Original article

NURSING ACTIONS IN REFERENCE AND COUNTER-REFERENCE IN HEALTH CARE FOR PERSONS WITH AMPUTATION*

Micheli Leal Ferreira[1], Mara Ambrosina de Oliveira Vargas[2], Ana Maria Fernandes Borges Marques[1], Andréa Huhn[3], Selma Regina de Andrade[2], Caroline Porcelis Vargas[4]

ABSTRACT: The present study aimed to identify reference and counter-reference activities performed by nurses of the Health Care Network, by describing their actions in the delivery of care to persons with amputation. Qualitative study, with data collection performed by semi-structured interviews with 21 nurses of primary, secondary and tertiary levels of health care in Florianópolis. Data was collected in April and May 2015 and was organized with the aid of ATLAS.ti 7.5.6 software and analyzed with the use of Thematic Analysis technique. Two categories emerged: Entry points to the healthcare network (RAS) for persons with amputation, and Nurses role in care and the implications of the actions of these professionals in the reference and counter-reference system. Basic Health Units, Emergency services and the Rehabilitation Center of Santa Catarina (CCR) were identified as the most frequently accessed entry points. The primary focus of nursing professionals is to deliver higher quality care to persons with amputation through reference and counter-reference in health care when necessary.
DESCRIPTORS: Amputation; Nursing; Integral care in health; Health care.

ATUAÇÃO DO ENFERMEIRO NO REFERENCIAMENTO E CONTRARREFERENCIAMENTO DE PESSOAS COM AMPUTAÇÃO

RESUMO: O objetivo foi identificar referenciamentos e contrarreferenciamentos realizados pelos enfermeiros da Rede de Atenção à Saúde, descrevendo sua atuação na assistência à pessoa com amputação. Estudo qualitativo, com coleta de dados realizada por entrevista semiestruturada com 21 enfermeiros dos três níveis de atenção à saúde de Florianópolis. A coleta ocorreu nos meses de abril e maio de 2015. Os dados foram organizados com auxílio do software ATLAS.ti 7.5.6. e analisados com base na técnica da Análise Temática. Emergiram duas categorias: Portas de entrada da pessoa com amputação; O enfermeiro na assistência e as implicações de sua atuação no referenciamento e contrarreferenciamento. Identificou-se como portas de entrada mais procuradas Unidades Básicas de Saúde, serviço de Emergência e o Centro Catarinense de Reabilitação. O foco inicial dos enfermeiros é oferecer melhor assistência à pessoa com amputação realizando referência e contrarreferência quando necessário.
DESCRITORES: Amputação; Enfermagem; Integralidade em saúde; Assistência à saúde.

ACTUACIÓN DEL ENFERMERO EN EL SISTEMA DE REFERENCIA Y CONTRARREFERENCIA DE PERSONAS CON AMPUTACIÓN

RESUMEN: El objetivo del estudio fue identificar los sistemas de referencia y contrarreferencia que describen la actuación de enfermeros de la Red de Atención a la Salud en la asistencia a la persona con amputación. Es un estudio cualitativo, cuyos datos fueron obtenidos por medio de entrevista semi estructurada con 21 enfermeros de los tres niveles de atención a la salud de Florianópolis en los meses de abril y maio de 2015. Las informaciones fueron organizadas con por medio del software ATLAS.ti 7.5.6. y analizadas con base en la técnica del Análisis Temático. Resultaron de eso dos categorías: Puertas de entrada de la persona con amputación; El enfermero en la asistencia y las implicaciones de su actuación en sistema de referencia y contrarreferencia. Se identificaron como puertas de entrada más buscadas Unidades Básicas de Salud, servicio de Emergencia y el Centro Catarinense de Rehabilitación. El infoque inicial de los enfermeros es ofrecer mejor asistencia a la persona con amputación, realizando referencia y contrarreferencia cuando sea necesario.
DESCRIPTORES: Amputación; Enfermería; Integralidad en salud; Asistencia a la salud.

*Article extracted from the dissertation titled: "Referência e contrarreferência na atenção à saúde das pessoas com amputação na visão do enfermeiro: uma perspectiva bioética". Universidade Federal de Santa Catarina, 2015.(Reference and counter-reference in health care for people with amputation: Analysis from the perspective of bioethics)

[1]Nurse. PhD Student in Nursing. Universidade Federal de Santa Catarina. Florianópolis, SC, Brazil.
[2]Nurse. PhD in Nursing. Professor in Graduate and Postgraduate studies in Nursing at Universidade Federal de Santa Catarina. Florianópolis, SC, Brazil.
[3]Radiologic Technologist. PhD Student in Nursing. Professor at Instituto Federal de Santa Catarina. Florianópolis, SC, Brazil.
[4]Nurse. Master Student in Nursing. Universidade Federal de Santa Catarina. Florianópolis, SC, Brazil.

Corresponding author:
Caroline Porcelis Vargas
Universidade Federal de Santa Catarina
R. Ruth Pereira 806 - 88058-640 – Florianópolis, SC, Brasil
E-mail: k2vargas@gmail.com

Received: 09/02/2017
Finalized: 14/08/2017

http://dx.doi.org/10.5380/ce.v22i3.50601

INTRODUCTION

Amputation dates back to prehistoric times. There are records dating back more than 1,000 years about congenital limb deficiency amputations; acquired amputations caused by trauma (e.g. as a consequence of wounds in battles or accidents) and used to treat diseases or complications. Currently, elective amputations are aimed to prevent complications and offer better living conditions to the patients, especially when endovascular intervention to preserve the affected limb is complicated [1-2].

Studies addressing amputations reported that these procedures are used to treat traumas and complications caused by diabetes mellitus (DM), systemic hypertension (SH) and HIV infections [3-5].

The epidemiological profile of Brazil has been changing since the 1950s, with chronic non-communicable diseases (CNCD) ranking among the main causes of morbidity and mortality. Therefore, it is important to raise awareness about the impact of these conditions that threaten human health and development because they generate various types of dependency and deficiencies, often caused by amputation complications [6-7].

The Brazilian Census of 2010 conducted by the Brazilian Institute of Geography and Statistics (IBGE) found that 24% of the country's population has a disability, and of these, there are about 3 million people living with some sort of motor disability [8].

Given the magnitude of the problem, empowerment and the full implementation of the current public policies are necessary. In this regard, we stress the delivery of integral, comprehensive care "understood as a coordinated set of actions and preventive and curative, individual and collective services required at all levels within the healthcare system" [9:40].

Law 8080/90 provides for the flow of customer services, as follows:

> ... The actions and health services performed under the Unified Health System (SUS), directly or involving additional participation of the private sector will be organized on a regional and hierarchical way at increasing levels of complexity [10:5].

Hierarchization of health services at the SUS aims to ensure universal, integral and equal access to health services to users, through actions and services that begin at the entry points to the SUS, and in a second stage are delivered at the regionalized and hierarchical network, depending on the complexity of the service [11].

The organization of Health Care Networks (RAS) aims to ensure primary health care facilities close to the users' residences to promote interventions at the most common situations. When the RAS is unable to provide the care needed, the user is referred to a higher level health service to be seen by experts [11].

The process of reference and counter-reference can be defined as the process of referring the user to a sector of the health care network where more complex care that uses the latest technological resources is provided, while counter-reference is the opposite process, that is, the user returns to a RAS sector where less complex care is provided [12].

The particularities of individuals who underwent elective amputation or whose amputations were caused by trauma were considered in this study, as these patients require rehabilitation care. For this purpose, the different levels of healthcare must be well coordinated to avoid successive readmissions and the chronification of acute processes.

The theme was investigated from the perspective of nurses, given their key role as care managers. In addition, nurses are supposed to observe ethical commitments in their practice and are responsible for providing specific care and monitoring various chronic diseases that are the main causes in elective amputations.

Therefore, it is extremely important to contextualize the role of nurses in the health care process of persons with amputation at all levels of care, in order to disseminate the difficulties encountered by these professionals, as well as the need for investments to structure this process, as this may guide or support nursing actions.

Thus, the research question defined in this study is: how do nurses provide health care for persons with amputation at the three levels of the RAS in the city of Florianópolis, State of Santa Catarina (SC)?

The study had the following objectives: to identify reference and counter-reference in health care by nurses at each level of the RAS and to describe the nurses' actions in the care to persons with amputation.

METHOD

Qualitative, exploratory and analytical study developed at three different levels of health care: primary, secondary and tertiary.

Data was collected at the Surgery Unit II (UIC II) of University Hospital Professor Polydoro Ernani of São Thiago, a teaching hospital of the Universidade Federal de Santa Catarina (UFSC/HU); The Rehabilitation Center of Santa Catarina (CCR); Municipal Polyclinic Continente; The HU Outpatient Clinic, and five Basic Health Units (UBS): UBS Centro; UBS Coqueiros; UBS Córrego Grande; UBS British, and UBS Saco dos Limões.

The criterion used to select the UBS in Florianópolis was their elderly population (individuals aged 65 years and older) assisted at each health district, due to the close relationship between elective amputations and chronic diseases, which are more frequent in this population group.

The participants were 21 nurses employed in the hospitals where the study was conducted. Nurses who had less than three months of practice at the RAS, who were not providing direct or indirect care to persons with amputation and/or who were away on vacation or leave at the time of data collection were excluded from the study.

The subjects were randomly selected and data collection took place in April and May 2015, through individual semi-structured interviews that were recorded. Three interview guides were used, one for each level of care, to contemplate the particularities of each care level. The guides were validated by experts and the transcribed interviews were given back to the respondents for content validation.

The interviews were imported into ATLAS.ti software 7.5.6 (Qualitative Research and Solutions) for data processing and analysis. All transcripts were saved as Microsoft Word documents and constituted the primary documents. Data analysis was based on the thematic analysis technique that uses the following criteria: pre-analysis, creation of thematic categories, inference or deduction, and interpretation of data [13].

The project was approved by the Research Ethics Committee through Plataforma Brasil, under statement no. 970.902 of February, 24, 2015. To ensure the anonymity of the participants, their statements were identified by a code E (letter) followed by a number (E1, E2, E3....E21). The numbers were randomly assigned to the respondents.

RESULTS

Two thematic categories emerged from the results: Entry points to the healthcare network for people with amputation and Nurses role in care and the implications of the actions of these professionals in the reference and counter-reference system.

Entry points to the health care network for persons with amputation

The participants mentioned the different entry points to the RAS for persons with amputation at the RAS of Florianópolis. As described below, the entry point varies according to the time and the level of care required by the amputated person.

Thus, the entry point most frequently accessed by patients with amputation and at hospital discharge is the UBS, particularly because they need to change their bandages, followed by the Outpatient unit

of the University Hospital (HU), as recommended by the institution during hospitalization.

They arrive at the health center after undergoing amputation at the HU. The limb had to be amputated. They seek the service because they need to change stump dressings. (E12)

Patients access the center by the reception desk, but some are referred to the center by community health agents, or a home visit is requested by phone! (E3)

The patients are usually referred to the HU outpatient unit during consultations at the admissions, emergency, endocrinology units, or sometimes at the primary health unit. (E14)

Another entry point to the RAS is the emergency service of the hospital in cases of recurrent amputations or postoperative complications.

The patients assisted at the emergency service are referred to the RAS by a health center, by the outpatient service or else, in case of exacerbation of the condition or pain, the doctor may request the referral by letter. The patients are received in our emergency department and end up undergoing amputation. O else, the patient comes directly to the emergency service because of the pain, without previous assistance at the health center. I even overheard someone saying: - The emergency unit looks like a vascular care unit! (E18)

The Centro Catarinense de Reabilitação (Rehabilitation Center of Santa Catarina) (CCR) was identified as an entry point to the RAS focused on rehabilitation and prosthetic care. However, delay in the arrival of these users is worrisome, particularly because these patients are not assisted at the other entry points of the RAS after the amputation.

I wish these patients were assisted earlier here. [...] They come here long after undergoing amputation, almost without guidance, and stump dressing. With appropriate guidance, these patients could be more able to care for their stumps to become fit for prosthesis. (E16)

When an amputated person arrives at the local RAS, the nurse must identify the specific needs of the user and provide customized assistance. A description of nurses' actions related to the care of persons with amputation from the moment they arrive at the local RAS, through the previously mentioned entry points is provided.

Nurses' role in care and the implications of the actions of these professionals in the reference and counter-reference system

At the UBSs, the action plan for nurses included the following activities: identify the cause of the amputation; assess the status of the stump or operative wound, if any; treat underlying diseases, where necessary; identify specific needs to be addressed, either physical or psychosocial, considering the rehabilitation, prevention of health risks and social inclusion of this person, and finally, carry out and/or assist in the referencing.

First, it is necessary to determine the reason for the patient to undergo amputation, find out whether the patient was aware of his/her illness, of the care he to be taken with his/her feet, whether it was a chronic problem or an exacerbation, or else whether there was a trauma, and then conduct the rehabilitation. (E10)

We divide the patients into groups, and depending on their health status, we encourage them to maintain their quality of life. Also, even if the patient had an amputated limb, measures aimed to prevent the amputation of another limb are necessary. (E7)

When a person with amputation arrives at HU's Outpatient unit, the nurse attempts to identify any signs of neurological or cardiovascular disorder; any possible wounds, refers the patient to a specialized service where he/she will have custom made special shoes, foot orthosis or prostheses, and conducts preventive educational activities. When this professional has injuries, or faces situations where healing is difficult, it is recommended that the patient is directly referred to the emergency service:

First, I check for any possible neurological or cardiovascular disorders because we want to prevent the

occurrence of other amputations. [...] During rehabilitation, patients wear special shoes, foot orthoses, have a different gait pattern, and calluses can be seen in other parts of the foot. I talk to the doctor, fill in the data and refer the patient to a service for having custom made special shoes. [...] Sometimes, I receive a phone call about a patient and depending on the situation, I provide care to this patient or refer him/her to emergency for debridement or amputation, and the amputated patient returns to me to receive guidance on prevention. (E14)

Regarding the nurse's role in the healthcare of persons with amputation, at an Admissions Unit at a Tertiary Referral Center (NTS), the nursing professionals made the following statements:

If the patient has good mobility, physical strength and can move around with a walker, we offer him/her guidance and assistance. We offer a wheelchair to take the patient to the bath or to the toilet. [...] The patient leaves the RAS with a scheduled return visit and a dressing prescription. This is far from being good enough! (E20)

At discharge, we advise patients about stump care. After they leave the RAS, an appointment is scheduled for these patients at the dressing clinic and also with the vascular surgery team. We teach them to apply and change wound dressings at home, but if necessary, we advise them to have their dressings applied and changed at the health center, and in case of any intercurrence, we advise them to return to the hospital emergency service. (E19)

At the Tertiary Referral Center (NTS), nurses from the CCR assist in the treatment of skin wounds, in the procedures or control of comorbidities, i.e. also performing activities of health education targeted to prevention.

Patients come to the Center for treating their wounds, not for guidance on prevention, but our primary responsibility is to offer prevention. [...] Nursing care, our main responsibility, does not concern applying or changing dressings, but rather promoting health education activities. (E16).

When a person with amputation is monitored at a Basic Health Unit (UBS) and needs intervention or examination by an expert who does not integrate the Family Health Care Support Center (NASF) team, referral is performed by the nurse and /or the physician.

Patients needing prosthetic care are referred to the CCR. When specialized care (nursing, vascular, endocrinology) is needed, patients are referred to a Secondary Referral Center (NSS), at the outpatient unit of the HU or at the polyclinics of the city.

There were no reports of post-amputation referrals for follow-up of the operative wound or stump by nurses in the polyclinics, although the RAS of Florianópolis counts on a wound care center, with permanent nursing staff, for referral. In practice, this is not part of the flow of care to persons with amputation, as shown below:

In general, patients do not come here because of an amputation, but because they were referred for appointments with specialists, e.g. experts in vascular interventions. Sometimes we receive patients with previous amputation at the room for wound care and dressings. There is no referral of patients with amputation in this polyclinic. (E15)

An amputated person coming for an appointment at the HU Outpatient unit with an unhealed or infected wound is referred to the Tertiary Referral Center (NTS) through the emergency department.

Our routine practices are internalized at the HU, but sometimes we need professional advice. [...] We told the professionals of health centers that in the case of injury or a more serious problem, the patient should be referred to the emergency service because this is what we would do in a similar situation. (E14).

However, the nursing professionals at the admissions unit of the HU claim to have little involvement with the counter-reference of amputated patients. Sometimes they make contact with the UBS exclusively for dressing changes and/or treating an operative wound. Regarding rehabilitation, other professionals are responsible for this process, according to the following reports:

The discharge process is very complicated. Psychology and social work provide good services [...]

social workers provide guidance on rehabilitation, on access to prosthetic services, talk about the rehabilitation center. I know nothing about it [...] Where possible, I counter-reference to primary care and offer guidance on dressings. As we do not have a specific form for this, I once had to write a letter and make a call to provide information about a patient. But this is not a standard! (E18)

Nurses who work at the CCR reported referrals to another professional at the NTS in hospital settings, when intervention or assessment is needed; counter-referrals to the UBS, for patients living in other cities that will continue their treatment at home, or reassignments to the institution's prosthetic program when the person with amputation is fit for this.

If the patient has some sort of necrosis or needs to undergo another amputation, he will be referred to the hospital of his/her city or to the hospital of the regional unit. [...] guidance is made in writing and verbally. We provide the patients with bandages and materials for starting wound care and refer them to the local UBS for continuing wound care. [...] we refer these patients again to the CCR prosthetic program. If the prosthesis does not fit well, the patient must return to the program. (E17)

If it proves to be impossible to address a specific situation, the nurses of the CCR establish an action plan and the necessary referrals so that the person with amputation recovers and becomes fit for the prosthesis.

DISCUSSION

The main entry points to the RAS used by persons with amputation are the UBSs, the emergency service and the CCR, according to their specific needs. The focus of UBS is the care of the wounds or stump and dressing changes. There were no statements reporting the involvement of the UBS in the process of rehabilitation of amputees or in ensuring their rights. However, it is known that the rehabilitation should start as soon as possible, even before the amputation procedure, and that although this procedure is performed by professionals at higher levels within the healthcare system, Primary Health Care (APS) is closely related with care provided to amputated patients, and is also involved in the coordination of such care [14-15].

The nurses' work process at the UBSs is based on the interdisciplinary and multidisciplinary relationship of the team, and the professionals are supposed to perform a higher number of preventive, educational and administrative actions. However, individual care to patients e.g. wound care, dressings, is also reported, as the supervision, planning and management of health services requires customized actions [16].

Primary Health Care designs, monitors and organizes the flow of users between the different entry points, and provide care based on a horizontal, continuous and integrated relationship, through the reference and counter-reference processes [16]. This is consistent with the statements of the participants related to nursing actions at the UBS and its implications in the reference and counter-reference process. These professionals are concerned with the delivery of integral and continuous care.

Persons with amputation usually seek the hospital emergency service because acute exacerbation of chronic conditions is common in these patients, or due to complications related to stump and/or wound healing. The use of this entry point is acceptable since, according to clinical guidelines based on evidence, hospitals must provide care to patients in acute conditions or during acute exacerbation of chronic conditions [12].

The reports also showed that individuals who underwent recent or recurrent amputations are treated at hospital units. The nursing professionals involved in this process reported little involvement and knowledge on rehabilitation and referrals. Studies showed that early and intensive intervention by a nurse trained to provide guidance, support and care to persons with amputation, contributes to a significant reduction in the rate of complications and amputations among high-risk patients and optimizes the results in rehabilitation processes [17-18].

Many professionals of health centers that provide complex care are unaware of referral for rehabilitation and usually refer patients to social workers and physiotherapists, revealing fragmentation

of care [19]. It is believed that, the creation of a flow between health services and care points with previously established referrals and counter-referrals could mitigate this problem. The individuals should have quick and easy access, after hospital discharge, to the UBS closer to their homes, as well as count on physical rehabilitation and psychosocial support Services [20].

Individuals who undergo amputation experience a process of transition that involves various and dramatic changes that require adaptation. In general, the success of this adaptation is associated to the care received by these patients, since the availability of a team working in an interdisciplinary way can make the recovery and rehabilitation process more satisfactory [21-22].

Therefore, if a person with amputation is not referred to the correct level of care, this may generate significant sequelae for both the patient and the society, since the ultimate goal of the rehabilitation process is to ensure that persons with amputation are successfully integrated to the community [23].

One limitation of this study was the difficulty in contacting health professionals at the primary, secondary and tertiary levels of care who had already assisted people with amputation, since the records of Brazil's Federal Council of Nursing (COFEN) do not inform where the amputated patients were assisted or which professionals were involved in such care.

FINAL CONSIDERATIONS

Through the identification and description of the nurse's role at all the entry points of the Health Care Network (RAS), as well as of the implications in the process of referrals and counter-referrals of persons with amputation, as a component and integral part of care, it is emphasized that the prevention of diseases and injuries was present at all levels of health care.

Moreover, it has been demonstrated that all the assumptions of an integrated and coordinated RAS are based on the connectivity of the different care points to ensure the delivery of integral care, and that this is obtained through effective transfers between the different levels of health care.

Nurses play a key role as care managers and must perform their actions according to the principle of responsibility in health promotion. However, the provision of integral and continuous health care to persons with amputation has been made difficult by the ineffective communication between the different levels of care, which results in a rehabilitation process that is too time-consuming and expensive for the SUS.

Assessment of the flow of persons with amputation at the RAS in the city of Florianópolis showed that the Rehabilitation Center of Santa Catarina (CCR) is the only referral center for prosthetic services in the city, and that these procedures are untimely performed and without the necessary guidance.

It is necessary to standardize the actions related to the process of rehabilitation and healthcare to persons with amputation, as well as create instruments to support the actions of all the health care professionals involved, in order to guide and facilitate this process and the access of these users to the SUS.

There is a need to standardize the actions regarding the rehabilitation and health care of the person with amputation, as well as to create instruments to support the actions of not only the nurse, but of all the professionals involved, in order to guide and facilitate the Actions and access to these SUS users.

Further studies are needed to fill training gaps, define a flow of care to persons with amputation and improve the referral and counter-referral process at the RAS.

REFERENCES

1. Jacobs C, Siozos P, Raible C, Wendl K, Frank C, Grützner PA, et al. Amputation of a lower extremity after severe trauma. Oper Orthop Traumatol. [Internet] 2011;23(4) [acesso em 14 jun 2015]. Disponível: http://dx.doi.org/10.1007/s00064-011-0043-9.

2. Chalya PL, Mabula JB, Dass RM, Ngayomela IH, Chandika AB, Mbelenge N, et al. Major limb amputations: a tertiary hospital experience in northwestern Tanzania. J Orthop Surg Res. [Internet] 2012;(7) [acesso em 10 jun 2015]. Disponível: http://dx.doi.org/10.1186/1749-799X-7-18.

3. Slim H, Tiwari A, Ahmed A, Ritter JC, Zayed H, Rashid H.. Distal versus ultra distal bypass grafts: amputation-free survival and patency rates in patients with critical leg ischaemia. Eur J Vasc Endovasc Surg. [Internet] 2011;42(1) [acesso em 4 jun 2015]. Disponível: http://dx.doi.org/10.1016/j.ejvs.2011.03.016.

4. Dunkel N, Belaieff W, Assal M, Corni V, Karaca Ş, Lacraz A, et al. Wound dehiscence and stump infection after lower limb amputation: risk factors and association with antibiotic use. J Orthop Sci. [Internet] 2012;17(5) [acesso em 30 mai 2015]. Disponível: http://dx.doi.org/10.1007/s00776-012-0245-5.

5. Moxey PW, Hofman D, Hinchliffe RJ, Poloniecki J, Loftus IM, Thompson MM, et al. Delay influences outcome after lower limb major amputation. Eur J Vasc Endovasc Surg. [Internet] 2012;44(5) [acesso em 4 jun 2015]. Disponível: https://doi.org/10.1016/j.ejvs.2012.08.003.

6. Marinho MGS, Cesse EAP, Bezerra AFB, de Sousa IMC, Fontbonne AF, de Carvalho EF. Análise de custos da assistência à saúde aos portadores de diabetes melito e hipertensão arterial em uma unidade de saúde pública de referência em Recife - Brasil. Arq Bras Endocrinol Metab. [Internet] 2011;55(6) [acesso em 2015 jun 14]. Disponível: http://dx.doi.org/10.1590/S0004-27302011000600007.

7. de Souza CF, Gross JL, Gerchman F, Leitão CB. Pré-diabetes: diagnóstico, avaliação de complicações crônicas e tratamento. Arq Bras Endocrinol Metab. [Internet] 2012;56(5) [acesso em 10 jun 2015]. Disponível: http://dx.doi.org/10.1590/S0004-27302012000500001.

8. Instituto Brasileiro de Geografia e Estatística (IBGE). Censo Demográfico 2010: Características gerais da população, religião e pessoas com deficiência [Internet] 2013 [acesso em 14 jun 2015]. Disponível: http://www.ibge.gov.br/home/estatistica/populacao/censo2010/caracteristicas_religiao_deficiencia/caracteristicas_religiao_deficiencia_tab_gregioes_xls.shtm.

9. Ministério da Saúde (BR). Secretaria de Atenção à Saúde. HumanizaSUS: Cartilhas da política nacional de humanização. Brasília: Ministério da Saúde; 2009.

10. Brasil. Lei n. 8080 de 19 de Setembro de 1990. Dispõe sobre as condições para a promoção, proteção e recuperação da saúde, a organização e o funcionamento dos serviços correspondentes e dá outras providências. Diário Oficial da República Federativa do Brasil, Brasília, 20 set. 1990.

11. Ministério da Saúde (BR). Decreto n. 7.508, de 28 de junho de 2011. Regulamenta a Lei n. 8.080, de 19 de setembro de 1990, para dispor sobre a organização do Sistema Único de Saúde - SUS, o planejamento da saúde, a assistência à saúde e a articulação interfederativa, e dá outras providências. Diário Oficial da União, Brasília, 28 jun. 2011.

12. Mendes EV. As redes de atenção à saúde. Brasília: Organização Pan-Americana da Saúde; 2011.

13. Minayo MCS. O desafio do conhecimento: pesquisa qualitativa em saúde. 16ª ed. São Paulo: Hucitec; 2014.

14. Mendes EV. O cuidado das condições crônicas na atenção primária à saúde: o imperativo da consolidação da estratégia da saúde da família. Brasília: Organização Pan-Americana da Saúde; 2012.

15. Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Diretrizes de atenção à pessoa amputada. 1ª ed. Brasília: Editora do Ministério da Saúde; 2013.

16. Freitas GM, Santos NSS. Atuação do enfermeiro na atenção básica de saúde: revisãointegrativa de literatura. R. Enferm. Cent. O. Min. [Internet] 2014;4(2) [acesso em 21 fev 2017]. Disponível: http://dx.doi.org/10.19175/recom.v0i0.443.

17. Ren M, Yang C, Lin DZ, Xiao HS, Mai LF, Guo YC, et al. Effect of intensive nursing education on the prevention of diabetic foot ulceration among patients with high-risk diabetic foot: a follow-up analysis. Diabetes Technol Ther. [Internet] 2014;16(9) [acesso em 4 ago 2015]. Disponível: http://dx.doi.org/10.1089/dia.2014.0004.

18. Price B, Moffatt B, Crofts D. Managing patients following a lower limb amputation. J. Comp. Neurol. [Internet] 2015;29(3) [acesso em 10 ago 2016]. Disponível: https://www.jcn.co.uk/files/downloads/articles/jcn-06-2015-10-

managing-patients-following-a-lower-limb-amputation.pdf.
19. Vargas MAO, Ferrazzo S, Schoeller SD, Drago LC, Ramos FRS. Rede de atenção à saúde à pessoa amputada. Acta paul. enferm. [Internet] 2014;27(6) [acesso em 10 jun 2015]. Disponível: http://dx.doi.org/10.1590/1982-0194201400086.

20. Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Política Nacional de Saúde da Pessoa Portadora de Deficiência. Brasília: Editora do Ministério da Saúde; 2012.

21. Cruz DM, do Nascimento LRS, da Silva DMGV, Schoeller SD. Red de apoyo para las personas con discapacidad. Cienc. enferm. [Internet] 2015;21(1) [acesso em 28 abr 2016]. Disponível: http://dx.doi.org/10.4067/S0717-95532015000100003.

22. Fortington LV, Rommers GM, Wind-Kral A, Dijkstra PU, Geertzen JH. Rehabilitation in skilled nursing centres for elderly people with lower limb amputations: a mixed-methods, descriptive study. J Rehabil Med. [Internet] 2013;45(10) [acesso em 3 ago 2015]. Disponível: http://dx.doi.org/10.2340/16501977-1210.

23. Brito TDQ, de Oliveira AR, Eulálio MC. Disability and aging: study of social representations of the elderly from physical therapy rehabilitation. Av. Psicol. Latinoam. [Internet] 2015;33(1) [acesso em 25 abr 2016]. Disponível: http://dx.doi.org/10.12804/apl33.01.2015.09.