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CASE REPORT

Rehabilitation Nursing with post-stroke patients and their families to promote well-being - Case Report

Enfermería de rehabilitación con pacientes post-ictus y sus familias para promover el bienestar - Caso clínico

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ABSTRACT

Introduction: in a disease such as stroke, where the number of cases spread around the world is highly significant, it is important to understand how to intervene in order to promote well-being in rehabilitation nursing care.
Objective: to describe the rehabilitation process of a person after a stroke, hospitalized in a Medium Duration and Rehabilitation Unit, as well as to present the rehabilitation nursing care that enhances functionality, capacity for self-care and well-being.
Results: after the implementation of the Rehabilitation Nursing care plan, corresponding to the person's expectations and concomitant with the monitoring of the same, there was an improvement in functional recovery, in the capacity for self-care and an increase in the well-being of the person after a stroke event admitted to a community unit.
Conclusion: a Rehabilitation Nursing care plan focused on the well-being, expectations and preferences of the person after a stroke and their family, brings health gains, enhances functional recovery and the capacity for self-care.

Keywords: Rehabilitation Nursing; Well-Being; Family; Stroke; Case Report.

RESUMEN

Introducción: en una enfermedad como accidente cerebrovascular, donde el número de casos repartidos por todo el mundo es muy significativo, es importante conocer cómo intervenir para promover el bienestar en los cuidados de enfermería de rehabilitación.
Objetivo: describir el proceso de rehabilitación de una persona tras un accidente cerebrovascular, hospitalizada en una Unidad de Media Duración y Rehabilitación, así como presentar los cuidados de enfermería de rehabilitación que potencian la funcionalidad, la capacidad de autocuidado y el bienestar.
Resultados: tras la aplicación del plan de cuidados de Enfermería de Rehabilitación, correspondiente a las expectativas de la persona y concomitante con el seguimiento del mismo, se produjo una mejoría en la recuperación funcional, en la capacidad de autocuidado y un aumento del bienestar de la persona tras un evento cerebrovascular ingresada en una unidad comunitaria.

Conclusiones: un plan de cuidados de Enfermería de Rehabilitación centrado en el bienestar, expectativas y preferencias de la persona tras un accidente cerebrovascular y su familia, aporta ganancias en salud, mejora la recuperación funcional y la capacidad de autocuidado.

Palabras clave: Enfermería de Rehabilitación, Bienestar; Familia; Accidente Cerebrovascular; Caso Clínico.

INTRODUCTION

Stroke is the second leading cause of death throughout Europe and one of the main causes of disability in adults.[1,2] This occurs when blood flow to the brain is interrupted and can be divided into two large groups: ischemic strokes, related to a blockage in a vessel, and hemorrhagic strokes, when blood leaks into the brain tissue due to a rupture.[1] The signs and symptoms of a stroke depend on the area of the brain that has been affected. They usually occur on one side of the body and involve weakness and loss of sensation.[1] Against this backdrop, it is essential to understand the multifactorial nature of the needs of the person after a stroke and their family, based on their expectations, in an effort involving the entire healthcare team, with possible results in increased quality of life.[2,3,4]

When the Rehabilitation Nurse Specialist (RNS) develops gait-related care, they can maximize functionality, which concomitantly improves self-care capacity.[5] The person's motor needs are high on the list of priorities for health professionals, but the parameterization of well-being is often neglected.[6]

Well-being is defined as a multidimensional construct, a positive experience frequently equivalent to quality of life and satisfaction, in the search for a sense of contribution to the world with meaning and purpose. The results are expressed in such domains as happiness, commitment, purpose, vitality, tranquility and energy.[7] The construction of effective Rehabilitation Nursing (RN) care plans aimed at the person and their family that promote functionality, the capacity for self-care and well-being is rewarded.[8]

CASE PRESENTATION

The patient was 65 years old, male, Caucasian, a carpenter in active employment. He had an episode of left lenticulo-capsular and thalamic hemorrhagic stroke, probably of hypertensive etiology. After the stroke, he was conscious and oriented in all three aspects - person, space and time. There were no reported changes in memory or attention, and his mood was euthymic. No drug allergies. Personal history: ex-smoker for around 25 years, hypertension, non-insulin dependent diabetes mellitus and dyslipidemia.

Married, lives in his own home, in a single-storey house. Vital parameters remained within normal range: blood pressure values: systolic (130-110 mmHg) and diastolic (60-90 mmHg); normocardic (60-90 beats per minute); eupneic on room air, with peripheral saturations above 98 %, respiratory rates between 12 and 20 cycles per minute; apyretic and normoglycemic. He had hypostasis of the right hemibody and hemiparesis of the right hemibody. Static balance was preserved, and dynamic balance was impaired; he ambulated in a wheelchair. The person was in a Medium Duration and Rehabilitation Unit (MDRU), 37 days after the stroke event, transferred from hospital care to care in the community and his expectation was to leave the unit walking.

The RN care plan was divided into three phases, lasting 32 days, the first phase: from Day 1 to Day 10, the second phase: from Day 11 to Day 21 and the third phase: from Day 23 to Day 32, with phased assessments using the following scales: Berg, Functional Independence Measure (FIM) and the World Health Organization(WHO)-5 Well-being Index, among others not included in this Case Report (CR) and with the RN diagnoses: impaired dynamic balance and impaired gait. Supported in the Ontology with the parameterization of the following scales:

- The Berg Scale, created in 1992 by Katherine Berg with the aim of assessing balance (both static and dynamic) and predicting the risk of falls in adults and the elderly, with a maximum score of 56.[9]
- The FIM Scale, created in 1986 to parameterize functional capacity, with a maximum score of 126.[9]
- The WHO-5 Well-being Index to assess mental well-being in a self-assessment carried out by the person, with a maximum score of 25.[10]

The motor and functional RN care plan was carried out twice a day, for around 30 minutes, subject to the person's tolerance, based on the FITT-VP training acronym (frequency, intensity, time, type of exercise, volume and progression), plus the promotion of self-management, in accordance with the safety and quality criteria guaranteed.

This plan was divided into three phases: the first phase involved exercises in a lying/sitting position, the second phase involved standing exercises and the third phase involved walking exercises. In all three phases, emphasis was placed on promoting a safe balance, promoting self-care and monitoring well-being.[11,12] Supported by integrative care therapies such as music therapy, humor in care and praise. With the parameterization of the

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afore mentioned scales. Table 1 shows the RNS's interventions, and the exercises carried out with the person/family and which were their preference.

Table 1. Personalized and Person-Specific RN Care Plan

RNS diagnosis: Compromised dynamic balance		
Objective	**RNS intervention**	
Promote adherence: dynamic balance training.	Ability to train balance. Awareness of the relationship between postural control exercises and balance. Self-efficacy for balance training. Meaning attributed to balance training. Providing suitable support devices in the MDRU gym.	
RNS diagnosis: Compromised gait		
Promote walking autonomy.	Awareness of commitment to walking. Awareness of the relationship between the use of a walking aid and walking autonomy. Ability to walk. Self-efficacy for walking. Meaning attributed to the use of a walking aid. Meaning attributed to the use of a wheelchair. Assess family member's knowledge of home adaptation for walking; Teach caregiver about home adaptation. Providing educational material, choosing the most appropriate support devices. Carry out a training session to increase the wife's/family's knowledge of home adaptation, based on safety and quality criteria.	
1st Phase	**2nd Phase**	**3rd Phase**
Lumbar-pelvic (10 times, one set). Rolling (10 times, one set). Elbow load/cross facilitation (10 times, one set).	Sitting/standing from chair with front hand support (backrest) (10 times, one set). Leg abduction and hip and knee flexion (10 times, one set). Pedaling with isometrics (20 minutes).	Parallel bars (20 minutes). Training whit a walking aid depending on the persons tolerance (about 10 minutes).

RESULTS

After the implementation of an RN care plan, there was a gradual increase in the person's functionality after the stroke event and in their capacity for self-care. There was significant translation during the 32 days of the care plan in all the parameterization scales.

On the Berg Scale, the person went from a score of 13/56 to 33/56, with effective gains, in particular the ability to move from a sitting position to standing alone. On the FIM Scale, she went from a score of 83/126 to 89/126, effectively translating into improved self-care. On the WHO-5 Well-being Index, the person went from a score of 15/25 to 21/25, with an effective increase in their reported sense of well-being, feeling happier, calmer and more active.

DISCUSSION

This CR describes the process of rehabilitation nursing care for a person after a stroke event, characterizing the plan at a motor level, emphasizing a person- and family-centered relationship that promotes well-being. [2,3,4] The care plan presented by the RNS resulted in a significant improvement in both motor skills and the person's sense of well-being. In terms of the objectives of promoting adherence to dynamic balance training and promoting walking autonomy, health gains were visible in the scales applied: the Berg scale and the FIM scale.

This CR showed a gradual increase in the person's sense of well-being, through quality and safe care, effectively reflected in the WHO-5 Well-Being Index, which can be recorded by the RNS [10]. As is referred by Bright et al.[6] care that is centered on the person's expectations/preferences, on the parameterization of well-being, results in effective care plans aimed at the person's needs.

According to the evidence, an RN care plan in community hospitalization, supported by diagnoses and interventions that are meaningful to the person and in line with their health project, resulted in a gradual increase in their sense of well-being. The care plan implemented corroborates the scientific evidence previously presented. As Kwakkel et al.[2] point out, the translation of care plans into maximizing functionality and promoting the capacity for self-care becomes relevant in terms of results such as increased well-being.

CONCLUSION

This CR demonstrated the construction of a personalized and specific RN care plan for a person hospitalized in a MDRU and their family, in a partnership relationship with comprehensive care, validated by the entire multidisciplinary health team with significance for the person's health project. It was possible to demonstrate

health gains in terms of functionality, self-care and well-being.

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The study was conducted in accordance with the Declaration of Helsinki and approved by the Institutional Review Board (or Ethics Committee) of Escola Superior de Saúde Atlântica n. 7 ESSATLA 2024 (approved on 10 July 2024) for studies involving humans.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION

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