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Experience report

Case management algorithm for people with hypertension in primary care: experience report *

Algoritmo de gerenciamento de casos para pessoas com hipertensão na atenção primária: relato de experiência

Algoritmo de manejo de casos para personas con hipertensión arterial en atención primaria: relato de experiencia

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Abstract

Objective: to report the experience of elaborating a case management algorithm for people with systemic arterial hypertension treated in primary care. **Method:** experience report in which the construction of the algorithm was based on the model of *Community Access Ageing, Disability and Home Care, Department of Human Services* NSW9, which provides for seven stages: Commitment, Evaluation, Planning, Implementation, Monitoring, Review and Closure. **Results:** validated questionnaires and activities such as home visits, nursing consultations, individualized therapeutic plan and goal agreement, health education, telephone contact and redirection to the health care network were included in the algorithm. The preparation time was 12 months. **Conclusion:** the algorithm developed represents a simple and dynamic case management tool that guides the care activities of people with hypertension treated in primary care, through seven stages, and facilitates the reading of results.

Descriptors: Adult Health; Nursing Care; Hypertension; Primary Health Care; Case management

Resumo

Objetivo: relatar a experiência de elaboração de um algoritmo de gerenciamento de casos para pessoas com hipertensão arterial sistêmica atendidas na atenção primária. **Método:** relato de experiência em que a construção do algoritmo foi baseada no modelo da *Community Access Ageing, Disability and Home Care, Department of Human Services NSW9*, que prevê sete etapas: Compromisso, Avaliação, Planejamento, Implementação, Monitoramento, Revisão e Encerramento. **Resultados:** compuseram o algoritmo questionários validados e atividades como visitas domiciliares, consultas de enfermagem, plano terapêutico individualizado e pactuação de metas, educação em saúde, contato telefônico e redirecionamento para a rede atenção à saúde. O tempo de elaboração foi de 12 meses. **Conclusão:** o algoritmo desenvolvido representa uma ferramenta simples e dinâmica de gerenciamento de casos, que orienta as atividades de cuidado de pessoas com hipertensão atendidas na atenção primária, mediante sete etapas, e facilita a leitura dos resultados.
Descritores: Saúde do Adulto; Cuidados de Enfermagem; Hipertensão, Atenção Primária à Saúde, Administração de Caso

Resumen

Objetivo: relatar la experiencia del desarrollo de un algoritmo de manejo de casos para personas con hipertensión arterial sistémica atendidas en atención primaria. **Método:** relato de experiencia en el que la construcción del algoritmo se basó en el modelo *Community Access Aging, Disability and Home Care, Department of Human Services NSW9,* que prevé siete pasos: Compromiso, Evaluación, Planificación, Implementación, Monitoreo, Revisión y Cierre. **Resultados:** cuestionarios validados y actividades como visitas domiciliarias, consultas de enfermería, plan terapéutico individualizado y acuerdo de metas, educación para la salud, contacto telefónico y redirección a la red de salud compusieron el algoritmo. El tiempo de preparación fue de 12 meses. **Conclusión:** el algoritmo desarrollado representa una herramienta de gestión de casos simple y dinámica, que orienta las actividades de atención de las personas con hipertensión arterial asistidas en la atención primaria, a través de siete pasos, y facilita la lectura de los resultados.
Descriptores: Salud del Adulto; Atención de Enfermería; Hipertensión, Atención Primaria de Salud, Manejo de Caso

Introduction

Case management (CM) is a collaborative process of planning, facilitating, coordinating care, evaluating and advocating for options and health services for a person and his family members. To meet these needs, communication and promotion resources are used in order to improve the care experience, reduce the fragmentation of care, promote the health of populations and reduce costs.[1-2]

In Brazil, CM is proposed in the document "The care of chronic conditions in primary health

care: the imperative of consolidating the family health strategy" as one of the cardinal strategies in the care and follow-up of chronic patients,[3] however, it is still little used in clinical practice.

This care strategy is carried out by a case manager, usually a nurse or social worker, who is responsible for the individual in chronic condition and makes judgments about health needs, services offered and received, determining and controlling the level of care necessary to comply with the established plan.[3]

Case management is indicated for complex health situations, such as Systemic Arterial Hypertension (SAH) associated with comorbidities and/or other aggravating factors such as difficulties in adherence to treatment. SAH has a high prevalence and is the main risk factor for cardiovascular and renal diseases. Between 2008 and 2017 it is estimated that 667,184 deaths can be attributed to SAH.[4] Although it is easy to diagnose and treat, its control worldwide is low and the difficulties with adherence to therapy are evident.[4]

In this context, the use of CM as a strategy for the care and follow-up of patients with hypertension in primary care may have good results, however, as it is a little diffuse method in Brazil, the development of a specific monitoring algorithm for this population is necessary.

Algorithms are tools consisting of well-defined instructions that guide decision-making in clinical practice,[5] therefore, they are sequential instructions and have been widely used in several areas; in health, they provide a standard for patient care, based on an objective recommendation for decision making, with consistency and transparency of the situation.[6]

Its use in the health area became more notable from the movement of evidence-based medicine after the 1990s,[7] and helps professionals and researchers to perform care or apply a standardized research protocol based on science, which results in quality of care, systematization of care and improvement of outcomes.[8]

The construction of an algorithm for the CM for people with SAH can favor the dissemination of this method of care through the targeting of actions such as evaluation, planning of individualized care with goal agreement and decision-making based on the information collected throughout the process. Thus, the objective of this study was to report the experience of elaborating a CM algorithm for people with SAH treated in primary care.

Method

This is an experience report of the construction of a CM algorithm carried out by

applying the seven stages proposed by the Community *Access Ageing, Disability and Home Care, Department of Human Services NSW*: Commitment, Evaluation, Planning, Implementation, Monitoring, Review and Closure.[9]

The first stage, Commitment, refers to the contact of the case manager with the person targeted for care, which can be face-to-face or by telephone and aims to develop interpersonal interaction. The Evaluation stage is a dynamic process of collecting and analyzing information to determine the care to be performed. It is important that evidence-based validated scales are used for data collection. The Planning stage, based on the evaluation and collection of information, allows listing the actions to meet and/or assist in the identified needs. All planning must be documented in language that allows the person to understand, especially in relation to the goals and expected results.[9]

In the Implementation stage, the objective is to help the target person and his family members to act in order to achieve the agreed goals. Monitoring allows the monitoring of goals; this stage is crucial in the identification of barriers with a view to intervening in specific points. The Review stage allows you to reflect on all previous stages, in order to maintain the actions or review them, modifying them, based on updated data. Finally, the Closure stage corresponds to the return of the person to his care network, for the usual care.[10]

For the elaboration, it was decided to carry out a bibliographic review and follow-up of people with SAH treated in primary care in a municipality in the countryside of Paraná chosen for convenience. The case manager was a nurse and the strategies used were: nursing consultations, home visits, telephone contact, health education activities and care with other professionals such as nutritionist, psychologist and physician, according to individual needs.

The proposed activities followed the recommendations of the Ministry of Health,[11-12] World Health Organization,[13] Federal Nursing Council.[14] and the algorithm elaboration time was 12 months. The research project was approved by the Research Ethics Committee of the Health Sciences Sector of the Federal University of Paraná under opinion number 1,670,453 and CAAE: 57179116.8.0000.0102 on August 10, 2016.

Results

The first stage of the algorithm, Commitment, was developed through the dissemination of information through home visits and with the aid of a banner exposed in

the health unit.

Subsequently, the Evaluation stage was carried out through the first nursing consultation, with a survey of information on the health history of the person with SAH and identification of care needs. To assist in obtaining data, validated and reliable scales were used to evaluate adherence to treatment,[15] quality of life[16-17] and patient risk classification.[18] The risk classification guided the frequency of activities proposed for the CM.

From the collection of information and nursing diagnoses, the third stage began, Planning. At that time, nursing care was prescribed and a therapeutic plan was developed in partnership with the person targeted for care. Agreed goals, needs for lifestyle changes, and general care guidance were recorded on a form so the patient could take it home with him as a reminder. The case manager nurse recorded all the information in his/her own forms and medical records.

After the first consultation and considering the risk classification, follow-up began through health education activities, home visits, telephone contact, nursing consultations and with other professionals, corresponding to the stages of Implementation, Monitoring and Review of the CM.

Health education activities occurred individually, during nursing consultations, and in groups. The group health education lasted an average of 60 minutes and was developed through the methodology of group living and dynamics as a conversation circle, videos and playful activities related to the theme.

In the first meeting, all presented themselves and the objectives were clarified, as well as a round of conversation about the definition of SAH. At the end of each meeting, participants were asked to choose the theme for the subsequent activity.

Home visits were carried out to strengthen the bond between the case manager and the person being cared for and his families, to perceive the family context, to verify the involvement of the family, to measure blood pressure, to review the agreed goals, to modify them if necessary and to provide guidance.

The usual telephone contact or WhatsApp® was also used as a tool to remind the person about his appointments and activities, make positive reinforcement about the agreed goals, monitor them, modify them, if necessary, and resolve doubts. The case manager also made her contact available.

After the first nursing consultation, the other consultations were conducted in the

same way, however, with the addition of the revision of the care plan, modifying or reinforcing guidelines. At the end of each consultation, the participant was given a copy of the care plan, when modified, and a card with the scheduling of the next activities.

The closure stage occurred by directing the person targeted for care to the health care network.

The stages of the algorithm can be seen in Figure 1.

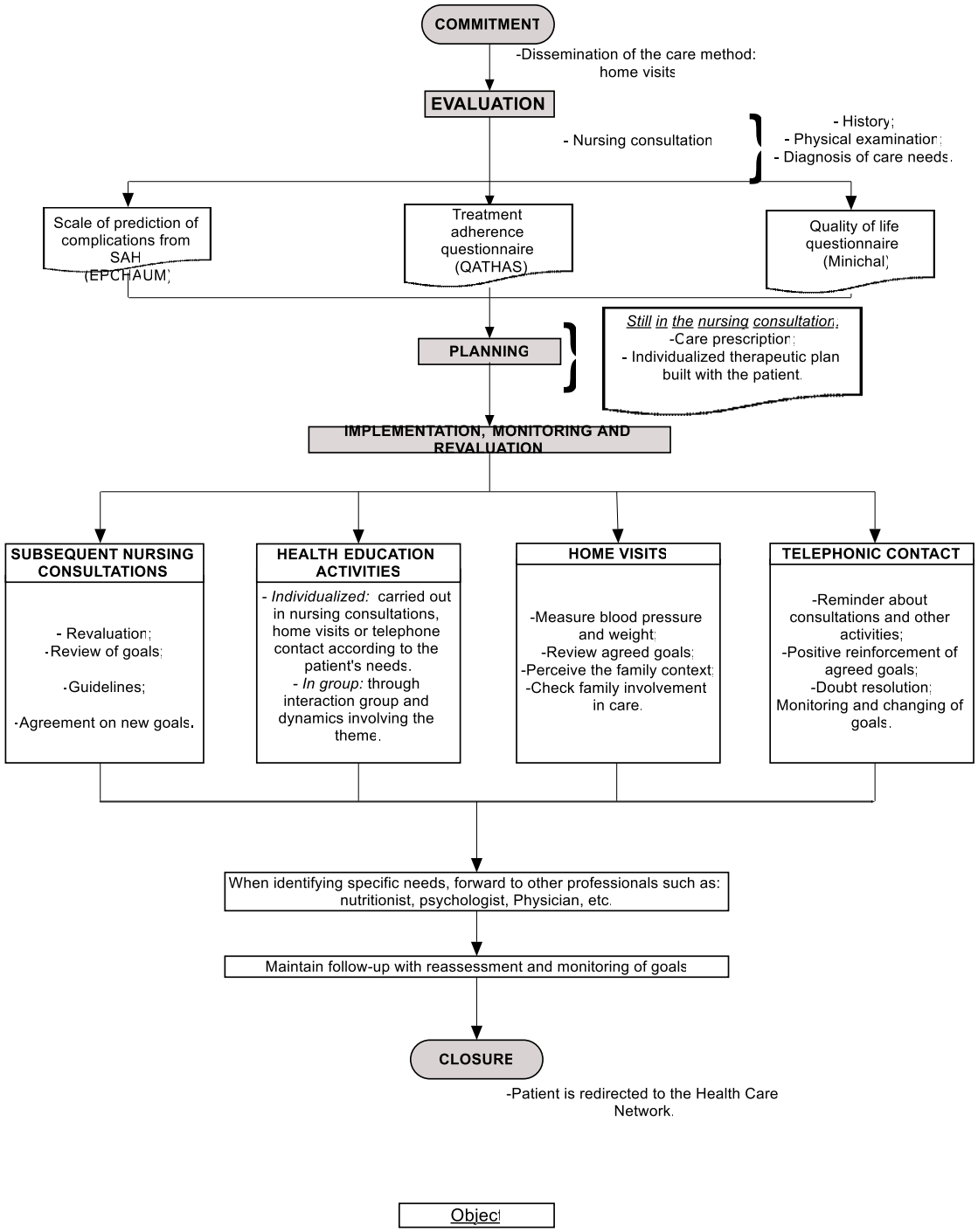

Figure 1 – CM algorithm stages for people with SAH. Curitiba-PR, 2022

Discussion

The use of algorithms in the CM for people with SAH can facilitate the organization of care, however it is important that the instrument has been prepared based on scientific evidence and that it is composed of scales already in use in the literature. The construction of this algorithm was preceded by a literature review and provides for the use of validated scales such as the SAH complication prediction scale,[18] QATHAS,[15] and MINICHAL[17]

The scale for predicting SAH complications was created and validated in Brazil in order to predict the emergence of morbidities secondary to hypertension, based on the evaluation of variables such as age, gender, smoking, time of diagnosis, risk classification by the health unit, number of medications in use and diagnosis of depression, which result in a low, moderate, high or very high risk classification.[18] Its use contributed to the proposition of actions with a view to changes in lifestyle, therapeutic adherence and pressure control.

The QATHAS is a multiple-choice questionnaire that measures adherence to pharmacological and non-pharmacological treatment of SAH. Based on the answers, it was possible to evaluate whether or not the individual stopped taking the medications and how often this happened, as well as whether or not he/she maintained a healthy diet, and also whether or not he/she attended scheduled appointments.[15] The answers obtained in the application of the QATHAS questionnaire in the people targeted for care enabled the measurement of adherence to therapy and enabled the agreement of new goals.

The MINICHAL questionnaire was developed in Spain; it has been used by research worldwide and its effectiveness has been ratified by science.[19-21] This instrument contributed to the evaluation of the intervention performed on the quality of life of the participants in the somatic dimensions and mental state.

That said, the Evaluation stage enabled the planning of actions and the continuity of case management, with implementation, monitoring and review, according to the need. At the Closure, last stage, the results were shared with the team and local authorities.

It is admitted that the use of technologies that assist in the systematization, organization and planning of work such as algorithms, protocols, booklets, manuals,

flowcharts and guidelines are important for coping with problems and managing health services.[22] In this sense, the present report aims to contribute to the growth of knowledge in the area, as it proposes an instrument that directs CM actions for patients with SAH, which represent an important portion of the population served in primary care.

The main limitation is the fact that the algorithm was built from the monitoring performed with people with hypertension in only one municipality in the state of Paraná.

Conclusion

The algorithm developed represents a simple and dynamic tool that guides care activities through seven stages and facilitates the reading of results, allowing the standardization of CM actions for adults with SAH treated in primary care and directing them according to individual needs, and its application can help in improving clinical outcomes.

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