

**AMPUTEE PATIENT'S NOTIFICATION FILE FACILITATOR FOR  
EARLY REHABILITATION: HOSPITAL NOTIFICATION:  
FACILITATOR IN AMPUTEE REHABILITATION**

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### Abstract

This extension project of the Santa Catarina State University (UDESC) called Multidisciplinary Rehabilitation in Amputees is a set of actions aiming to follow the National Guidelines of Attention to Amputated People, prioritizing the assistance provided for these patients during the immediate post-operative period. This study aimed to prepare the tool of amputee patient's notification file, the methodology of insertion of this routine in a multiprofessional practice scenario,

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and socio-demographic results of the subjects notified. This is a descriptive study with quantitative and qualitative approach, of experience-report type, carried out from June 2014 to June 2016. Regarding the municipalities of origin, it was found that the patients residing in Greater Florianópolis correspond to 51.8% of the sample, however, the number of notifications with this field not completed was high (32.1%). The major cause of amputation was due to vascular diseases (50%), followed by traumatic etiology (37.5%), with a most prevalent transfemoral level (46.4%). In total, 33.9% of patients were notified with admission for early rehabilitation in the extension project. The tool of hospital notice of amputee patients was innovative for facilitating care to a newly-amputated patient and referral to early rehabilitation as it is incorporated in the routine of the hospital's multidisciplinary staff.

**Keywords:** Amputees. Notification. Health promotion. Rehabilitation.

FICHA DE NOTIFICAÇÃO FACILITADORA AO PACIENTE AMPUTADO  
PARA REABILITAÇÃO PRECOCE: NOTIFICAÇÃO HOSPITALAR:  
FACILITADOR NA REABILITAÇÃO DE AMPUTADOS

**Resumo**

Este projeto de extensão da Universidade do Estado de Santa Catarina (Udesc), denominado Reabilitação Multidisciplinar em Amputados, é um conjunto de ações que visam atender às Diretrizes Nacionais de Atenção à Pessoa Amputada, priorizando o atendimento a esses pacientes no pós-operatório imediato. O objetivo deste trabalho é descrever a elaboração da ficha de notificação do paciente amputado, a metodologia de inserção dessa rotina em um cenário de prática multiprofissional e os resultados sociodemográficos dos sujeitos notificados. Para tanto, realizou-se um estudo descritivo de abordagem quantitativa e qualitativa, do tipo relato de experiência, realizado entre junho de 2014 e junho de 2016. Em relação aos municípios de origem, verificou-se que os pacientes pertencentes à Grande Florianópolis correspondem a 51,8% da amostra, mas este campo não foi preenchido em um grande número de notificações (32,1%). A principal causa de amputação foi doença vascular (50%), seguida de etiologia traumática (37,5%), com prevalência do nível transfemoral (46,4%). Em torno de um terço (33,9%) dos pacientes foi notificado com admissão para reabilitação precoce no projeto de extensão. O instrumento de notificação ao paciente amputado mostrou-se inovador por facilitar o atendimento ao paciente recém-amputado e o encaminhamento para o início precoce da reabilitação, uma vez que está incorporado à rotina da equipe multiprofissional do hospital.

**Palavras-chave:** Amputados. Notificação. Promoção da saúde. Reabilitação.

EXPEDIENTE DE NOTIFICACIÓN FACILITADOR AL PACIENTE AMPUTADO  
PARA REHABILITACIÓN PRECOZ: NOTIFICACIÓN HOSPITALARIA:  
FACILITADOR DE LA REHABILITACIÓN DE LOS AMPUTADOS

**Resumen**

Este proyecto de extensión de la Universidad del Estado de Santa Catarina (UDESC) denominado Rehabilitación Multidisciplinaria en Amputados es un conjunto de acciones que tienen como objetivo cumplir con los Lineamientos Nacionales de Atención al Amputado, priorizando la atención de estos pacientes en el postoperatorio inmediato. período. Buscamos definir un instrumento del formulario de notificación del paciente amputado, la metodología para insertar esta rutina en un escenario de práctica multiprofesional y los resultados sociodemográficos de los sujetos notificados. Esto es un estudio con enfoque cuantitativo y cualitativo, descriptivo, del tipo relato de experiencia, realizado de junio de 2014 a junio de 2016. En relación a los municipios de origen, se encontró que los pacientes pertenecientes al Gran Florianópolis correspondían al 51,8% de la muestra, pero el número de notificaciones con este campo sin rellenar fue alto (32,1%). La principal causa de amputación de enfermedades vasculares (50%), seguida de la etiología traumática (37,5%), con el nivel transfemoral más prevalente (46,4%). Treinta y tres por ciento (33,9%) de los pacientes fueron notificados con ingreso a rehabilitación temprana en el proyecto de extensión. El instrumento de notificación al paciente amputado resultó innovador para facilitar la atención del paciente recién amputado y la derivación al inicio temprano de la rehabilitación, ya que se incorpora a la rutina del equipo multiprofesional del hospital.

**Palabras clave:** Amputados. Notificación. Promoción de la salud. Rehabilitación.

**INTRODUCTION**

In 2022, over 70 thousand amputations, 98.01% of which were of lower limbs, were recorded by the Brazilian Unified Health System (SUS). From 2020 to 2022, 7,272 authorizations for hospital admissions (AIH) were registered; hospital admissions generated an average cost of R\$ 144.28 per admission registration, totaling an expenditure of R\$ 8,482,786.60 in the state of Santa Catarina<sup>1</sup>.

Overall, we can note the lack of a Health Attention Network (*Rede de Atenção à Saúde* – RAS) to provide care to a person who suffered an amputation from urgency care until the end of the rehabilitation process with the multiprofessional staff, making the early and effective return to activities of daily living (ADLs) and work activity impossible<sup>2</sup>.

The UDESC's extension project called Multidisciplinary Rehabilitation in Amputees in the city of Florianópolis, the capital of the state of Santa Catarina, represents one of the actions of the *Reabilitar e Integrar* (Rehabilitate and Integrate) Program and is one of the few projects in Brazil that promotes rehabilitation and seeks to foster fully and humanized attention to the individual who had an amputation of limbs and is a SUS user. The multidisciplinary team is constituted of professors and students of the institution and voluntary healthcare professionals, such as physiotherapists and physical educators. The nurses have teamed up to assist in the hospital notifications.

The project phases started with the analyses of medical charts of the Santa Catarina State Center for Rehabilitation (*Centro Catarinense de Reabilitação – CCR*) to check the history of amputations in the state. In turn, the amputee patient's notification file is presented as a facilitator for the amputee to communicate with the project in the hospital environment. After such notification is made by a hospital professional already inserted in the project context, a participant of the program visits the bedside of the hospitalized patient and performs a humanized and educative action called *Conversa no leito* (Conversations at the bedside). In outpatient care, functional physical examinations with individual attention are conducted and after this step, the patients are referred to walking school, to prepare and adapt the patient for gait. Patients' care is performed once per week by students of the Physical Therapy and Physical Education courses, being supervised by professors and voluntary professionals. The treatment plan is prepared to improve physical aspects and functional independence, allowing autonomy in the return to social, professional, sports, and leisure activities<sup>2</sup>.

According to the National Humanization Policy, with a humanized care, it is possible to promote trust, commitment, and bond between professionals and patients, thus strengthening the socio-affective network of the user. Humanizing means the inclusion of differences in the processes of management and care<sup>3</sup>.

The purpose of hospital notification is to promote early rehabilitation, with which it is possible to promote increased range of motion, increased muscle strength, optimize mobility, and reduce pain, enabling a successful rehabilitation. Early rehabilitation has a low cost since it involves low-tech interventions. From early rehabilitation, it is possible to avoid an aggravated rehabilitation process for the amputee<sup>4</sup>. At the time of prosthetization, such aggravations are noticeable due to difficulty in the functional use of a prosthesis. This is due to biomechanical compensations<sup>5</sup>.

The Guidelines of Attention to Amputated People argue that the ideal rehabilitation care given to amputee patients should be performed by a multidisciplinary staff and started,

in high complexity, if possible at the pre-surgery stage, thus favoring future rehabilitation and dealing of the patient in this situation. Such Guidelines instruct on rehabilitation, from immediate post-amputation in the pre-prosthetization phase to post-prosthetization, providing rehabilitation and quality of life to the amputee person in all stages of this process<sup>6</sup>.

With the late arrival of the amputee patient for rehabilitation in the outpatient clinic of the extension project Multidisciplinary Rehabilitation in Amputees, having several osteomioarticular complications from poor posture after discharge, the need to build the tool for the amputee patient's notification file was created. A pivotal study was conducted to get them acquainted with the tools of data collection<sup>7</sup>. Thus, this study aimed to describe the preparation of the tool for the amputee patient's notification file: the methodology of insertion in this routine in a multiprofessional practice scenario, facilitating attention to hospitalized patients and referral to early rehabilitation, as well as socio-demographic data collection of notified patients.

#### **MATERIAL AND METHODS**

This study is part of the hospital's macro research of the extension project Multidisciplinary Rehabilitation in Amputees. Promotion of Health of Amputees in the Hospital Environment. This research was approved by the Research Ethics Committee of UDESC (CAAE: 33009514.9.3001.0112), following CNS Resolution No. 466/2012 under REC opinion No. 962.040 on 02/24/2015.

A descriptive study with quantitative and qualitative approach, of experience-report type presenting the prepared tool and data of hospital notifications was conducted by the multidisciplinary staff of the Dr. Homero de Miranda Gomes Regional Hospital of São José (HRSJHMG), a public hospital based on the city of São José, in the state of Santa Catarina, from June 2014 to June 2016. It is a large general hospital and a reference center in polytrauma due to its proximity to the Brazilian highway (BR), exclusively for SUS services. Besides HRSJHMG, the survey was also conducted simultaneously in the Instituto de Cardiologia de Santa Catarina (ICSC), located inside HRSJHMG. This public hospital is a reference center in the state of Santa Catarina for medical specialty in cardiology and vascular care in clinical, emergency, and outpatient aspects.

#### **DATA ANALYSES AND INTERPRETATION**

Data analyses were carried out by descriptive statistics using the Statistical Package for Social Sciences-SPSS, version 20.0. Simple, and percentage frequency were used for data regarding gender, municipality of origin, etiology and level, and year of occurrence of the amputation.

## RESULTS

### BUILDING OF THE TOOL OF HOSPITAL NOTIFICATION

To create this tool called amputee patient's notification file (**Figure 1**), the main data to be objectively completed in the process of notification by the healthcare professional in hospital level, three physical therapists from UDESC, four physical therapy students, two hospital nurses, one nursing technician, one hospital physical therapist, and one physician participated in this process. To develop the tool, three meetings were necessary (in April, May, and June 2016), two of them were held in the biomechanics laboratory of the UDESC and one in the hospital. The basic material for the elaboration of the notification form was the anamnesis of the multiprofessional rehabilitation project for amputees, associated with the minimum information for referral to the hospital observed by health professionals working in the hospital environment. Such objectivity was focused on completing the tool, as well as not demanding too much time of their work routines. The items contained in this tool, which aid in the patient's early arrival to the project are patient's name, contact phone number, updated home address, date of admission, cause of amputation, level of amputation, occupation and name of the professional who notified, date of notification.

**Figure 1** – Prepared tool of amputee patient's notification file. Florianopolis, Santa Catarina, Brazil – 2016

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| <p>SANTA CATARINA STATE UNIVERSITY<br/>EXTENSION PROJECT: MULTIDISCIPLINARY REHABILITATION IN AMPUTEES<br/><b>AMPUTEE PATIENT'S NOTIFICATION FILE</b></p> <p><b>Level 1. Hospital intervention</b><br/>Governor Celso Ramos Hospital ( )<br/>Regional Hospital of São José ( )<br/>Institute of Cardiology of Santa Catarina ( )<br/>University Hospital (HU)<br/>Patient _____<br/>Age: _____<br/>Telephone: _____<br/>Date of admission ____/____/____</p> <p>Cause of amputation:<br/>( ) trauma ( ) osteomyelitis ( ) vascular<br/>( ) congenital ( ) oncological ( ) other: _____</p> <p>Level of amputation:<br/>Lower limb ( ) above the knee ( ) below the knee ( ) foot amputation</p> <p>Notified by the professional: _____</p> |
|--|

Source: Author's own elaboration.

## EXECUTION PROCESS OF HOSPITAL NOTIFICATION

This tool of notification is kept in a briefcase at a specific location, collectively agreed by the professionals of hospital departments assisting amputee patients. In previous meetings between the project team, the management, and professionals of the sector working in the hospital, the form of completion of notifications and routines was standardized for initiation of the tool. After three meetings with professionals and academics in physical therapy, nurses, nursing technicians, and physicians, it was possible to obtain progress towards the finalization of the hospital notification form, carried out in the university's biomechanics laboratory and in the hospital. In the first meeting, items from the anamnesis of the UDESC project were chosen, which was essential for notification. Afterwards, the second meeting was used to verify which basic items were necessary for the hospital identification of the amputee. Finally, the last meeting was designed to finalize and review the chosen items and adjust the layout of the hospital notification form. The routine of collection of the notifications is performed once per week. In the event of notification, intervention is conducted with the inpatient. Direct communication is made by phone between the hospital's healthcare professionals and the project members to enable early intervention after amputation.

## HOSPITAL INTERVENTION AFTER NOTIFICATION OF AMPUTEE PATIENT AND REFERRALS FOR THE EXTENSION PROJECT

After the extension project's members became aware that the notification was completed, we implement a project action at hospital level, from a qualitative approach focused on education called conversations at the bedside<sup>7</sup>, which also includes conversations at the bedside researchers. This conversation means to give attention to the amputee patient, both men and women, adults and seniors, admitted to the orthopedic department of the Dr. Homero de Miranda Gomes Hospital, focused on humanization of care, in which guidelines are provided on post-amputation new perspectives, importance of the early physiotherapy treatment, stump care, and clarification of doubts.

The Conversation includes the delivery of a kit (**Figure 2**) containing an elastic bandage to wrap up the stump after hospital discharge, a project t-shirt, an informative booklet, and an explanatory folder of the project. The first appointment in the project after discharge is also scheduled, to start early recovery. The patient is requested to bring the compressive bandage in their first appointment, since they will be taught how to apply the bandage correctly. In this physiotherapeutic visit conducted in the CEFID/UDESC

biomechanics laboratory, the patient is physically assessed for articular strength and mobility, presence of muscle contractures, stump sensitivity and edema, and independence for the Activities of Daily Living. Upon the interest and possibility of participating once per week, with individual care for 50 minutes on average and performed by students of undergraduate and graduate studies, as well as professionals acting on the field and professors of the Physical Therapy course. This bedside conversation takes place in the room where the patient is hospitalized, next to their bed. All information followed the ethical requirements maintained by the National Health Council of the Ministry of Health (MS).

**Figure 2** – Kit made by UDESC extension project, for hospital attention to the amputee patient. Florianópolis, Santa Catarina, Brasil – 2016



Source: Authors' records.

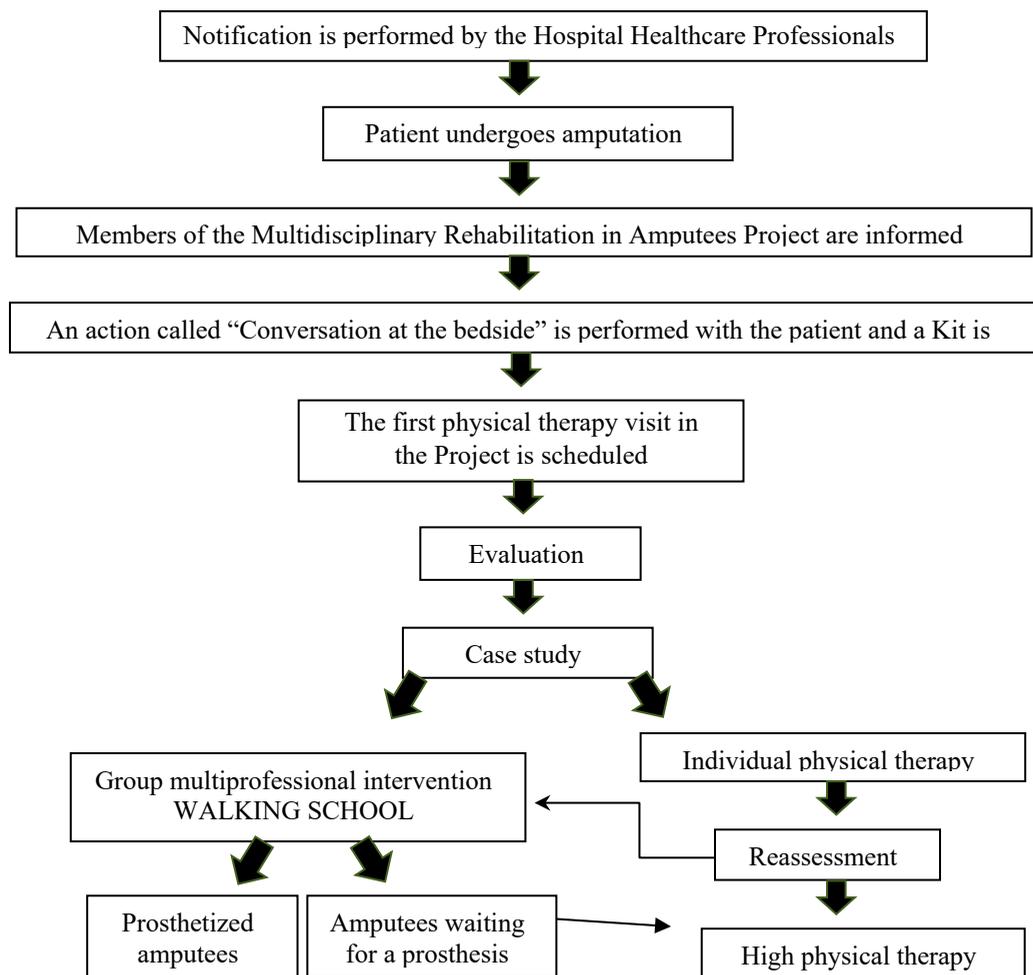
The flowchart of referral process to Physical Therapy is highlighted in **Figure 3**.

The patients whose physical therapy assessment showed a great functional independence, especially young patients with traumatic amputation, can be referred directly to the project action called Walking School, carried out at the clinic of the UDESC school of physical therapy in Florianópolis (SC). At Walking School, exercises are performed in two groups: a group whose patients are still waiting for a prosthesis and another whose patients already have one and are adapting to it. For the patients waiting for a prosthesis, exercises aiming at balance and suitability of the walking aid, gait training with crutches, group interactive, and sportive exercises promoting wellness and leisure are recommended. As to the patients who already have a prosthesis, gait trainings in flat ground, going up and down stairs, and ramps are recommended. Walking

School also includes activities such as Wii-based rehabilitation, neopilates, and adapted physical education.

As to the tool preparation, after several meetings, we believe that its items were objective and the multiprofessional staff adhered to its completion. We highlight that including the item age to the notification file would be useful. From June 2014 to June 2016, 56 notification of patients who underwent amputation were collected at data collection sites and are specified on **Table 1**. Of these notifications, 44 were from men (78.6%) and 12 (21.4%) from women.

**Figure 3** – Flowchart of internal referrals of the project from the Hospital Notification. Florianopolis, Santa Catarina, Brazil – 2016



Source: Author's own elaboration.

**Table 1** – Epidemiological profile of amputee people notified, according to gender, municipality, level of amputation, etiology, year, and site of notification 2014-2016. Florianópolis, Santa Catarina, Brazil – 2016

| Characteristic                            | Absolute freq. | Relative freq. (%) |
|---|----------------|--------------------|
| <b>Gender</b>                             |                |                    |
| Woman                                     | 12             | 21.4               |
| Man                                       | 44             | 78.6               |
| <b>Municipality</b>                       |                |                    |
| Greater Florianópolis                     | 33             | 58.9               |
| South                                     | 3              | 5.4                |
| Mountain region                           | 1              | 1.8                |
| North                                     | 1              | 1.8                |
| Not specified                             | 18             | 32.1               |
| <b>Level of amputation</b>                |                |                    |
| Transfemoral                              | 26             | 46.4               |
| Transtibial                               | 17             | 30.4               |
| Knee disarticulation                      | 3              | 5.3                |
| Transhumeral                              | 3              | 5.3                |
| Hip disarticulation                       | 1              | 1.8                |
| Forefoot                                  | 1              | 1.8                |
| Second finger + distal phalanx of thumb   | 1              | 1.8                |
| Transfemoral and shoulder disarticulation | 1              | 1.8                |
| Transfemoral and transtibial              | 1              | 1.8                |
| Transradial                               | 1              | 1.8                |
| Not specified                             | 1              | 1.8                |
| <b>Etiology</b>                           |                |                    |
| Vascular                                  | 28             | 50                 |
| Trauma                                    | 21             | 37.5               |
| Osteomyelitis                             | 4              | 7.1                |
| Oncological                               | 1              | 1.8                |
| Others                                    | 2              | 3.6                |
| <b>Year</b>                               |                |                    |
| 2014                                      | 13             | 23.2               |
| 2015                                      | 29             | 51.8               |
| 2016                                      | 14             | 25.0               |
| <b>Site</b>                               |                |                    |
| Public Hospital of Greater Florianópolis  | 39             | 69.6               |
| Institute of Cardiology                   | 17             | 30.4               |
| <b>Total</b>                              | 56             | 100                |

Source: Author's own elaboration.

## DISCUSSION

Regarding the entry in the Extension Project (**Figure 3**), we highlight that, of the 56 notifications received, 19 individuals performed rehabilitation in the project, achieving 33.9% of our sample. We consider that this percentage could be higher, and we point out a few barriers that may have contributed for the non-compliance of the patients: difficulties of

accessibility found by this population, such as accessible urban or local transport, as well as physical-functional dependency of a family member or friend to come to the activities. The barrier related to transport was even more intense for the patients living in municipalities furthest away from the capital, where our project is based. Other factors may also be related to the non-entry, such as lack of interest in participating in the activities by the notified amputee patient; post-amputation depression, and thus, lack of initiative to come to the project; difficulty when contacting these patients, especially by phone. Limb amputation, a permanent surgical procedure, imposes important functional, psychological, and social sequelae that can significantly reduce the quality of life<sup>8,9</sup>.

In the last decades, specific actions directed to disabled people have been taking worldwide proportion due to the increasing demand of patients with disabilities, the high cost of assistance, and the absence of the evaluation of results of such services. All these points end up justifying the search for solutions that optimize existing services and increase the quality of the assistance provided to this population. The incapacitating process may lead to a temporary or permanent disability for work, causing losses to the economically active population and direct losses in the economy of a country<sup>10</sup>.

The Tool of Hospital Notification made by the members of the UDESC Multidisciplinary Rehabilitation in Amputees Project is groundbreaking because, from that, the amputee patient can start their rehabilitation earlier. We are aware that the municipalities of Greater Florianópolis do not have a system of attention to the amputee person. A long-time stay of a patient in the hospital environment predisposes the emergence of several comorbidities, such as decreases of strength, physical resistance, and quality of life<sup>11</sup>.

The Brazilian Guidelines of Attention to Amputated People are a theoretical framework that consists of a national document published by the Ministry of Health under the Ordinance No. 1.329 3/12/2012 that make guidance to the multidisciplinary teams in the three levels of attention and conduct them from the preoperative stage (whenever possible) to the postoperative stage and the complete rehabilitation with a prosthesis by SUS. It highlights the concern with potential adaption and autonomy of this population<sup>6</sup>.

In Brazil, it is estimated that of all amputation procedures, those of lower limb prevail in about 85% of cases, being the most frequent indications arising from chronic degenerative complications, with older adults being the most affected population<sup>12</sup>. Regarding amputations due to vascular diseases, diabetes mellitus is the main cause, mainly at the transfemoral and transtibial level<sup>13</sup>. Studies show that 80% of lower limb amputations are conducted in individuals with a peripheral vascular disease and/or diabetes<sup>14</sup>, followed

by traumatic causes. Corroborating with the findings of this study, most individuals were amputated due to vascular etiology.

The preparation of the tool of data collection is described here as amputee patient's notification file, and the development of the methodology of completion of this document within the practical routine scenario of the hospital's multiprofessional team was groundbreaking and challenging for our university extension project called *Multidisciplinary Rehabilitation in Amputees* of UDESC. The reasons for its preparation and applicability have been founded in meeting with the National Guidelines, but especially understanding the difficult access to the patient's rehabilitation, a fact that is concluded in the numerous reports of our patients who have joined the project late due to biopsychosocial sequelae. This tool can be considered breakthrough because the results presented showed us that the hospital multidisciplinary staff can adhere to this practice to notify the newly amputated patient and provide them a humanized attention called Conversations at the bedside. This conversation offers the chance of answering questions and provide safe guidance in several issues, such as stump care, postural care, phantom pain and sensation, performing stump bandage, exercises for mobility, and instructions to obtain a prosthesis via SUS<sup>2</sup>.

Such attention during the patient's hospitalization performed by a trained and qualified staff can significantly change the reality of this individual, now considered a disabled person by the society, but with high chances of overcoming and functionality when referred early to rehabilitation. This tool also made possible for the hospital health staff to establish a follow-up epidemiology of the patient after discharge with counter-reference by the health services. We highlight the possibility of hospitals to establish a database with the origin of these patients, which can implement secondary actions of prevention in municipalities with the highest prevalence rates before etiology, level of amputation, and age of the subjects notified.

Supporting the findings of this study, Agne et al.<sup>15</sup> aimed to identify the causes of limb amputations at the Santa Maria University Hospital (HUSM), in the state of Rio Grande do Sul, as well as evaluate the data referring to gender, age, and average of hospitalization days. The data of this study were obtained by a review of the medical records of inpatients of HUSM from January 2002 to August 2003, and had a sample of 154 amputees, of whom 67.4% had an amputation performed for vascular causes and 17.5% for traumatic causes, with the greatest incidence by gender occurring to men, with 74.6% of the cases<sup>15</sup>.

In contrast, a study performed by Bortolletto et al.<sup>16</sup>, aiming to analyze the profile of patients having Diabetes Mellitus in 2006 in a university hospital in Londrina, in the state

of Paraná, also had a higher incidence of amputation in men, totaling 52% of the population, and differently from the study previously mentioned, this population predominantly had Diabetes Mellitus<sup>16</sup>.

According to Lima, Chamlian, and Masiero<sup>17</sup>, the final process of rehabilitation for the patients with indication of prosthetic rehabilitation requires the acquisition of a prosthesis, which can cause anxiety, as many individuals put on a prosthesis on the hope of regaining functional independence. Franchini and Savoia<sup>18</sup> also highlight the anxiety regarding prosthesis placement and the importance given by the patients to it, associating the strong desire to walk again to getting out a little of the reality of amputation and gaining independence. In our project, we found reports of patients with periods longer than five years of amputation who manage to start their process of rehabilitation without the prospect of having a prosthesis. On the other hand, in some assessments with patients already prosthetized, we found reports of poor adaptation to the prosthesis, and lack of gait training with prosthesis, with the outcome of non-use. All these reports have encouraged us to prepare the notification of newly-amputated patients in high complexity to enable early arrival to the project<sup>18</sup>.

However, all the access barriers to rehabilitation reported by the patients, and with which this tool was built, are essential for further discussions. The origins of such barriers are related to the characteristics of health services, geographical distribution, human resources availability and training, accessibility, technologies available, and guidance on the current technical assistance model in force<sup>19,20</sup>.

The Guidelines of Attention to Amputated People<sup>6</sup>, serving as an example of other countries that have their own Guidelines, can be considered a national milestone to guide health staff. But without a structured Health Attention Network that understands that the treatment after an amputation, it takes a long time until the complete readaptation and social reinsertion of the individual, and this scenario of chaotic therapeutic itineraries reproduced by the patients seeking for health services that can rehabilitate them will be difficult to change<sup>6</sup>. Involvement of the Family Health Teams (*Equipes de Saúde da Família* – ESF), extension of the Centers for Family Health Support (*Núcleos de Apoio à Saúde da Família* – NASF), as well as investments in training for the professionals involved in several levels of attention are needed. Appropriateness of Specialized Centers of Rehabilitation with special qualification of the staff and modernization of prosthetic workshops, besides a review of the table of prosthetic components offered by SUS, particularly consider the age and etiology of the patient and level of functionality to return them to work activities.

To ensure this integral care and prepare a singular therapeutic project, ESF is added to Home Care and NASF to expand problem resolution<sup>21-23</sup>. Primary attention should be the main gateway and the center of communication among the several points of the entire RAS via a horizontal relation, continued and integrated with the main function of coordinate and promote continuous care. That implies to prepare, follow up, and organize the flow of users among the points of care<sup>22</sup>. An interdisciplinary approach and the direct engagement of professionals, caregivers, and the family are important in this process. The strategies of actions for rehabilitation must be established from the needs of each individual, according to the deficiency effect over their functionality. In this regard, the exchange of experiences and knowledge among the various areas is key, as well as qualification of clinical practices and election of priority conducts to be addressed in each stage of the rehabilitation process<sup>23</sup>.

By knowing the complexity and challenges of SUS in articulating and training healthcare professionals of different levels of attention who can structure an effective RAS to the amputee patient, we point out that this tool of Hospital Notification could be used as a groundbreaking and initial document for articulation of this RAS. As a university extension project, our major goal is developing Education, Research, and Extension linked to undergraduate and graduate students. The State Government is responsible for articulating intersectoral actions to promote access to health, train its professionals, invest in the infrastructure of the several points of attention, computerize its systems, and give the multiprofessional staff conditions to facilitate full and continued care to amputee people.

### **FINAL CONSIDERATIONS**

The tool of amputee patient's notification file presented methodological adhesion by the multiprofessional staff of the institutions studied in their routines and scenarios of practice, showing to be innovative for having facilitated care to the newly-amputated patient and referral to an early start of rehabilitation, complying with the Guidelines of Attention to Amputated People. This tool can be used as a hospital database to assist strategies of promotion of health and prevention of amputations, as well as be used to structure the initial communication of RAS.

A limitation of this study is that the filling out of the hospital notification form occurred in person. As a suggestion for future research, the possibility to do it virtually with the help of online forms would facilitate and simplify communication.

## **PARTICIPATION**

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2. Writing of the article and critical review of its intellectual content: Tayla Siqueira Ruy and Tuane Sarmento.
3. Review and/or approval of the final version to be published: Rafael Isac Vieira and Tuane Sarmento.
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