ORIGINAL ARTICLE

UNDERSTANDING OF PEOPLE WITH SPINAL CORD INJURY ABOUT THE PERFORMANCE OF TRANSFERS FOR THEIR DAILY ACTIVITIES

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Highlights: (1) The study revealed the importance of good performance in transfers for the participants. (2) Many people with spinal cord injury do not have access to rehabilitation programs. (3). The Adaptation Model promotes autonomy and well-being of wheelchair users in the community.

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ABSTRACT

Objective: to understand, based on the Adaptation Model, how people with spinal cord injury perceive and perform safe transfers in their daily activities. **Methodology:** qualitative study, based on the Adaptation Model. A total of 17 paraplegics with post-traumatic spinal cord injury were interviewed. The participants' information was analyzed in light of content analysis. **Results:** of the 17 participants, 15 men and 2 women, only 11 declared themselves as rehabilitated; in fact, eight stated that they had not received training to perform transfers. The analysis of the raw data was decoded into recording units, which gave rise to two thematic categories: "Essential adaptive skills that distinguish them as dependent or independent for the performance of daily activities" and "Activities that promote autonomy and restore self-confidence, either from the received training or through peer sharing." **Final Considerations:** the participants stated that performing transfers safely and independently is crucial for them to carry out their daily activities with autonomy, functional independence, leave the house, and achieve full social inclusion. They also reported that they share experiences with peers and use resources of new learning available on social networks. In this way, nurses specialized in rehabilitation, based on the Adaptation Model, can invest in guidance, training, and periodic assessment of transfers, to minimize the daily difficulties of people with spinal cord injury, since they work in the direct care of these people in the various spheres of health care, aiming at the promotion of their self-esteem, adaptation, and independent life.

Keywords: Assistive Technology; Daily Activities; Spinal Cord Injury; International Classification of Functioning, Disability and Health; Rehabilitation Nursing.

UNDERSTANDING OF PEOPLE WITH SPINAL CORD INJURY ABOUT THE PERFORMANCE OF TRANSFERS FOR THEIR DAILY ACTIVITIES

INTRODUCTION

The global incidence of spinal cord injury (SCI) is 40 to 80 cases per million inhabitants[1]. In Brazil, it amounts to 71 cases per million inhabitants each year, with the most common causes being traffic accidents, falls, violence, and sports-related injuries[1]. It is a worldwide public health problem that requires the provision of resources to meet care needs in communities, given the disabilities and complications manifested by the people affected by it[2,3]. Complications resulting from SCI are related to the loss of mobility, tactile and thermal sensitivity below the lesion, neurogenic bowel and bladder, recurrent urinary infection, disorders in sexual activity and reproductive health, incidence of pressure sores, osteoarticular injuries in the shoulders, hips, knees, ankles, and feet, among others[1-4]. When not rehabilitated, these people become more vulnerable to the risks of early death due to the aforementioned complications[3-5].

In this sense, people with SCI require guidance and periodic assessments on adaptation measures for the safe execution of transfers from one surface to another, aiming at the best performance of their daily activities, based on the instrumental parameters of Assistive Technology (AT) [4-7]. AT is a broad term for assistive products and their related systems and services[5]. In the case of this study, assistive products are applied in the processes of health education and rehabilitation of the person with SCI, his/her family members, and caregivers, through guidance, training, and short-, medium-, and long-term assessments. These are interprofessional interventions that contribute to the optimization and balance of an individual's body functions, in terms of cognition, communication, mobility, self-care, and better adaptation to the available physical, environmental, and social conditions, thereby promoting his/her health, well-being, inclusion, and participation.

National and international literature highlights that many people with SCI still lack access to care in specialized rehabilitation centers and services in several developed or developing countries; therefore, they are not rehabilitated or do not receive guidance and training on how to properly perform their transfers[3,4,6,8]. The cited reasons vary from issues related to the concentration of specialized rehabilitation services in large urban centers, difficulties in accessing rural areas, or geographically distant regions in countries with vast territorial extension[2-4,8].

Studies emphasize that the number of daily transfers performed by wheelchair users ranges between 8 and 20 procedures[4,8-10], depending on their routines and activities or potential impairments that prevent them from performing transfers more frequently. Since transfers are among the activities that require the most physical effort from these individuals, preventive strategies against the risks of falls and musculoskeletal injuries should be fully employed by rehabilitation teams, under the leadership of nurses, when they guide, train, and assess people with SCI for their safe performance, both inside and outside their homes[7,9].

Moreover, when using the Adaptation Model (AM)[11] in their caring interventions to promote the best functional autonomy of people with SCI in performing transfers, nurses contribute greatly to the identification of the most appropriate adaptation strategy for each of them over time, considering that it is a disabling and irreversible neurological injury[1,3-4].

This study is of significant relevance to the area of health and rehabilitation, given the restrictions and difficulties people with SCI face in accessing rehabilitation programs, their periodic need for physical and functional assessments, the inadequate accessibility conditions in their homes, the lack of regular health care, and full social inclusion. It is expected to contribute to the deepening of new studies on the topic, as well as to the improvement of the care provided by rehabilitation teams to these people. Accordingly, this study was conducted based on the following research question: What is the understanding of people with spinal cord injury about the performance of transfers in daily living?

Therefore, the objective of this study was to understand, based on the Adaptation Model, how people with spinal cord injury perceive and perform safe transfers in their daily activities.

METHODOLOGY

This is a qualitative study, guided and structured in accordance with the *Consolidated Criteria for Reporting Qualitative Research* (COREQ), based on Calista Roy's AM[11].

It is important to highlight the participation of nurses as full members of physical rehabilitation teams in the procedures of guidance, training, and assessment of transfers, considering that these professionals follow and care for people with SCI in hospital settings,

specialized centers, and services in the area. This care that is extended and implemented in home visits, within the scope of Primary Health Care (PHC)[4,7,8,12].

In the course of the health/illness transition experienced by people with SCI, in addition to needs related to bodily processes, there are several needs inherent to the adaptive process of adjusting to a new condition. In this context, it becomes essential to systematize the clinical decision-making process carried out by nurses, and specifically by rehabilitation nurses, based on Roy's Adaptation Model[13].

Thus, by employing the AM with a focus on the Physiological Mode, Functional Role Mode, Self-Concept Mode, and Interdependence Mode, nurses can provide effective strategies to meet the adaptive needs of individuals with SCI through guidance and training based on the Transfer Assessment Instrument (TAI), Version 3.0[7,9,13]. Therefore, Roy's AM aligns with the understanding that conditions facilitating access to assistive technologies, provided by qualified and experienced professionals in the area of rehabilitation, contribute to the program achieving its goals in terms of functional gains for individuals undergoing rehabilitation[5].

The study was conducted with people with post-traumatic SCI living in Rio das Ostras, Cabo Frio, Armação de Búzios, and Macaé, cities located in the Lakes and North regions of the State of Rio de Janeiro, Brazil, cared for in the care points of the Care Network for People with Disabilities[14]. Due to the social isolation resulting from the COVID-19 pandemic and the lack of access to official records on the services available in health units, participants volunteered to contact their peers, demonstrating an interest in sharing information with those interested in collaborating on the topics discussed in the study. Participants were accessed through social networks and information and communication technology resources; subsequently, they were contacted by their mobile or landline phones in their homes.

A total of 17 paraplegics with SCI participated in the study. In order to reach the number of participants, non-probabilistic *snowball* sampling was used[15].

The inclusion criteria were as follows: participants had to have a traumatic spinal cord injury for at least one year, be at least 18 years old, live in cities in the Lagos and North regions of the State of Rio de Janeiro, Brazil, have access to a mobile or landline phone, and be users of health and social support services available in the community. The exclusion criterion was the presence of an intellectual disability.

Data collection took place in the months of September, October, and November 2020. The research participants were contacted in advance to schedule interviews at times of their choosing. The interviews were based on a semi-structured script composed of two parts. In Part I, in order to identify the sociodemographic profile (age, sex, schooling, marital status, profession, and family monthly income) and the clinical profile of the participants (etiology, injury duration, injury level, number of daily transfers, institution where they were rehabilitated, training on transfers, link to rehabilitation programs, and registration with Primary Health Care). In Part II, there were three open-ended questions: (1) What is the importance of transfers for the performance of your daily activities? (2) How do you perform them in your daily living? and (3) Where and how did you learn to do transfers?

The instrument was subjected to a pilot test and approved by six of the interviewed participants. The mean duration of the interviews was 40 minutes, conducted via phone contact, audio-recorded in a digital system, and carried out in a single stage by the main researcher. Participants were recruited until theoretical saturation was reached as expressed in their statements, given that no relevant information was identified[16].

The data from the interviews were fully transcribed by typing in Microsoft Word 2016 and, subsequently, returned to the respective study participants via personal email for approval of the transcribed content. No participant requested any changes to the material. The qualitative analysis of the data was carried out with the support of NVivo Pro 12 software[17]. For this process, two of the researchers analyzed the transcriptions according to the following steps of the process: pre-analysis, exploration of the material and processing of the results, inference, and interpretation[18].

Exhaustive readings were carried out, and the raw text was decoded into recording units for the organization of the analysis. In order to preserve the anonymity of the participants, the use of the abbreviation PARA was chosen, followed by the cardinal numerical order of the interviews.

The study fulfilled the ethical aspects of research with human beings, recommended by the Brazilian National Health Council, in accordance with Resolution No. 466/2012, and was approved by the Research Ethics Committee of the Federal University of the State of Rio de Janeiro, under CAAE: 35995120.9.0000.5285, No. 4,263,342/2020.

RESULTS

The sociodemographic characterization of the sample revealed that the age range of the 17 participants varied between 20 and 63 years, with a mean age of 34 years (SD = 11.7), 15 (89%) were male and two (12%) were female, seven (41%) had a schooling level between 8 and 11 years, 10 (59%) were single, eight (47%) were beneficiaries of social security, and nine (53%) had a monthly family income between R$ 1,001.00 and R$ 2,500.00 (Table 1).

Table 1 – Sociodemographic characteristics of the sample, Lagos and North regions of the State of Rio de Janeiro, RJ, 2020.

Numeric/categorical variables (n = 17)	n	%	Minimum	Mean	Maximum
Age			20	34 (11.69)	63
Sex					
Male	15	88			
Female	2	12			
Race/color					
White	3	18			
Brown	10	59			
Black	4	24			
Schooling					
4-7 years	6	35			
8-11 years	7	41			
> 12 years	4	24			
Marital status					
Single	10	59			
Married	6	35			
Divorced	1	6			
Profession					
Retired	5	29			
Beneficiary	8	47			
Housewife	1	6			
Self-employed	1	6			
Salesperson	1	6			
Unemployed	1	6			
Monthly family income					
Up to R$ 1,000.00	2	12			
R$ 1,001.00 to R$ 2,500.00	9	53			
R$ 2,501.00 to R$ 3,000.00	2	12			
R$ 3,501.00 to R$ 4,000.00	1	6			
> R$ 4,000.00	3	18			

Source: authors.

Regarding the etiology of the injury, 10 (59%) participants suffered traffic accidents, six (35%) were victims of firearms, and one (6%) was injured after a fall. Regarding the injury duration, five (29%) participants had the same proportion of 1 to 5 years and 10 to 15 years, four (24%) from 6 to 10 years, five (29%) from 11 to 15 years, and three (18%) with more than 16 years of injury. Concerning the level of spinal cord injury, two (12%) at the thoracic (T) vertebrae T1 to T4, six (35%) from T5 to T9, eight (47%) from T10 to T12, and one (6%) did not report. As for transfers, eight (47%) reported that they perform fewer than ten transfers per day, four (24%) from 10 to 15, and five (29%) from 16 to 20 (Table 2).

Among the participants, 11 (65%) reported that they were rehabilitated by Specialized Rehabilitation Centers or Services, five (29%) did not have access, and one (6%) did not report. Additionally, nine (53%) reported having received training on how to perform transfers, while eight (47%) did not, four (24%) participants maintain a link to the rehabilitating institution, 13 (76%) do not, 12 (71%) are registered with the PHC, and five (29%) are not (Table 2).

Table 2 – Clinical characteristics of the sample, Lagos and North regions of the State of Rio de Janeiro, RJ, 2020.

Categorical variables	n	%
Etiology of injury		
Traffic accident	10	59
Gunshot wounds	6	35
Falls and dives	1	6
Injury duration (years)		
1 – 5	5	29
6 – 10	4	24
11 – 15	5	29
> 16	3	18
Injury level		
T1 - T4	2	12
T5 - T9	6	35
T10 -T12	8	47
NA	1	6
Number of daily transfers		
<10	8	47
10-15	4	24
16-20	5	29
Institution where rehabilitation took place		
No rehabilitation	5	29
Specialized centers/services	11	65
No information	1	6
Training/guidance on transfer techniques		
Yes	9	53
No	8	47
Link to a rehabilitation program		
Yes	4	24
No	13	76
Registration with the FHS model or PHC units		
Yes	12	71
No	5	29

Source: authors.

After being organized, the data extracted from the interviews were processed based on the content analysis proposed by Bardin, which gave rise to two thematic categories: “Essential adaptive skills that distinguish them as dependent or independent for the performance of daily activities” and “Activities that promote autonomy and restore self-confidence, either from the received training or through peer sharing.”

Essential adaptive skills that distinguish them as dependent or independent for the performance of daily activities

In the statements, the participants praise the importance of the performance of transfers for the accomplishment of their daily activities, associating it with a paramount condition for living in the best way.

> For me, transfer is everything; it is fundamental in our lives and extremely important (PARA-01).
>
> This is what moves us (PARA-02). It is essential (PARA-04). It is essential; if we did not have transfer, I would not even leave the house. We need transfer to get around (PARA-07).
>
> It is crucial and is very important (PARA-11).

Some have made considerations about how the skill to perform transfers directly influences the perception of one's own dependence and functional independence, granting him/her the ability to autonomously perform daily needs, which is decisive for the improvement of his/her life.

> If I do not transfer, I depend on someone (PARA-01).
>
> I can do everything anywhere (PARA-03).
>
> Without transfers, we become very limited and dependent (PARA-04).
>
> I know that we are dependent. I myself try as much as possible to be independent (PARA-13).

The interviewees emphasize a direct relationship between "being prepared to perform transfers" and "the sense of freedom they provide", which is what they desire to achieve.

> Transfer gives you the freedom of not having to rely on others to pick you up, put you in the bath, put you in bed, or place you on the sofa (PARA-07).
>
> It has total importance, since I can do many things, right? This is without depending on anyone (PARA-08).
>
> You need help with everything, but you try to be a little independent from the help of others (PARA-12).

> I feel satisfied to be able to do this, that is, not to be so dependent on a person to keep helping me; I can go out to the street and to my friends' houses (PARA-16).

Furthermore, the participants emphasized that this is about constant learning, a differentiator for their lives as they gain autonomy in performing transfers in the various opportunities for inclusion, home accessibility, and in facing the various barriers imposed on them.

> It needs to be improved, because there are many places you want to go, but there is no way: for example, my old school, there was no ramp there. On the second floor, there was the laboratory and cinema room; so, someone had to help me because there was a staircase (PARA-06).
>
> I am going to perform transfers and, sometimes, I do not carry out them correctly; then, each day you keep doing them, you keep learning. I need to learn every day and be the best (PARA-12).
>
> Transfer is practically what will help you with everything (PARA-15).

Activities that promote autonomy and restore self-confidence, either from the received training or through peer sharing

The use of specific techniques and support materials or equipment (bars, boards, planks, and similar) to facilitate the movements of projecting the body from one surface to another contributes to the identification of each person's strengths and weaknesses.

> Normally, the technique is taught to avoid getting hurt, but everyone will see their own way. You get the hang of it, see what works best, and there are also the transfer techniques. This only really comes with practice (PARA-04).
>
> I did training to perform this transfer using a transfer board because, in the beginning, when I was alone, I could not do it. It required a lot of effort from me. After I got used to it, it was of great value to me, even having this injury in my left arm (PARA-09).
>
> Lately, I can perform the transfer without using the bar, but whenever I need to use it, it is something that helps me a lot (PARA-10).

There are those who resort to the resources available on the Internet to guide themselves on alternative ways to perform transfers.

> I keep watching *YouTube* videos of other people with spinal cord injuries. So, these people who post videos on *YouTube* help a lot in that transition; anything that can help, anything that can help is essential, any help is welcome (PARA-10).

The skills for autonomous performance of transfers are essential for them to achieve independence in daily activities such as dressing, putting on shoes, bathing, making their own food, and going wherever they want.

It improves our self-esteem; it is very important, as it allows you to come and go, use the bathroom, and get ready to dress. I used to live alone and did everything independently. I would wake up and go to sleep in my apartment, alone, doing all everything inside my home, including, moving around, preparing my meals, bathing, dressing, and changing clothes. I would also get into my car, lock it, and leave. This is fundamental (PARA-05).

The fact of becoming increasingly independent from the help of others to meet their basic self-care needs, as a result of their efforts and functional achievements in adapting to their new circumstances, helps individuals with SCI overcome feelings of shame and fosters resilience, joy in living, the recovery of self-esteem, and the development of self-confidence.

> In the beginning, I was embarrassed to go out on the street to see my friends, but now I go out anywhere (PARA-12).
>
> I try to perform wheelchair transfers without worry or embarrassment, whether at a friend's house, when withdrawing money, or while going to the movies. You never know when you will be on the street and encounter an obstacle (PARA-13).
>
> The transfer is pretty good, as it boosts our self-esteem (PARA-17).

Some participants also highlighted the effective professional interventions of teams working in Primary Health Care (Family Health Strategies). However, these teams often lacked mastery of specific knowledge regarding the functional potentials of patients, based on the training they had received, which limited their ability to identify each patient's possible adaptive needs.

> As soon as I left the hospital to go home, some people from the health center "came" to teach me, although they taught me differently. When I arrived at the Specialized Rehabilitation Center "X," that was where I learned the correct way, and then it became easier. Once you learn the correct transfer, the transfer is everything (PARA-15).

DISCUSSION

Most participants were male, had a schooling level equivalent to elementary school, were single, beneficiaries of social security, and reported a monthly income insufficient to cover expenses related to SCI. These expenses—including food, materials, equipment, and medications required for health or rehabilitation care—pose significant challenges for the participants. They underlined the importance of learning how to perform transfers safely, considering them essential for carrying out daily activities, in addition to granting them autonomy with a sense of freedom, by reducing the need for help from others on various occasions and in different environments.

The narratives of the participants who were rehabilitated corroborate those of men and women wheelchair users between 18 and 65 years of age from another study, demonstrating what rehabilitation professionals generally offer in wheelchair skills training in rehabilitation clinics, charitable institutions, social support networks, or even through online courses[9]. Similarly, a study with 72 full-time wheelchair users confirmed that these individuals benefit from transfer training conducted online[19], as it allows them to self-assess the quality of transfers in their home environments. It has the potential to reduce the risk of injuries by avoiding the challenge of in-person training barriers. It indicates how much the functional role and self-concept modes affect the social aspects related to the roles a person occupies in society and the sense and body self-image of people with SCI, even if they are delivered remotely.

In addition, similar narratives were also identified with 40 wheelchair users, aged between 18 and 50, of both sexes, where the importance of transfers in the lives of people with spinal cord injury was evidenced, suggesting that virtual reality training allows users to practice difficult tasks in a safe environment[20]. Moreover, it highlighted an additional benefit attributed to the greater feedback provided to optimize learning[20]. Another important aspect of training in a virtual environment lies in the fact that it can be easily adapted to people's reality due to its variability of technical and practical options for the performance of transfers[8,12,21], all highlighting the relevance of Physiological Mode, Functional Role Mode, Self-Concept Mode, and Interdependence Mode, as they encompass the sense of well-being, safety, respect, and the frequent attempts to meet their needs, despite the challenges faced in daily living[22].

Furthermore, a study on remote training of transfers through boards or planks, with paraplegics with SCI of both sexes, aged between 18 and 85 years, using the Transfer Assessment Instrument, concludes that, although recommended for the beginning of training, the use of these resources may lead to a higher risk of developing upper limb injuries, but potentially reduce the risk of falling compared to other techniques[4], corroborating the testimonies of the participants in this study. Regardless of how well-trained wheelchair users become, it is advisable to consider that their musculoskeletal system was not designed to withstand excessive repetitive effort[21,23-24].

Regarding the mean household income and schooling level reported by the paraplegics in this study, similar findings were identified in the study conducted in a specialized rehabilitation clinic, with 113 people with SCI, which showed that the highest incidence occurs in the young, working-age population, mostly from low-income families and with limited educational level, representing a high economic and social cost. Based on the present study and several others, preventive measures should be tracked to reduce the incidence of this type of disability, in addition to adapting the language of guidance instruments for continued care[3,24-25].

Otherwise, similar findings were also observed in 70 people with SCI, male, users of a specialized rehabilitation service, whose etiologies were related to injuries from falls, traffic accidents, urban violence, and social conflicts[26]. The most frequent complications were nephrological, urological, and intestinal dysfunctions, as well as pressure injuries. Regarding limitations in performing coordinated movements for self-care alone, it was found that most participants were potentially dependent in activities of daily living, moved independently in wheelchair navigation, but independence in transfers was greater among the younger participants[26].

The narratives of the participants in this study align with descriptive research, which followed methodological procedures adapted from terminological studies, whose results demonstrate the relevance of using the AM as a theoretical framework for nurses to mitigate the various difficulties faced by people with SCI in performing activities of daily living[13]. Based on the Physiological Mode, Functional Role Mode, Self-Concept Mode, and Interdependence Mode, nurses can contribute to improving interdisciplinary interventions with these individuals, their families, and home caregivers, as they are professionals who are

effectively present and caring for them in all areas of health care, in the short, medium, and long term after injury[13].

Their reports are emphatic regarding the unanimous understanding of the importance of acquiring the skill to perform the procedure in daily practice, thereby indicating opportunities for professionals working in physical rehabilitation services and programs to intervene with activities favorable to gradual learning, based on the adoption of guidance strategies with training for safe performance. To this end, the use of measurement and assessment instruments with academic recognition, such as transfer assessment metrics, is necessary[7-8].

Above all, their statements highlight the importance of proper preparation for autonomous performance of transfers in daily living, when they assert that the procedure is essential, crucial, and helps in everything so that they do not depend on the help of others. These arguments that demonstrate how pressing it becomes to implement systematic interventions in Rehabilitation Nursing based on the AM, considering the current gap regarding the preparation of these people in health and rehabilitation services to meet their basic needs.

From this perspective, it is essential that nurses who are part of rehabilitation teams exercise leadership in health education, paying attention to the identification of the vulnerabilities and potentials of paraplegic patients in the procedures for the performance of transfers, thereby intervening with guidance and training in accordance with the adaptation model, applied within the scope of nursing practice in rehabilitation[11,27]. They should be guided by the Physiological Mode, Functional Role Mode, Self-Concept Mode, and Interdependence Mode, which focus on interactions related to giving and receiving affection, respect, and value, and encompass their professional relationships with people with spinal cord injury[13,27-28].

Guidance on the performance of transfers should be provided to people with SCI by physical rehabilitation teams, under the leadership of nurses, as an early approach and presented from the first interventions and guidance in preparation for discharge in the hospital emergency and urgent care network[12,19,29]. In this stage, the team professionals need to consider that these individuals face several conflicting reactions of a mental, emotional, and existential nature that hinder and delay the acceptance of their new condition. It is an

opportune moment to involve their family members and potential home caregivers in the guidance processes on ways to interact to provide care and offer support in adverse situations[20,30-31].

Due to the increasing rate of traffic accidents, urban and domestic violence, guerrillas, and armed conflicts, which greatly raise the number of victims with disabling injuries, the demand for specialized rehabilitation services is becoming ever greater[9-10,14,19]. Nevertheless, the provision of these services remains concentrated in large urban centers as a result of the prioritization of actions in public policies focused on other areas, both in developed and in developing and underdeveloped countries, which is why rehabilitation teams make use of remote and wide-reaching systems[14].

Therefore, the testimonies expressed by the participants of this study regarding the use of resources available on the internet, aiming at achieving better performance in transfers, are similar to those experienced by other people with MS, who are full-time wheelchair users, when evaluating the Transfer Assessment Questionnaire (TAI-Q), who consider that the online tool is easily accessible for carrying out consultations from various locations[8]. Thus, the authors assert that self-assessment performed with the video demonstrates acceptable levels of reliability and validity for the total score, allowing it to help identify difficulties and ease in performing safe transfers[8].

Given the current scenario pointed out by this study, it can be inferred that people with SCI in Brazil, in the near future, will have access to rehabilitation services and programs with interdisciplinary teams also composed of nurses specialized in the area, a professional who will provide relevant contributions to achieving the goal of ensuring comprehensive care for these people. Incidentally, COFEN Resolution No. 728/2023[32] establishes parameters, lists, and defines the activities to be performed by professionals of the Rehabilitation Nursing Team, coming to formalize what has been instituted by the Brazilian Ministry of Health in the guidelines of the Care Network for People with Disabilities, in effect since 2012[14].

The Resolution in question defines as exclusive activities of the rehabilitation nurse to organize, direct, plan, assess, prescribe, provide complex care, provide consulting, act in all steps of the rehabilitation process, in addition to issuing opinions on Rehabilitation Nursing Services. Professional activities are very welcome, given the need to eliminate the current gap between the demand and supply of access to rehabilitation programs, as pointed out in this

study, aiming at promoting health, quality of life, autonomy, functional independence, a sense of freedom, and social inclusion for people with SCI by applying the AM in their care interventions for these people and, consequently, enabling them for the safe performance of transfers[13], especially providing academic training compatible with the provision of specific care for these people, their families, and caregivers, consolidating Rehabilitation Nursing in Brazil, as in other countries[21,29,33].

Study limitations

The limitations of the study included contact with interviewees conducted by phone and the inability to objectively assess their actual needs regarding the performance of transfers. In addition, the results were built based on the understanding of paraplegics from a single region and the fact that these individuals were influenced by the characteristics of the participants during the Covid-19 lockdown period. Therefore, it is recommended to conduct studies in different settings and times involving other conditions of the physical rehabilitation process in Brazil.

FINAL CONSIDERATIONS

In the understanding of the participants in this study, the emphasis they place on learning the techniques that ensure safe performance of transfers in daily living was evident. However, for individuals to achieve autonomy, the effective contribution of nurses in rehabilitation teams, using Roy's Adaptation Model in their interventions, is essential for the care of individuals with SCI in the short, medium, and long term, as this process is continuous and adaptive.

The fact that some interviewees reported not being rehabilitated in specialized services or rehabilitation centers, along with reports from others that they did not receive guidance on how to perform transfers despite being formally rehabilitated, demonstrates a gap in interprofessional practices in the area. Similarly, this finding justifies their frequent searches on social networks, interactions with peers in the community, and the use of other digital resources related to this procedure. Consequently, these findings highlight opportunities for rehabilitation nurses to act as agents of transformation in the lives of individuals with SCI by

implementing the AM as a therapeutic care strategy aimed at minimizing difficulties and enhancing functional abilities for the performance of transfers.

In their statements, the interviewees highlighted the importance they attribute to transfers, particularly regarding the opportunities they provide to leave home and go wherever, whenever, and however they choose, as well as enabling them to dress, put on shoes, use the bathroom, and perform other activities of daily living. Beyond that, they recover well-being, cheerfulness, independence, and a new sense of autonomy and freedom in their lives.

Due to the lack of articulation among services across different levels of health care and rehabilitation, individuals with traumatic SCI return home without adequate preparation for self-care. They often rely on visits from Primary Health Care professionals for information and guidance regarding their functional limitations and specific care needs, services that are frequently provided by nurses. This finding reinforces the relevance of nursing interventions based on the AM as care strategies within the scope of rehabilitation for people with SCI, particularly those focused on the performance of transfers for their daily activities.

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UNDERSTANDING OF PEOPLE WITH SPINAL CORD INJURY ABOUT THE PERFORMANCE OF TRANSFERS FOR THEIR DAILY ACTIVITIES

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