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REVISION ARTICLE

Strategies for self-management support by patients with stroke: integrative review

Estratégias de autocuidado apoiado para pacientes com acidente vascular cerebral: revisão integrativa

Estrategias de autocuidado apoyado para pacientes con accidente vascular cerebral: revisión integradora

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ABSTRACT

Objective: To analyze strategies for self-management support by patients with stroke in the light of the methodology of the five A's (ask, advice, assess, assist and arrange). **Methods:** Integrative review conducted at the following databases CINAHL, SCOPUS, PubMed, Cochrane and LILACS. **Results:** A total of 43 studies published between 2000 and 2013 comprised the study sample. All proposed actions in the five A's methodology and others were included. We highlight the Assist and Arrange, in which we added actions, especially with regard to the use of technological resources and joint monitoring between patients, families and professionals. No study included all five A's, which suggests that the actions of supported self-management are developed in a fragmented way. **Conclusion:** The use of five A's strategy provides guidelines for better management of patients with stroke with lower cost and higher effectiveness.

DESCRIPTORS:

Stroke; Self Care; Activities of Daily Living; Nursing Care; Review.

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INTRODUCTION

Considering the magnitude of chronic conditions, the concept of self-management support, proposed by the Chronic Care Model (CCM), has been much discussed in recent years. Self-management support refers to strategies used in order to prepare and empower people so that users self-manage their health and attention to the provision of health, emphasizing the central role of individuals in managing their own care[1].

Self-management is supported by a methodology developed by the National Cancer Institute in 1989 for use with smoking people. However, over time this method was altered and can be applied in several clinical settings. Becoming known as the methodology of the 5 A's: ask, advice, assess, assist and arrange. Actions represented by 5 A's are strongly interrelated, and support the self-management system, which is most effective when used together[2].

There is robust evidence that individual and group interventions to promote the empowerment of people and to empower them for self-management are very effective in the management of chronic conditions. This means empowering people to establish their goals, participating in the development of their care plans and identifying and overcoming the barriers that are faced to their health[2].

This methodology can be applied effectively to patients affected by stroke (CVA), which is the main cause of chronic disability worldwide[3], causing limitations in physical, psychological and social functioning in individuals affected by this neurological condition[4].

It is estimated that between 30 and 40% of stroke survivors develop some degree of functional dependence, which prevents them from reintegrating into the labor market and demand some kind of assistance in performing basic activities of daily living (ADLs)[5]. A study conducted with patients in the rehabilitation phase identified the location of the injury, recovery time, performance in instrumental activities of daily living and age were the most important determinants of quality of life of patients[6].

It should be noted that the problems of secondary health for stroke can further reduce the quality of life of patients. Among the main impairments developed after a stroke, we cite signs of motor skills worsening, sleep problems, falls, urinary incontinence and memory deficits[7].

In this context, health professionals play an important role in assisting patients with stroke, monitoring the process of treatment and rehabilitation, preventing or detecting early complications, with the purpose of achieving the well-being of patients and thus health promotion[8]. Furthermore, the starting point for the assistance consists in the perception of professionals regarding patients' health needs, introduced in the integrality of care plan[9].

To this end, it is necessary that these health professionals develop skills to act together to individuals who have had a stroke, providing greater opportunities for harm and disabilities reduction, as well as improving the ability to self-management seeking a better quality of life.

However, it is recognized that the process of empowerment needs to be based on appropriate methods so that the results can be effective. In this context, the following questions emerged: *Which strategies have been used to increase self-management support of patients who have had a stroke, published and available in databases?* The answer can collaborate for a critical reflection of the assistencial practice of health professionals in the provision of self-management support of stroke patients, aiming to improve their performance. Thus, the objective of this study was to analyze the strategies related to self-management support in patients who have had a stroke, published and available in databases.

METHODS

This is an integrative review, method that aims to organize and synthesize research findings on a delimited topic or question, systematically and orderly, contributing to the deepening of the knowledge of the topic investigated[10].

To achieve the proposed objective, we used the following steps: (1) identification of the problem or topic (drafting the guiding question, establishment of descriptors); (2) determination of criteria for inclusion/exclusion of studies (study selection); (3) categorization of studies according to the methodology of the 5 A's; (4) definition of information to be extracted from selected studies; (5) analysis and discussion; (6) summary of findings evidenced in studies analyzed[11].

The methodology of the 5 A's comprises five strategies that should be used to support the construction of the care plan, they are: Ask, which investigate the beliefs, behaviors and knowledge of patients; Advise, when they are informed about health risks and benefits of change; Assist, necessary for the definition of collaborative goals, planning actions and degree of confidence; Assess, which evaluates through the identification of barriers, technologies of troubleshooting and material and/or social support; and arrange follow-up, when the monitoring system is applied[2]. These strategies guided data analysis of this study.

The inclusion criteria for the selection of the studies were: to include some thematic strategy of support for self-management in stroke patients; to be electronic available and free; to be classified as original study, case report or systematic review studies; to be indexed in at least one of the following databases: Cumulative Index of Nursing and Allied Health Literature (CINAHL), SCOPUS, National Library of Medicine and National Institutes of Health (PubMed), Cochrane and *Literatura Latino-Americana e do Caribe em Ciências da Saúde* (LILACS). We excluded editorials, letters to the editor, studies of reflection and duplicates.

The search for studies was held in November 2013, using the controlled descriptors of LILACS "stroke" and "self care". The MeSH (Medical Subject Headings) descriptors, "stroke" and "self-care" were used in the CINAHL, SCOPUS, PubMed and Cochrane databases. It should be noted that the search, the selection of studies and data extraction were performed by a single researcher.

From the association of descriptors 560 articles were found, they were published between the years of 2000

Table 1 – Distribution of studies found and selected - Fortaleza, 2013.

Study/Database	PubMed	CINAHL	SCOPUS	Cochrane	LILACS	Total
Found	172	72	312	2	2	560
Excluded	168	55	290	2	2	517
Selected	4	17	22	0	0	43

and 2013. Initially, the titles and abstracts were read and evaluated according to the inclusion and exclusion criteria. After this step, we read 73 studies in full, of which 43 were chosen according to the inclusion criteria (table 1).

From the excluded studies, 83 were unavailable electronically (21 in PubMed, 24 in CINAHL, 36 in SCOPUS and two in Cochrane); 19 were editorials or opinion of specialists (PubMed, SCOPUS); six narratives review (CINAHL, SCOPUS); four abstracts of Conferences (CINAHL, SCOPUS); Two dissertations (CINAHL); and 288 did not respond our research question (39 in PubMed, 224 in SCOPUS, 23 in CINAHL and 2 in LILACS) and 115 were duplicates (107 in PubMed, 7 in SCOPUS and 1 in CINAHL).

The results of the study are presented in form of Chart and analyzed according to the predefined categories, according to the 5 A's methodology. Initially, titles and abstracts were read to pre-select the studies, then we proceeded to read the full studies to confirm their permanence in the sample and start the data extraction. One research could present more of one strategy and may include more than one of the 5 A's.

RESULTS

From a total of 560 studies, 43 composed the sample of the study, contemplating the inclusion criteria. They were published between the years 2000 to 2013, with a concentration of publications in the last four years.

Chart 1 presents the self-management support strategies, identified in the selected publications by the integrative review. The underlined actions were identified in the included studies, but not included in the methodology developed by the National Cancer Institute. As proposed, we divided according to the actions of the 5 A's methodology.

We highlight that no study brought together all five strategies of the methodology. Two studies[12-13] approached four strategies, while 18 studies contemplated only a single strategy. It was similar to the amount of studies that addressed two and three strategies, 12 and 11 publications, respectively. Assist and Assess strategies were the most identified. It should be noted that some of the strategies can be classified into more than one category of the methodology, and that this choice was defined from the context of the study analyzed.

Chart 1 – Self-management support strategies used in patients with stroke according to the 5 A's method - Fortaleza, 2013.

5A's Method
Ask
Assess the knowledge of the person about their condition [14-18].
Ask the person what is more important to her/him, at the moment, in self-management[13,19-22].
Ask the person what are the barriers to self-management[14,21,23].
Ask the person what are the barriers to self-management[14,21,23].
Assess the ability of the participants to perform a computational procedure for her/his self-management [30]*.
Learn the strategies used by patients with dysarthria after a stroke to rehabilitate[23]*.
Assess the degree of depression after a stroke which influences the actions of self-management[17]*.
Advise
Inform the person about their symptoms[31] and the results of the complementary examinations, recognizing their cultural singularity [12].
Inform the person that the behavioral changes are as important as taking medications[32].
Inform what are the evidence on health behavior changes[31,33].
Sharing evidence-based clinical guidelines to encourage the person to participate in treatment[33-34].
Establish an intervention program with weekly sessions with the aim of improving the knowledge of patients and involve them in self-management[12,18,29,35-37], including the use of educational booklets about self-management[38]*.
Assess
Establish a goal with the person, a specific target for self-management[12-13,19,26-27,39].
Provide possible options for defining the goal of self-management[40].
Encourage the person to seek help from relatives and friends to translate into goals[40-41].
Discuss benefits and risks related to possible goals[32].
Establish a shared action plan to reach the defined goal[31,34,42-43].
Establish, together, the degree of confidence of the person in achieving the goal[32,39]

...continuation

5A's Method
Assist
Help the person to identify possible barriers to reach the goal[13,40].
Discuss with the person the plan of self-management[40]. Elaboration of the Nursing process in rehabilitation after a stroke according to Orem's theory[44].
Refer the person to a group or to a course on self-management support[12,18,27-29].
Identify together with the person possible existing resources in the family and in the community that can support the self-management[36,40,43-44].
Provide services that are appropriate to the culture of the person[12,29,36,40].
Arrange meetings, review self-management plan progress, renegotiate goal and revise the action plan[13].
Include Motivational Interview Strategies[32]*.
Implement an intervention of self-monitoring patient-centered[13,45-46]*.
Allow the patient to discover their own abilities after a stroke[20,29,47]*.
Multidisciplinary teamwork[18,20,27,29,48]*.
Assist patients in achieving self-management plan for motor rehabilitation after a stroke[33,37,41,49-50]*.
Interventions with the use of technological resources, such as telemedicine, virtual reality and computer programs, in various aspects of rehabilitation[19,30,42,47,51-53]*.
Arrange
Give the person a written copy of the plan of self-management[40].
Monitor, from distance, by phone or mail, the self-management plan[17,28,39,51].
Interfere so that the person can use important community resources in their self-management[12,28].
Peer group with support from professionals[36,51]*.
Follow up patients[20,31,44,51] through questionnaires to assess activities of daily living, self-management and quality of life continuously[16]*.
Encourage the patient and family to monitor their progress and the need for changes in the plan of self-management[13,32,40]*.
Evaluate the achievement of goals together with the patient[13,42]*

* Suggested actions by the authors of the study.

DISCUSSION

Stroke patients have special needs as they are subjects that require different care. Because this is a sudden onset disease, they require greater professional care in the first moments, followed by greater responsibility by the individual for their own care. We highlight that some patients are still dependent on professional help due to the severity of the sequel arising from this condition. Although, these individuals should have their self-management encouraged.

Consonant with the actions listed, the first A (Ask) consists in understanding beliefs and values, knowledge[14-18] and the behaviors of the people in sanitary and motivational areas. Within the Community area, one should understand the health condition of the person and what their ability to self-monitoring. In the emotional component is important to the assessment of motivation for change and the identification of barriers[14,21,23] to achieve the goals set out in the self-management plan.

The patient who has had a stroke must be included in their treatment as responsible, especially because the disease causes important functional and psychological deficits. We highlight the importance of assessing what is important to the individual at the time of self-management[13,19-22] and their ability to carry out the proposed interventions[30]. In addition to investigate depressive symptoms, which directly influence on the achievement of general care of prevention,

such as receiving a flu shot, performing treatment against pneumonia, a mammogram in the past two years and blood test to track changes, etc.[17].

The second A, Advise, consists of the transmission of specific information about the risks and benefits of the changes through health education and skills training. It is connected with the importance that the person gives to behavioral changes[2].

In the actions included in advise, we highlight health education, especially aimed at patient's self-management of their chronic condition[38], being associated with better clinical outcomes and lower costs[36]. This strategy must be supported by scientific evidence and clinical guidelines[31,33-34] to promote behavior change in a more extensive and permanent way. Various studies have addressed the implementation of an intervention program to improve knowledge about the illness of patients and involve them with self-management[12,18,29,35-37].

According to the results of this review, the actions of the third A (Assess) have been fully considered, and no different actions were found. The care planning or specific goals must be constructed in this stage[12-13,19,26-27,39]. This action must be performed and shared between professionals, patients, family and friends[40-41]. Another important aspect is the determination of the patient's self-efficacy to reach the proposed goal[32,39].

In this review, no reference to the risks of change were found. We believe in the fact that the characteristics of stroke patients, who already have illness installed, and the content of the proposed interventions, which seek secondary prevention, as new occurrence of events.

Among the A's, the fourth, Assist, grouped a greater amount of studies. Among the actions consolidated[2], we can observe a reaffirmation of those undertaken previously, such as identification of barriers to achieving goals[13,40], discussion of the care plan[40], and review of progress according to the goals established[13], revising the plan to suit the real needs of the patient to each monitoring meeting. We highlight the study that pointed out the importance of the Nursing Process in the rehabilitation of the patient who have had a stroke and the use of the Orems' theory, which works the self-management of individuals[44].

Another action would be referring the person and their caregivers to a group or to a course on self-management support [12,18,27-29], interfering so that community resources and family support the rehabilitation[36,40,43-44]. It is worth noting the importance of the family in this process and the creation of appropriate courses to the culture of the people[12,29,36,40]. One of the approaches identified as effective in patient's approach is the motivational interview[32].

Other actions were identified belonging to this A - Assist, which must be implemented to self-management support. They are: to implement an intervention of self-monitoring patient-centered[13,45] according to their difficulties, for example, the ability to dress up[46]. Allow the patient to discover their own abilities[20,29,47], avoiding an overprotection that impede the achievement of autonomy; presence of multi-professional teams for the care[18,20,27,29,48]; implementation of more intensive physical rehabilitation plans, with more professional presence and encouragement to the self-management of the exercises[33,37,41,49-50].

Interventions with the use of technological resources, such as telemedicine[47], telerehabilitation[42,51], virtual reality[52] and computer programs[30,52], were employed to assist the rehabilitation of individuals. We highlight the subsequent studies that evaluate the effectiveness of these interventions that should be carried out. Stroke patients often complain of difficulties of mobility or financial resources to attend to the care centers, they may benefit from the use of these technological resources and carry out the rehabilitation in an early, complete and permanent manner.

It should be noted that the rehabilitation assistance programs with professional help provide subsidies only in the first year after the stroke, impairing the full rehabilitation process of the individual. It is recommended the need for expansion of this follow-up, because studies indicate advances in recovery even after two years of the event[18,45].

After caring for a patient who have had a stroke, the latter A consist in arrange follow-up, in other words, in preparation and implementation of a monitoring system[2].

Self-management support strategy is not a short-term activity, especially in a patient affected by stroke, who commonly have to live with the after effects of cerebrovascular event. Thus, it is necessary that health professionals conduct regular and systematic monitoring for a long time, adopting various forms, such as: regular visits to health services, home visits, telephone calls[17,28,39], e-mail, peer groups[36] or community resources[12,28].

In this review, it was found that only one study reported a self-management plan written to the patient[40]. This result was considered negative, since is recommended that plan must be written and placed in a visible place to be consulted every day, such as on the refrigerator door[2].

Regular monitoring can be performed not only by health professionals, but also by patients and their families[13,32,40,42], so that the plan may be adequate to the real possibilities of the person. For that reason, we must use the problem based solving methods: identify the problem, list the alternatives to solve it, choose the most viable alternatives, monitor the results and, in some circumstances, accept the idea that the problem cannot be solved at this time[2].

The monitoring can be very beneficial when using peer groups, with the presence of several people, or even groups of two people. In this context, the primary health care professionals can meet patients with the same chronic condition, which facilitates dialogue and mutual assistance facing the barriers, as well as sharing emotions with the goals reached. Peer monitoring with the help of professionals was one approach used in only one of the studies included in this review[36].

Self-management support strategy is a recurring topic studied in literature, especially for patients with stroke, which ratifies its importance. However, we highlight the fact that none of the studies analyzed used all of the 5 A's, which represents a downside, because, when used together, they greatly reinforce self-management support.

Among the present study limitations, we include the use of only five databases, and we found a large number of studies in three of them; a search conducted by a single researcher; the scarcity of Brazilian studies dealing with the subject in question, since only one study was found. Thus, the analysis of published studies in other countries may have suffered cultural interference, since they are inserted into another cultural and social reality.

CONCLUSION

We analyzed 43 studies on self-management support strategies, used in patients affected by stroke. However, no studies comprised the 5 A's methodology, and the Assist was the most used, what prompts a reflection on how fragmented health care professionals are adopting to encourage and support the patient to achieve greater levels of autonomy and self-management.

Self-management support structured according to the strategy of the 5A's provides guidelines for a better approach to the patient with stroke, with lower cost and greater effectiveness. Especially when employed physical and social rehabilitation of the individual.

Therefore, it is essential to develop an individualized plan of self-management with realistic goals that meet the needs of stroke patients. It should be drafted together with the patient, professional and family members, and all re-

sources available in the community should be listed for its effective performance.

Finally, we highlight that this review can contribute to a theoretical-practical reflection on the part of professionals who attend patients affected by stroke, mainly those of primary health care. In search of a humanized and integral care in all levels of attention, it is necessary that the family health team be prepared and proactive, in order to contribute to the rehabilitation and reintegration of individuals with this chronic condition.

RESUMO

Objetivo: Analisar as estratégias de autocuidado apoiado para pacientes com acidente vascular cerebral, à luz da metodologia dos 5 As (avaliação, aconselhamento, acordo, assistência e acompanhamento). **Método:** Revisão integrativa da literatura realizada nas bases de dados CINAHL, SCOPUS, PubMed, Cochrane e LILACS. **Resultados:** Foram selecionados 43 artigos, publicados entre 2000 e 2013, que compuseram a amostra do estudo. Todas as ações propostas na metodologia dos 5 As foram contempladas, e outras foram incluídas. Destacaram-se as relativas à Assistência e Acompanhamento, nas quais foram acrescentadas ações, especialmente no que se refere ao uso de recursos tecnológicos e trabalho conjunto de monitoramento entre pacientes, familiares e profissionais. Nenhum estudo contemplou todos os 5 As, o que sugere que as ações de autocuidado apoiado são desenvolvidas de forma fragmentada. **Conclusão:** O uso da estratégia dos 5 As fornece diretrizes para uma melhor abordagem do paciente com acidente vascular cerebral com menor custo e maior efetividade.

DESCRITORES:
Acidente Vascular Cerebral; Autocuidado; Atividades Cotidianas; Cuidados de Enfermagem; Revisão.

RESUMEN

Objetivo: Analizar las estrategias de autocuidado apoyado para pacientes con accidente vascular cerebral, a la luz de la metodología de las 5 As (apreciación, aconsejamiento, acuerdo, asistencia y acompañamiento). **Método:** Revisión integradora de la literatura llevada a cabo en las bases de datos CINAHL, SCOPUS, PubMed, Cochrane y LILACS. **Resultados:** Fueron seleccionados 43 artículos, publicados entre 2000 y 2013, que compusieron el muestreo del estudio. Todas las acciones propuestas en la metodología de las 5 As fueron contempladas, y otras fueron incluidas. Se destacaron las concernientes a la Asistencia y el Acompañamiento, a las que se añadieron acciones, especialmente en lo que se refiere al uso de recursos tecnológicos y trabajo conjunto de monitoreo entre pacientes, familiares y profesionales. Ningún estudio contempló todas las 5 As, lo que sugiere que las acciones de autocuidado apoyado se desarrollan de manera fragmentada. **Conclusión:** El empleo de la estrategia de las 5 As brinda directrices para un mejor abordaje del paciente portador de accidente vascular cerebral con menor costo y mayor efectividad.

DESCRIPTORES:
Accidente Cerebrovascular; Autocuidado; Actividades Cotidianas; Atención de Enfermería; Revisión.

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