was an expert in mediating and facilitating group work. Five undergraduates from the Nutrition course were also part of the guiding group in the observation and in the written records of the activities. At the beginning of the workshop, a questionnaire for the sociodemographic characterization of participants was applied.

Regarding the group of interest, an intentional sample was made, including health workers involved in the nutritional care and in discharge guidance for patients undergoing HENT. These workers were recommended by the heads of the Nutrition and Dietary Services and by the Nursing Department of the hospital, considering their close relation with the theme. An initial selection was elaborated with two physicians specialized in nutrition, three nurses who worked in direct assistance, and seven nutritionists. Three Nursing residents and three Nutrition residents were included, all of whom were enrolled in the university connected to the hospital and recommended by the Multidisciplinary Residency Program there. An intentional sample of 18 participants was created.

Each worker was asked in person for the date they found most appropriate to carry out the workshop. Those who, due to managerial or assistance-related factors, could not participate, and those who could not be absent from the ward in the day scheduled for the activity, were excluded. After a date and time were selected and accepted by all, an agreement was made with the administration, so they would allow the workers to be available.

The analysis of the records took place at the end of the workshop, through a group reading by the conducting group. A single text record was created with the perceptions of the focus group as a whole. It

followed the structure of content analysis as proposed by Minayo.^{15,16} With regards to the ethical aspects, resolution No. 466/2012, from the National Health Council, was respected. This research was approved by the Research Ethics Committee of the Universidade Federal do Triângulo Mineiro in 2018, under legal opinion No. 2.703.137. Participants were informed about all details of the research and signed the Free and Informed Consent Form.

RESULTS

There were 14 health professionals in the workshop: 3 nurses, 9 nutritionists, 1 physician, and 1 pharmacist, with a mean age of 36.8 years ($sd = \pm 13.8$), minimum age of 23 and maximum age of 64. Most participants were women (92.9%), self-declared white (64.3%), and in a stable union (50%). Four workers could not participate in the workshop.

Participants had been working in the hospital for a mean of 11 years ($sd = \pm 12.4$), with a minimum of 6 months and a maximum of 37 years. Regarding the highest degree of the workers, 50% were only graduated, 28.6% had *stricto sensu* post-graduation (one was a PhD and the others had master's degrees), and 21.4% had *lato sensu* post-graduation (residency or specialization).

Regarding the analysis of the records, three semantic aspects were mentioned regarding the perception about the guidance for the care of people undergoing HENT. They were: difficulties related to the teamwork routine; difficulties related to the continued care and to the network of attention; and the potential of innovative work. Difficulties *related to the routine and to teamwork* resulted from communication problems between the many professional categories; from the absence of moments to discuss cases during work; among other aspects (Table 1).

Table 1. Description of the perceptions of the group (excerpts from the records) about "*Difficulties related to routine activities and teamwork*". Uberaba-MG, 2018.

Perceptions	Description
"Difficulties related to routine activities and teamwork"	The participants of the workshop stated that there was a gap in the communication between health professionals from the public health hospitals, which makes it more difficult for them to harmoniously provide integral care, creating an important limit to the qualification of the process of hospital discharge of patients using tubes or undergoing enteral nutrition. They exemplified this situation by bringing up routine facts in the nursing wards, such as bed rounds, in which staff physicians discuss cases with medicine residents and interns, but there is low adherence from other professional categories. Nutritionists and nurses expressed fear in integrating the bed rounds, despite understanding that this is an important moment for multiprofessional and interdisciplinary work. They identified that the discharge schedules are undernotified in the electronic systems and physical records. The high flow of patients, students, professors, researchers, and hospital workers in the hospitals is an aspect that needs to be better coordinated, so that the planning of the discharge is concrete. The limits regarding the timely discussion of cases and the undernotification of discharge planning compromise the scheduling of the discharge and of educational actions with the patients, their relatives, and caregivers. Since the definition of discharge has been reported as a recurring action involving one type of professional (an exclusive medical definition), and due to the aspects reported, nursing and nutrition teams often are uninformed of the discharge until it takes place, which compromises the possibility of engaging the back-end network (primary healthcare and family health). Another obstacle to improving the quality of the discharge in the hospital is related to the limits of the Single Health System (SUS) in having enough workers for its needs in an efficient manner. The number of workers in the different categories is undersized, and the hiring of others depends on public selection processes and on federal public input, a bureaucratic procedure that leads to slow results. The focus groups emphasized the need of warning the high management of the hospital on the adequate sizing of nurses and nutritionists, so that safe guidance can be offered, and educational actions developed during discharge. The educational leaflet with guidance for the discharge of patients undergoing HENT, organized by the Service of Nutrition and Dietetics of the hospital, was criticized by the nutritionists due to the language used in it, and to its layout. They stated that this material needed to be adapted, and that they would like to count on other digital resources, such as educational videos, to facilitate this interaction.

The *difficulties related to continued care and to the network of care* involved the interaction of the hospital services with other services of attention, including primary care. The need for group planning was emphasized, as well as that of permanent education, including the workers from other health sectors (table 2).

Table 2. Description of the perceptions of the group (excerpts from the records) about *"Difficulties related to continued care and to the organization of the network"*. Uberaba-MG, 2018.

Perceptions	Description
<i>"Difficulties related to continued care and to the organization of the network"</i>	During the focus group, the workers highlighted that the public teaching hospital had been attending a demand of assistance that was higher than the actions contracted by the macro-regional Single Health System (SUS). The attention to patients from locations that are not contracted to the specific hospital compromises the adequate relocation of financial resources. It also stands out that the reputation of the hospital and the fragmentation of the network of assistance contributes for the demand to be disorganized. That, in addition to the high complexity of the care offered in the institution, reflects in work overload and in the excessive expenditure of inputs. The nurses, especially, reported that they find it difficult to work with the Family Health Teams and the Primary Healthcare of the cities from where the patients come. Patients are often discharged with simple written guidance (counter-reference guides), but they notice that the patients need a closer type of contact, such as phone calls, reunions, something they believe is possible using information and communication technology. From this perspective, the nurses mentioned the importance of sharing this reality with the management of the hospital, and suggested the implementation of permanent health education on the subject, guided by periodical meetings involving the hospital teams and other teams from the health network.

Regarding the potential of the innovative work, initiatives to improve the process of discharge and health education about HENT were suggested, considering the governability of the hospital teams.

Table 3. Description of the perceptions of the group (excerpts from the records) about *"Potential and innovative work"*. Uberaba-MG, 2018.

Perceptions	Description
<i>"Potential and innovative work"</i>	Aiming to improve the process of hospital discharge of patients using tubes and enteral nutrition in the hospital, the group of interest suggested the elaboration of a multiprofessional and interdisciplinary discharge protocol. This protocol would aim to standardize content found to be essential, to be addressed by each health-related professional category in the guidance of caregivers and relatives of the patient. It would also have the potential of implanting an electronic checklist, an instrument to be inserted in the patient's electronic records, in which each health professional would mark the information provided to caregivers and relatives with regards to the management of the tube and the administration of the enteral diet. The focal group believes that this initiative can lead professionals to take responsibility with regards to the theme and improve the quality of the hospital discharge. The "shared discharge" was mentioned as an experience that is viable for hospital implantation. From this perspective, the scheduling of the discharge would be based on a multiprofessional and interdisciplinary perspective, meaning that health workers must agree among themselves and with the relatives of the patients on what is the best moment for the discharge, always in accordance to a longitudinal and integral care. Health education activities at bedside were also proposed by health professionals, as they could contribute for them to teach caregivers and relatives about the management of tubes and home enteral nutrition. As a way to give support to educational actions, the focus group proposed the incorporation of resources and communication and information technology, such as educational videos. Since the hospital is connected to a federal university, they mentioned the need for the professionals who work on assistance and those who work in the university to get closer, as to establish partnerships and show the reality of public health services to the students, who, after all, are the future health professionals and researchers. The focus group hopes, despite the difficulties of integrating research and service, to arouse, with this initiative, the interest on the development of projects and researches targeted at solving routine hospital problems.

DISCUSSION

Using workshops as research tools has been leading to important results with regards to the perceptions of participants.¹⁷ No other researches were found that were similar to the one reported here with regards to workshops to discuss HENT with hospital teams.

Regarding the different perceptions of the focus group, the communication and the interdisciplinary work were situations identified as critical in different hospital services.^{18,19} In one public university hospital that evaluated the perception of professionals with regards to daily work in a Pediatric Clinic, a similar context to the one in this study was found: problems in team communication and interaction were found to be barriers against the improvement of the quality of the work.²⁰

In the Rio Grande do Sul state, the members of a multidisciplinary team of nutritional therapy had difficulties interacting with one another, with caregivers, and with the relatives of patients.²¹ This has been common at the time of hospital discharge in many places.^{20,22}

Another aspect found is the fact that patients rarely leave the hospital services, in Brazil, with guidance on how to refer to the primary healthcare or to home care services.^{23,24} This was also true in Portugal,²³ where it was found that hospital workers know the health network and the services that make it up, but there were hindrances to the attempts of offering work that was articulated with other levels of attention,²⁵ which corroborates the findings of this study.

It stands out that the underfunding of health and the fragmentation of the healthcare network have been realities of the Brazilian public health system. However, the outline of the Healthcare Network has been seeking to overcome this reality through an active participation of managers, and through the approximation of these managers to the health professionals and users.²⁵ Still, the effective functioning of the network has been showing problems with regards to social security funding, which is a part of the field of Health, especially when the context of globalized economies is considered.²⁵

Regarding the teaching-service integration, the insertion of students and the approximation of professors and educators to the actual setting of care generates theoretical knowledge, in addition to producing knowledge that can enable solutions to the settings of practice. However, challenges permeate the teaching-service integration, such as: the establishment of interdisciplinarity and organization of health services; objective definitions of the know-how that is shared with the academy by the services; and even the presentation of health policies.²⁶

The results of an integrative review corroborate this study when they discuss the challenges and advances for integrating teaching and service, highlighting the potential of said integration to readapt services to strengthen the formation, the development of researches, and, as a result, the qualification of work.²⁶

The suggestions presented by the discussions of the focus group for the development of educational action in health for hospital discharges aimed to, especially, give autonomy to the subjects in their process of caring, since many complications related to home enteral nutrition could be avoided through guidance to the caregiver responsible.^{27,28} The study also pointed out results that favor the investment in health education strategies to give support to patients, caregivers, and family members in the management of care.^{27,28} A unit specialized in head-and-neck surgery, while analyzing the evaluation of individuals and their relatives about the educational process used by nursing professionals, showed that health education helped patients to deal with their new condition, and diminished the number of new hospitalizations. It became clear, however, that workers need to be better prepared, and educational projects must be created to adapt their language to the patients, relatives, and caregivers.²⁹ In two Brazilian public hospitals from the city of Petrolina-PE, health education through educational and interactive lectures allowed for the clarification of doubts and for the acquisition of further knowledge by people who were accompanying patients, regarding the process of caring for them.³⁰

It should also be mentioned that the effective use of audiovisual technologies as a support for caregivers and relatives of people with chronic diseases was investigated in a study in Colombia. Caretakers

express satisfaction with the use of videos, since they consider it innovative and it offers a better understanding and learning about the themes studied.³¹ Frequently, the use of video to guide the care offered to patients has been effective for the learning and the familiarization of the caregiver with routine situations related to the management of certain health conditions.³¹

It should be highlighted that the methodology used in this study prevents its results from being generalized, and that the sample was selected by the convenience of the researchers. However, almost all those in the group of interest of this research participated in it, and the interactions in the focus group provided access to contextual meanings, enabling the research to make visible the aspects that condition the reality of hospital workers with regards to the continued care, after hospital discharge, of patients who are using tubes or enteral nutrition.

The results of this work showed a potential to correspond to similar settings, with regards to the difficulties and potentials found in daily life for the guidance of hospital discharges. However, in accordance to the stage 1 of Rogers's Theory, the hermeneutic-dialectic interactions pursued made it possible to recognize the contextual aspects that influence the social system of the hospital, according to the multi-professional perspective of hospital workers who participated in the focus group.

The results perceived in the workshop made it possible to understand the variables of this social system — the hospital setting —, with regards to the need for change and to the incorporation of innovations. They favor the future development of educational videos that have a closer connection to the demands of the context, thus giving better support to the guidance offered at the discharge of adult and elder people who need to use tubes and enteral nutrition.

However, it stands out that group interaction was found to be an implied device in the constitution of its operationalization, allowing for the production of the results found. The results, in turn, are contextualized, conditioned to the personal and intersubjective aspects of the focus group. Unanimously, the participants of the focus group asked for the results of the workshop to be presented to the high management of the hospital and discussed there, so that management could support the adaptations needed to their daily practices.

FINAL CONSIDERATIONS

The care of people using tubes and enteral nutrition at home must increasingly improve its quality, so that complications are diminished and the safety of the patient is improved. Strategies that facilitate the training of these people have been pointed out as essential, especially during the process of hospital discharge. To this end, the moment is apt for discussions about the aspects that influence the guidance offered at the discharge of patients using tubes and enteral nutrition in a public teaching hospital, to better define what are the educational actions that should be implemented.

In the workshop, which was guided by a focus group, the hermeneutic-dialectic approach used made it possible to unveil contextual aspects that condition the practices of hospital workers. These aspects were related to the difficulties found in the routine activities carried out in this setting, which traditionally followed a vertical and rigid hierarchy for decision making. Regarding the organization of work in multidisciplinary teams, workers would often find themselves unconnected to the planning of work. The fragmentation of the healthcare network also made it more difficult to offer the adequate support to the management of tubes and enteral nutrition. Also, it was also found that it was necessary to increment the educational strategies and resources for hospital discharges, in the context analyzed.

The results found presented themselves as important contributions for the dissemination of innovations that seek to aid patients and their families in the management of tubes and enteral nutrition at home. Innovations such as the development of an educational video contributed for the unveiling of this reality in a public teaching hospital.

In general, the findings of this study support the development of future researches aimed at implementing strategies to overcome the difficulties discussed. Initiatives that can support the improvement of the quality of the guidance offered at hospital discharge were discussed, and, thus, this study contributed to enrich the national scientific output on the subject, which is still incipient.

REFERENCES

1. Nogueira SCJ, Carvalho APC, Melo CB, Moraes EPG, Chiari BM, Gonçalves MIR. Perfil de pacientes em uso de via alternativa de alimentação internados em um hospital geral. *Rev CEFAC* [Internet]. 2013 [citado em 21 set 2018]; 15(1):94-104. Disponível em: <http://www.scielo.br/pdf/rcefac/v15n1/133-11.pdf>.<http://dx.doi.org/10.1590/S1516-18462012005000079>.
2. Libório ELF, Fietz VR, Watanabe EAMT. Vivências de cuidadores em relação à terapia nutricional enteral domiciliar. *Rev Labore Ens Ci* [Internet]. 2016 [citado em 21 set 2018]; 1(Esp):126-39. Disponível em: seer.ufms.br/index.php/labore/article/view/5493.
3. Ferreira RS, Pereira LR, Teles MAB, Oliveira KCF, Medeiros MRB. Percepção de cuidadores sobre a assistência a pacientes em nutrição enteral no âmbito domiciliar. *Rev Enferm UFPE on line* [Internet]. 2017 [citado em 21 set 2018]; 11(1):303-8. Disponível em: <https://periodicos.ufpe.br/revistas/revistaenfermagem/article/download/11909/14393>.<http://dx.doi.org/10.5205/reuol.7995-69931-4-SM.1101sup201708>.
4. Planas M, Lecha M, García Luna PP, Parés RM, Chamorro J, Martí E. Registro nacional de la nutrición enteral domiciliar del año 2003. *Nutr Hosp* [Internet]. 2006 [citado em 21 set 2018]; 21(1):71-4. Disponível em: <http://scielo.isciii.es/pdf/nh/v21n1/original11.pdf>.
5. Van Aanholt DPJ, Dias MCG, Marin MLM, Silva MFB, MELF Cruz, Fusco SRG et al. Sociedade Brasileira de Nutrição Parenteral e Enteral. *Terapia Nutricional Domiciliar*. *Rev Assoc Med Bras* [Internet]. 2012 [citado em 21 set 2018]; 58(4):408-11. Disponível em: <http://www.scielo.br/pdf/ramb/v58n4/v58n4a08.pdf>.<http://dx.doi.org/10.1590/S0104-42302012000400008>.
6. Landeiro MJL, Peres HHC, Martins T. Avaliação de necessidades informacionais dos cuidadores domiciliares. *Rev Enferm UFSM* [Internet]. 2015 [citado em 20 set 2018]; 5(3):486-98. Disponível em: <https://periodicos.ufsm.br/reufsm/article/view/16886/pdf>.<http://dx.doi.org/10.5902/2179769216886>.
7. Fleming SE, Reynolds J, Wallace B. Lights...camera...action! A guide for creating a DVD/Vídeo. *Nurse Educ* [Internet]. 2009 [citado em 21 set 2018]; 34(3):118-21. Disponível em: <http://www.ncbi.nlm.nih.gov/pubmed/19412052>.<http://dx.doi.org/10.1097/NNE.0b013e3181a0270e>.
8. Krau SD. Technology in nursing: the mandate for new implementation and adoption approaches. *Nurs Clin North Am* [Internet]. 2015 [citado em 20 set 2018]; 50(2): xi-xii. Disponível em: [https://www.nursing.theclinics.com/article/S0029-6465\(15\)00030-4/pdf](https://www.nursing.theclinics.com/article/S0029-6465(15)00030-4/pdf).<https://doi.org/10.1016/j.cnur.2015.03.01>.
9. Macedo APMC. Nursing Supervision: Studying the "Case" of the phenomenon of interorganizational articulation Nursing School and Hospital. *Rev Esc Enferm USP (online)* [Internet]. 2014 [citado em 20 set 2018]; 48(Esp2):190-6. Disponível em: http://www.scielo.br/pdf/reeusp/v48nspe2/pt_0080-6234-reeusp-48-nspe2-00190.pdf.<http://dx.doi.org/10.1590/S0080-623420140000800028>.
10. Brehmer LCF, Ramos FRS. Teaching-service integration: implications and roles in experiences of Undergraduate Courses in Nursing. *Rev Esc Enferm USP (online)* [Internet]. 2014 [citado em 21 set 2018]; 48(1):118-24. Disponível em: <http://www.scielo.br/pdf/reeusp/v48n1/0080-6234-reeusp-48-01-118.pdf>.<http://dx.doi.org/10.1590/S0080-623420140000100015>.
11. Rogers EM. Diffusion of innovations. Nova York: Free Press; 2003.
12. Andrews T. Ontological issues in qualitative research in nursing. *Texto & Contexto Enferm* [Internet]. 2016 [citado em 21 set 2018]; 25(3):1-2. Disponível em: <http://www.scielo.br/pdf/tce/v25n3/0104-0707-tce-25-03-editorial.pdf>.<http://dx.doi.org/10.1590/0104-0707201600453editorial>.
13. Camargo FC, Goulart MB, Iwamoto HH, Araújo MRN, Contim D. Apreensões de enfermeiros gerentes sobre a prática baseada em evidências. *Esc Anna Nery Rev Enferm* [Internet]. 2018 [citado em 21 set 2018]; 22(1): e0170109. Disponível em:

http://www.scielo.br/pdf/ean/v22n1/pt_1414-8145-ean-2177-9465-EAN-2017-0109.pdf.<http://dx.doi.org/10.1590/2177-9465-EAN-2017-0109>.

14. Spink MJ, Menegon VM, Medrado B. Using workshops as a research strategy: theoretical and methodological articulations and ethical/political applications. *Psicol. Soc.* (online) [Internet]. 2014 [citado em 20 set 2018]; 26(1):32-43. Disponível em: <http://www.scielo.br/pdf/psoc/v26n1/05.pdf>.<http://dx.doi.org/10.1590/S0102-71822014000100005>.
15. Minayo MCS, Gualhano L. Pesquisa qualitativa para pensar e atuar no campo da saúde. *Cien Saude Colet.* [Internet] 2016 [citado em 20 set 2018]; 21(8):1. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext_pr&pid=S1413-81232016010900001&lng=pt.
16. Minayo MCS. Scientificity, generalization and dissemination of qualitative studies. *Cien Saude Colet.* [Internet] 2017 [citado em 21 set 2018]; 22(1):16-7. Disponível em: http://www.scielo.br/pdf/csc/v22n1/en_1413-8123-csc-22-01-0016.pdf.<http://dx.doi.org/10.1590/1413-81232017221.30302016>.
17. Bagnasco A, Tubino B, Piccotti E, Rosa F, Aleo G, Pietro PD, et al. Identifying and correcting communication failure among health professional working in the Emergency Department. *Int Emerg Nurs* [Internet]. 2013 [citado em 20 set 2018]; 21(3):168-72. Disponível em: <https://www.ncbi.nlm.nih.gov/pubmed/23207054>. <http://dx.doi.org/10.1016/j.ienj.2012.07.005>.
18. Maxfield DG, Lyndon A, Kennedy HP, Keffe DO, Zlatnik MG. Confronting safety gaps across labor and delivery teams. *Am J Obstet Gynecol* [Internet] 2013 [citado em 20 set 2018]; 209(5):402-8. Disponível em: <https://www.ncbi.nlm.nih.gov/pubmed/23871951>.<https://doi.org/10.1016/j.ajog.2013.07.013>.
19. Scheren F, Rosanelli CS, Loro MM, Stumm EMF, Kolankiewicz ACB. Nutrição enteral no domicílio: orientações do enfermeiro e aplicabilidade na ótica do familiar. *Rev Enferm UFPE on line* [Internet]. 2010 [citado em 06 jan 2019]; 4(2):699-707. Disponível em: <https://periodicos.ufpe.br/revistas/revistaenfermagem/article/view/6206>. <https://doi.org/10.5205/1981-8963-v4i2a6206p699-707-2010>.
20. Nunes MF, Wolst LR, Neto SBC. Trabalho em equipe: percepção interprofissional de uma clínica pediátrica. *Rev Psicol Saúde* [Internet]. 2014 [citado em 06 jan 2019]; 6(2):72-84. Disponível em: <http://pepsic.bvsalud.org/pdf/rpsaude/v6n2/v6n2a10.pdf>.<http://dx.doi.org/10.20435/pssa.v6i2.361>
21. Martins CCF, Santos VEP, Pereira MS, Santos NP. The nursing team's interpersonal relationships v. stress: limitations for practice. *Cogitare Enferm* [Internet]. 2014 [citado em 21 set 2018]; 19(2):287-93. Disponível em: <https://revistas.ufpr.br/cogitare/article/viewFile/36985/22757>.
22. Dalmolin A, Girardon-Perlini NMO, Coppettia LC, Rossato GC, Gomes JS, Silva MEN. Vídeo educativo como recurso para educação em saúde a pessoas com colostomia e familiares. *Rev Gaucha Enferm* [Internet]. 2016 [citado em 06 jan 2019]; 37(esp):e68373. Disponível em: <https://seer.ufrgs.br/RevistaGauchadeEnfermagem/article/view/68373/40824>.<http://dx.doi.org/10.1590/1983-1447.2016.esp.68373>.
23. Lapão LV, Arcêncio RA, Popolin MP, Rodrigues LBB. The role of Primary Healthcare in the coordination of Health Care Networks in Rio de Janeiro, Brazil, and Lisbon region, Portugal. *Cien Saude Colet* [Internet]. 2017 [citado em 14 jan 2019]; 22(3):713-23. Disponível em: <https://pdfs.semanticscholar.org/d8d1/aabeeecb76174456cde66d8945bc0dd51249.pdf>.<http://dx.doi.org/10.1590/1413-81232017223.33532016>.
24. Costa JP, Jorge MSB, Vasconcelos MGF, Paula ML, Bezerra IC. Resolubilidade do cuidado na atenção primária: articulação multiprofissional e rede de serviços. *Saúde debate* [Internet] 2014 [citado em 19 jan 2019]; 38(103):733-43. Disponível em: <http://www.scielo.br/pdf/sdeb/v38n103/0103-1104-sdeb-38-103-0733.pdf>. <http://dx.doi.org/10.5935/0103-1104.20140067>.
25. Vieira FS. Impact of recent decisions and discussions on the Brazilian Public Health System financing. *Saúde debate* [Internet]. 2016 [citado em 14 jan 2019]; 40(109):187-99. Disponível em: http://www.scielo.br/pdf/sdeb/v40n109/en_0103-1104-sdeb-40-109-00187.pdf. <http://dx.doi.org/10.1590/0103-1104201610915>.
26. Brehmer LCF, Ramos FRS. Experiências de integração ensino-serviço no processo de formação profissional em saúde: revisão integrativa. *Rev Eletrônica Enferm* [Internet] 2014 [citado em 20 fev 2019]; 16(1): 228-37. Disponível em: <https://www.revistas.ufg.br/fen/article/view/20132/16462>.<https://doi.org/10.5216/ree.v16i1.20132>.
27. Kalita M, Majewska K, Gradowska A, Karwoska K, Michal L. Food, mechanic and septic complications in patients enterally nutritioned in home conditions. *Pol Przegl Chir* [Internet]. 2014 [citado em 14 jan 2019]; 86(10):466-72. Disponível em: <https://www.degruyter.com/downloadpdf/j/pjs.2014.86.issue-10/pjs-2014-0083/pjs-2014-0083.pdf>.<https://doi.org/10.2478/pjs-2014-0083>.

28. Silva AC, Silveira, SA. Perfil epidemiológico e nutricional de usuários de nutrição enteral domiciliar. Demetra [Internet]. 2014 [citado em 14 jan 2019]; 9(3):783-94. Disponível em: <https://www.epublicacoes.uerj.br/index.php/demetra/article/viewFile/10527/10931>.<https://doi.org/10.12957/demetra.2014.10527>.
29. Santos ES, Gastaldi AB, Garanhani ML, Montezeli JH. Educação em Saúde na Atenção ao Paciente Traqueostomizado: Percepção de Profissionais de Enfermagem e Cuidadores. 2016 [citado em 20 fev 2019]; 15(4): 439-46. Disponível em: <http://periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/33903/18473>.
30. Mattos RM. Educação em saúde aos trabalhadores de enfermagem e acompanhantes sobre prevenção e tratamento de lesões de pele em dois hospitais de Petrolina-PE. Rev Interfaces [Internet]. 2015 [citado em 20 fev 2019]; 3(1):22-32. Disponível em: <https://www.ufmg.br/proex/revistainterfaces/index.php/IREXT/article/view/44/pdf>.
31. Rojas MVM, Cardozo SLS. El vídeo como soporte social a cuidadores de personas con enfermedad crónica. Av Enferm [Internet]. 2015 [citado em 12 jan 2019]; 33(2):199-08. Disponível em: <http://www.scielo.org.co/pdf/aven/v33n2/v33n2a02.pdf>.<http://dx.doi.org/10.15446/av.enferm.v33n2.49784>.

Contributors

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