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Self-management of chronic diseases: a concept analysis

Samodzielne zarządzanie chorobą przewlekłą: analiza koncepcji

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STRESZCZENIE

SAMODZIELNE ZARZĄDZANIE CHOROBĄ PRZEWLEKŁĄ: ANALIZA KONCEPCJI

Wstęp. W związku z pandemią koronawirusa mającą swój początek w 2019 roku, która wpłynęła na objęcie opieką pielęgniarską pacjentów przewlekle chorych, samoopieka pacjentów wzrosła dzięki zastosowaniu nowoczesnych technologii. W celu wspierania samodzielnego zarządzania pacjentów chorobą przewlekłą, niezbędne jest przeanalizowanie i wyjaśnienie pojęcia samoopieki przed zastosowaniem go w praktyce.

Metody. Przegląd piśmiennictwa w bazach Web of Science, PubMed, CINAHL, ScienceDirect, Sage Journals, MEDLINE, Cochrane, biblioteczne bazy danych oraz Google Scholar i COBISS, używając słów kluczowych „koncept", „samoopieka", „choroba przewlekła" i „pielęgniarka". Uwzględniono badania metodami jakościowymi, ilościowymi i mieszanymi. Książki i streszczenia związane z wybraną tematyką w języku angielskim zostały zaliczone w poczet piśmiennictwa. Badania zostały uszeregowane zgodnie z hierarchią dowodów. Wykorzystano analizę koncepcji autorstwa Cutcliffe i McKenna.

Wyniki. Spośród 2974 znalezionych badań, 31 zostało włączonych do analizy. Zidentyfikowano siedem atrybutów: ocena sprawności fizycznej i objawów emocjonalnych, reakcja na zmiany, konsultacje z lekarzem, komunikacja, cele, dbałość o skuteczność leczenia, i świadomość sytuacji. Do uwarunkowań należą nauka, motywacja, nawyki, kulturowe i religijne wartości, poczucie własnej skuteczności, umiejętność czytania i pisania. Koncepcja konsekwencji obejmuje poprawę wyników klinicznych i jakości życia pacjentów oraz zmniejszenie kosztów zdrowia publicznego.

Wnioski. Ponieważ opieka pielęgniarska coraz bardziej skupia się na samodzielnym radzeniu sobie z chorobą, a nie tylko na leczeniu, pacjenci coraz częściej używają różnych technik do samoopieki. Poprzez włączenie tego konceptu w nowoczesną technologię, możemy przyczynić się do opieki nad pacjentem.

Słowa kluczowe: **przewlekle chorzy pacjenci, opieka zdrowotna, dbanie o siebie, samozarządzanie**

ABSTRACT

SELF-MANAGEMENT OF CHRONIC DISEASES: A CONCEPT ANALYSIS

Introduction. Due to coronavirus disease 2019, which affected the provision of nursing care to chronic patients, the self-management of patients has increased through the use of modern technology. To support the self-management of chronic patients, it is essential to analyze and clarify the concept of self-management before using it in practice.

Methods. A literature search was performed in the Web of Science, PubMed, CINAHL, ScienceDirect, Sage Journals, MEDLINE, Cochrane Library databases, in addition to Google Scholar and COBISS using the keywords "concept," "self-care," "chronic disease," and "nurse." Qualitative, quantitative, and mixed methods research, books, and abstracts, related to the selected concept in English were included in the review. Studies were ranked according to the hierarchy of evidence. Concept analysis by Cutcliffe and McKenna was used.

Results. Of the 2974 identified studies, 31 were included in the analysis. Seven attributes were identified: assessment of physical and emotional signs and symptoms, response to changes, consultation with the health care provider, communication, goals, attention to treatment effectiveness, and awareness of the situation. The antecedents are learning, motivation, habits, cultural and religious values, self-efficacy, literacy. The consequences concept includes improving individuals' clinical outcomes and quality of life and reducing public health costs.

Conclusions. As nursing care focuses more and more on self-management of the disease and not just on treatment, patients are increasingly using different techniques to manage their disease. By incorporating the concept of self-management of chronic disease into modern technology, we can contribute to patient care.

Key words: **chronic patients, health care, self-care, self-management**

INTRODUCTION

Chronic diseases are characterized by the care provided by the patient himself [1]. Self-care includes disease maintenance, monitoring, and self-management [2]. The chronic disease requires the patient to adhere to a strict treatment regimen and thus maintain, depending on the condition, their optimal health [3]. Adherence to a strict treatment regimen requires the patient to self-manage the disease [4].

Self-management is a part of self-care [2] that refers to a patients' ability to manage the symptoms of their illness, treatment, disease consequences, and lifestyle changes [5]. It can also be defined as the patient's response to signs or symptoms and include assessing changes in physical and emotional signs or symptoms [6].

The meaning and definitions of the concept of self-management of chronic diseases differ from each other [7]. By reviewing the literature, we wanted to analyze the concept of self-management of chronic diseases, which is suitable for various chronic diseases. Health professionals often interpret the concept of self-management in different ways. Van De Velde, et al. [8] state that clarity in the concept of self-management of chronic diseases significantly improves the understanding and implementation of self-management. They suggest the concept to be analyzed before use in clinical practice [8].

AIM

The purpose of the literature review was to clarify and analyze the concept of chronic disease self-management. In addition, the goal was to identify the attributes, precursors, and implications of the concept.

MATERIAL AND METHODS

The literature search was conducted in international databases Web of Science, PubMed, CINAHL, Science Direct, Sage Journals, MEDLINE, Cochrane Library. Additionally, other relevant literature in Google Scholar and COBISS was reviewed.

The literature search was conducted in June 2020 using the keywords "concept," "self-care," "chronic disease," and "nurse" and using their synonyms and Boolean operators AND and OR. Tab. 1. shows the inclusion and exclusion criteria for the selection of relevant literature.

Tab. 1. Inclusion and exclusion criteria for the selection of relevant literature

Inclusion criteria	
Topic:	Description, analysis, evaluation, and application of the selected concept
Typology:	Qualitative research, quantitative research, research of mixed methods, books, book chapters, summaries
Language:	English language
Period:	Until 19.06.2020
Exclusion criteria	
Duplicates, hits that do not meet the inclusion criteria, comments, prefaces, accompanying words, literary texts	

Fig. 1. shows the literature review process in the PRISMA diagram [9].

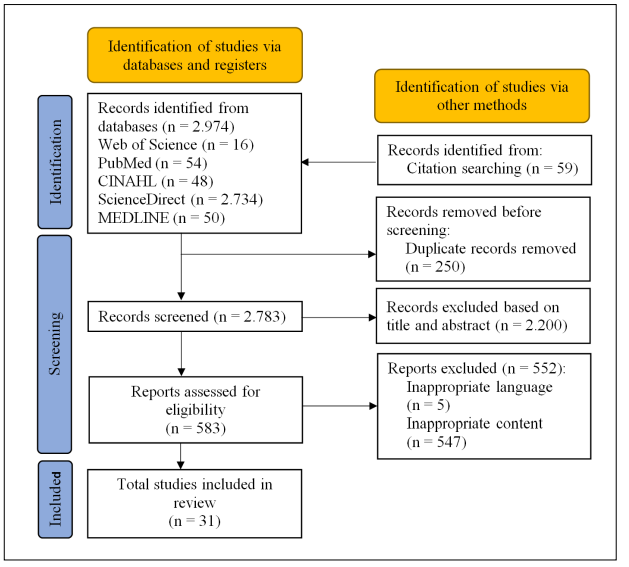

Fig 1. PRISMA flowchart [9]

The number of 2974 studies was identified in the databases (Web of Science: 16, PubMed: 54, CINAHL: 48, Science Direct: 2.734, MEDLINE: 50, and Cochrane Library: 72). In addition, 59 studies were identified in additional sources. Therefore, it can be seen from Figure 1. that out of a total of 2974 identified studies, 31 studies were included in the final analysis based on inclusion and exclusion criteria.

The quality of the review was assessed based on the classification of hits into the hierarchy of evidence [10-12]. We used the McKenna & Cutcliffe method [13] to analyze the concept [11,12].

RESULTS

Tab. 2. shows the basic characteristics of the included studies and their classification in the hierarchy of evidence.

Choice of concept and clarification of why analysis is needed

In the introduction, we explained that the analysis of the concept of self-management of chronic diseases is necessary for clarification and its use in the clinical environment and for use in modern technology. The role of chronic patients in self-management is changing, which requires new knowledge of nurses to perform support tasks. In addition, the resources available to manage the disease are also evolving, and increasing modernization requires new knowledge from nurses. Also, nurses have different ideas and opinions about what self-management support should include [19].

Tab. 2. Basic characteristics of included literature

Author, year	Typology	Aim	Findings	Hierarchy of the evidence
Ausili, et al., 2017 [14]	Psychometric testing	Test the psychometric properties of the SCODI instrument.	The SCODI instrument is intended for patients with SB and includes measurement of maintenance, monitoring, self-management, and self-confidence.	Level 4
Bratzke, et al., 2015 [3]	Literature review	Analyze self-management in adults with multimorbidity present.	Patients with multimorbidity prefer the predominant disease and use personal stimulants and overcome barriers to self-management.	Level 7
Dickson, et al., 2017 [15]	Psychometric testing	Test the psychometric properties of the SC-HI instrument.	The SC-HI instrument is intended for patients with hypertension and includes maintenance, monitoring, and self-management of the disease.	Level 4
Garnett, et al., 2018 [16]	Literature review (Concept analysis according to the Walker and Avant method)	Analyze the concept of self-management in older adults with multiple chronic diseases.	Attributes: use of financial resources to manage chronic diseases, acquisition of health and diseases, use of constant social support, positive response to health changes, continuous cooperation with the health system, and active participation in permanent disease management. Predecessors: physical environment, stable social environment, physical ability, cognitive abilities, employment and permanent income, desire for independence. Consequences: empowering patients, reducing the burden on carers, reducing dependence on the health system, improving health outcomes, reducing costs for the health system.	Level 7
Grady & Gough, 2014 [17]	Literature review	Suggest ways to improve research methods for self-management.	Effectiveness of self-management intervention programs addressing specific diseases identified.	Level 7
Hasanpour-Dehkordi, 2016 [18]	Literature review (Rodgers evolutionary method of concept analysis)	Analyze the concept of self-care in cancer patients.	Attributes: education, interaction, self-observation, and self-dependence. Predecessors: connected with clients (self-efficacy, self-confidence), with the system (relevant resources, social networks, and cultural factors), and with health professionals (cooperation). Consequences: relieving stress, promoting quality of life, lifestyle changes, improving knowledge and awareness, increasing disease adaptation, and disease acceptance.	Level 7
van Hooft, et al., 2015 [19]	Mixed methods study	Identify nurses' perspectives on self-management.	Self-management is the main task of nurses, but there is a different view of nurses on self-management support.	Level 4
Hughes, 2010 [20]	Literature review (Rodgers and Knafl's evolutionary method of concept analysis)	Analyze the concept of self-management of chronic diseases in the elderly.	Attributes: knowledge / education, relationship / partnership, self-control / self-care. Identified predecessors from the literature are time frame, self-efficacy, ability to participate, and the impact of a professional perspective. The consequences are monitoring and adherence to treatment, lifestyle changes, improved quality of life.	Level 7
Høy, Wagner & Hall, 2007 [21]	Literature review (concept analysis)	Analyze the concept of self-care for the elderly.	Attributes: basic capabilities, power capabilities, performance capabilities, practice, educational process, life experience, and ecological process. Predecessors: process conditions, personal conditions, interpersonal and external conditions that allow stability or change, adaptation. Consequences: positive (physical, mental, and social well-being and independence, self-confidence and ability to cope, capacity for success and freedom, positive self-image, educational development, exceeding only functional balance and integrity) and negative (helplessness, apathy, dependence, abandoned self-care).	Level 7
Kralik, et al., 2004 [22]	Qualitative research	Understand how to explain the concept of self-management in people with chronic illness.	Attributes: recognizing and monitoring boundaries, mobilizing resources, managing the movement of one's own identity, balancing, pace, planning, and prioritizing.	Level 6
Ling & Yu, 2018 [23]	Literature review (Concept analysis according to the Walker and Avant method)	Analyze the concept of self-management in the context of rehabilitation of cancer patients.	Attributes: active participation, problem-solving, use of resources, and perception of needs. Predecessors: self-efficacy, disease knowledge, and social support. Consequences: improved health outcomes, improved quality of life, reduced healthcare expenditures.	Level 7
Liu, 2012 [24]	Literature review (Concept analysis according to the Walker and Avant method)	Analyze the concept of self-efficacy in the elderly with diabetes.	Attributes: cognitive recognition of the necessary specific techniques and skills, perception of expectations about self-management results, confidence in performing self-management, and continuous efforts for self-management. Predecessors: relevant knowledge, personal experience, role modelling, and family support. Consequences: adherence to the prescribed regime and successful disease management.	Level 7
Luhr, et al., 2019 [25]	Randomized controlled clinical trial	Describe the impact of the self-management program.	There were no specific differences between the intervention and control groups.	Level 2
Mammen & Rhee, 2012 [26]	Literature review (Norris method of concept analysis)	Analyze the concept of asthma self-management in adolescents.	Attributes: symptom prevention, symptom monitoring, acute symptom treatment, and communication with significant others. Predecessors: interpersonal factors and external factors. Consequences: asthma outcome.	Level 7
Marzband & Zakavi, 2017 [27]	Literature review (Rodgers evolutionary method of concept analysis)	Analyze the concept of self-care based on Islamic literature.	Attributes: attention to mental health, consideration of physical needs, mental health care, directing social health to self-care. Predecessors: religious instruction as a source of self-care, originality of spiritual health in self-care, taking responsibility in guardianship. Consequences: disease prevention, disease control, social support, and clean life.	Level 7
Matarese, et al., 2018 [28]	Literature review (concept analysis)	Analyze the self-care and related concepts.	Attributes: maintaining a healthy lifestyle, preventing the onset of symptoms, assessing physical and mental changes, adhering to a therapeutic regimen, monitoring signs, and coping with the effects of the disease. Predecessors: information, knowledge, self-efficacy, motivation, and social support. Consequences: changes in physiological parameters, improved quality of life, independence, satisfaction and empowerment, reduced use of health services.	Level 7

cont. Tab. 2. Basic characteristics of included literature

Author, year	Typology	Aim	Findings	Hierarchy of the evidence
Miller, et al., 2015 [4]	Literature review (hybrid concept analysis)	Analyze the literature in the field of the concept of self-management of chronic diseases.	Predecessors: self-efficacy, disease knowledge, social support, health beliefs, motivation, and coping. Consequences: different outcomes, including disease status/severity, treatment adherence, utilization of health care resources, functional capacity, and quality of life.	Level 7
Omisakin & Ncama, 2011 [5]	Literature review	Examine the concept of self-sufficiency and the concept of self-management.	Self-management encompasses the patient's ability to manage disease symptoms, medical interventions, and disease consequences.	Level 7
Osokpo & Riegel, 2019 [29]	Literature review	Examine cultural factors influencing self-care.	Cultural beliefs and social norms significantly impact self-care, how the patient interprets symptoms, and how they respond.	Level 7
Riegel & Dickson, 2008 [30]	Literature review	Describe a situation-specific theory.	Recognizing symptoms is key to successful self-care management; self-care is better in patients with more knowledge, skills; trust moderates and mediates the relationship between self-sufficiency and outcomes.	Level 7
Riegel, Jaarsma & Stromberg, 2012 [6]	Literature review	Describe the theory of medium-scale self-care of chronic diseases.	The key concepts are maintenance, monitoring, and self-management. The main elements of the theory are: assessment of changes in physical and emotional signs and symptoms, response to changes, consultation with the health care provider, attention to the effectiveness of treatment, and awareness of the situation. In addition, factors influencing self-care, including experience, skills, cognition, support, and access to care, are also described.	Level 7
Riegel, et al., 2018 [2]	Psychometric testing	Develop and psychometrically test the SC-CII instrument.	The SC-CII instrument is designed to measure self-care for adults with chronic illnesses and includes subscales self-care maintenance, self-care monitoring, and self-management.	Level 4
Riegel, Jaarsma & Stromberg, 2018 [31]	Literature review	Describe the theory of medium-scale self-care of chronic diseases.	Describe the theory of medium-scale self-care of chronic diseases-basic concepts: self-care maintenance, self-care monitoring, and self-care self-management.	Level 7
Schilling, Grey & Knafl, 2002 [32]	Literature review (Rodgers evolutionary method of concept analysis)	Analyze the concept of self-management of type 1 diabetes in children and adolescents.	Attributes: process, activity, and goals. Predecessors: age, gender, motivation, cognitive abilities, skills, and knowledge. Consequences: metabolic control, freedom/health/well-being, universal self-management, looking at coping strategies as effective, global self-worth, adaptation, perception of health.	Level 7
Song & Lipman, 2008 [33]	Literature review (Rodgers evolutionary method of concept analysis)	Analyze the concept of self-monitoring in type 2 diabetes.	Attributes: awareness, interpretation, and response. Precursors: diagnosis of SB type 2, knowledge and skills. Consequences: achieved glycemic control, reduced complications associated with diabetes, fewer problems with symptoms, improved quality of life, improved self-care adequacy, improved coping skills, improved patient attitudes to the disease, improved knowledge.	Level 7
Udlis, 2011 [7]	Literature review (Rodgers evolutionary method of concept analysis)	Analyze the concept of self-management in chronic diseases.	Attributes: education/knowledge, decision making, participation, and adherence to the plan. Predecessors: information, self-efficacy, support, intent, and mutual investment between the patient and the healthcare provider. Consequences: improved clinical outcomes, reduced costs, improved quality of life.	Level 7
Van de Velde, et al., 2019 [8]	Literature review (Concept analysis according to the Walker and Avant method)	Analyze the concept of self-management of chronic diseases in the patient.	Attributes: active participation, taking responsibility, coping with inconvenience, information, individual definition, mutual partnership with the provider, openness to social support, lifelong tasks, problem-solving, decision making, use of resources, forming a partnership between the patient and provider, goal setting, medical management, role management, emotion management. Predecessor: self-efficacy and health literacy. The consequences are improved health outcomes, reduced mortality, improved functional capacity, improved quality of life, reduced health care costs, improved personal experience, improved social participation, improved functional outcomes, improved health behavior, improved self-efficacy, treatment adherence, and reduced use of health resources.	Level 7
Vaughan Dickson, et al., 2017 [34]	Psychometric testing	Develop and test the psychometric properties of the SC-CHDI instrument.	The instrument is designed for people with coronary heart disease and includes maintenance, guidance, and trust.	Level 4
Weinert, Cudney & Hill, 2008 [35]	Literature review	Determine the presence of a consideration of values and the present differences between the population.	Geographical and social isolation pose a significant challenge in treatment and the presence of inequalities among the population.	Level 7
Wilde & Garvin, 2007 [36]	Literature review (Rodgers and Knafl's evolutionary method of concept analysis)	Analyze the concept of self-monitoring.	Attributes: awareness of symptoms, feelings, activities and cognitive processes, measurements, recordings, or observations. Predecessors: knowledge of disease processes and symptoms, social support for health, problem-solving and measurement/recording skills, the goal for living with a chronic disease. Consequences: improved self-management through better recognition of symptoms, improved disease management, targeting more realistic goals, and contributing to a better quality of life.	Level 7
WHO, 2009 [37]	Report of the regional consultation	Consult on the integration of self-care in primary health care.	Self-care can alleviate the burden of an overburdened health system, reduce costs, and increase its efficiency.	Level 7

Legend: SCODI –Self-Care of Diabetes Inventory; SC-CHDI – Self-Care of Coronary Heart Disease Inventory; SC-HI – Self-Care of Hypertension Inventory

Identification of the use of the concept

Self-management is the part of self-care that is defined as the process of maintaining health [2]. It plays an essential role in reducing disease complications and improving quality of life [29] and is performed in healthy and diseased conditions [6].

Self-management is the pooling of goals and the partnership of the patient, family, community, and healthcare professionals to best manage the patient's illness while facilitating comprehensive care [17]. Self-management refers to the patient's ability to cope with symptoms, treatment, physical and psychosocial consequences, and lifestyle changes [5]. Chronic illness requires a person to adhere to a self-management regime to maintain optimal health and avoid life-threatening complications. Effective self-management of chronic diseases requires daily prioritization and decision-making [3]. In addition, self-management strategies can encourage patients to engage with healthcare professionals to manage the disease, representing an opportunity for self-care [25]. The implementation of self-management shows the potential in the preventive healthcare field at the primary, secondary, and tertiary levels [17].

Defining defined attributes

Attributes represent the characteristics of the concept used that distinguish concepts from similar or related concepts. Any concept is usually characterized by the definition of several attributes that define it [11-13,38]. Based on the literature analysis, we identified seven attributes of the concept of self-management of chronic diseases: (1) assessment of changes in physical and emotional signs and symptoms, (2) response to change, (3) consultation with a nursing care provider, (4) communication, (5) goals, (6) attention to treatment effectiveness, and (7) awareness of the situation.

Assessment of changes in physical and emotional signs and symptoms allows us to determine whether action is needed [6] or consultation with care providers [30,36]. Monitoring is necessary to manage the presence of changes in signs or symptoms, as individuals cannot decide on the change if observed and assessed [6]. Response to change is defined by Song and Lipman [33] as a reaction to a specific stimulus or situation. In self-care management, this treatment may require consultation with a nursing provider [6] or consultation in other informal groups [16]. Consultation with a nursing care provider is essential to exchange and communicate opinions and views [26]. Patients participate in this process to achieve specific goals [32]. Self-management should be focused on observing the effects of treatment, as the patient can assess whether a particular intervention has had a positive impact on his/her health and decide whether to do it again in the future [6]. Awareness can be broadly defined in the context of self-observation so that each patient recognizes individual manifestations of own health condition and disease [33].

Identification of precursors and consequences

Predecessors are defined as events that must occur before the concept emerges and prove it with their presence [11-13,38]. Matarese et al. [28] state that the whole process of self-care as well as self-management, as part of this process, is influenced by predecessors such as efficiency, learning, motivation, perception of imbalance, religious beliefs and regulations, commitment, and decision-making, and external factors, such as the availability of social support and resources [21,27]. Predecessors that can serve as barriers and facilitators are experience and skills, motivation, habits, cultural beliefs and values, functional and cognitive abilities, self-confidence, support, and access to care [6,31]. Among the predecessors of self-management, Van de Velde and others [8] emphasize self-efficacy and health literacy.

Consequences are events that occur after the emergence of the concept [11-13,38]. For example, Udlis [7], in an analysis of the concept of self-management in chronic diseases based on a literature review, finds that the most common consequences are improved clinical outcomes, reduced health care expenditures, and improved quality of life. Other authors also identified consequences that include a variety of outcomes, including disease status or severity, treatment adherence, utilization of health care resources, functional capacity, and quality of life [4], improved health outcomes, reduced mortality, improved functional abilities, improving quality of life, reducing health care costs, improving the personal experience, improving social participation, improving functional outcomes, improving health behavior, improving self-efficacy, considering treatment, and reducing the use of health resources [8]. Individual authors focus on disease-specific consequences [16,18,20,23,24,26,32,33] or an individual patient's life span [21].

Consideration of content and values

There are differences in the provision of self-care and self-management of patients according to a number of social factors and health conditions. Self-sufficiency and self-management are influenced by socio-cultural, economic, and political factors [37]. Geographical and social isolation is a major challenge for rural people. Feelings of isolation can lead to a number of societal ailments and side effects, such as alcohol and drug abuse, suicide, and family distress [35].

Identification of empirical indicators

Empirical indicators identified, based on a literature review, are Self-Care of Chronic Illness Inventory (SC-CII or "Sky") [2], Self-Care of Hypertension Inventory (SC-HI) [34], Self-Care of Coronary Heart Disease Inventory (SC-CHDI) [34] and Self- Care of Diabetes Inventory (SCODI) [14]. These empirical indicators represent scales for measuring self-sufficiency maintenance, self-care monitoring, self-care self-management, and self-confidence measurement.

DISCUSSION

Through a review of the literature, we identified the attributes of the concept of self-management of chronic diseases, which are: assessment of changes in physical

and emotional signs and symptoms, response to changes, consultation with the health care provider, communication, goals, attention to treatment effectiveness and situational awareness. It would make sense to include defined attributes in patients' innovative devices to manage their disease. The predecessors most often referred to knowledge, experience, motivation, and the physical and social environment. Predecessors, such as efficiency, understanding, learning, motivation, habits, religious and cultural beliefs, self-confidence, commitment, decision-making ability, and the availability of social support and access to care, were most common. The consequences could be divided into two groups: the consequences in relation to the patient and the consequences in connection with health services. Among the most common consequences in the literature, the authors cite health and well-being, improving clinical outcomes, enhancing quality of life, and reducing health services, thereby reducing health care costs.

The concept of self-management of chronic diseases is an abstract concept representing an essential aspect of treating persons with chronic disease and influences disease outcomes [7]. Song and Lipman [33] state that to begin self-management of chronic disease, a diagnosis is required that triggers the entire process. However, the patient must also know the disease process [36] and acquire the necessary knowledge [24]. The concept is also significantly influenced by a motivation to achieve the desired goal and social support [4,28]. In the process of self-management, it is important that the patient is aware of the state of health and that he knows how to detect and respond to any changes or deteriorations within his well-being [6]. In successful self-management of the disease, the patient's health and well-being improve, contributing to a higher quality of life [36] and reduced use of health resources [8].

When analyzing the concept of self-management of chronic diseases, it is necessary to be careful when using or interpretation of the word chronic disease, as many authors cite reflux disease, multiple sclerosis, depression, osteoporosis in addition to diabetes, coronary heart disease, hypertension, and chronic obstructive pulmonary disease [39-41]. Special care is also needed in patients with multimorbidity [42-44]. The inconsistency of vocabulary choice is also a limitation. Often, the term self-management is used interchangeably with terms such as self-care, self-regulation, patient education, and patient counselling [17,45]. The concept of self-management of chronic diseases is also defined too focused on the internal characteristics of the patient. It does not include the external environment [4], an important cause of the disease, but is often poorly understood [46]. The analysis results need to be interpreted with care because despite the broad search strategy, we did not cover all databases, and we only deal with English literature. The literature included in the analysis was heterogeneous, different research plans and quality.

Limitations

Despite the limitations of the literature review, we found the applicability of the concept. The opportunity is to integrate the concept into the clinical environment and integrate it into modern technology. It can be helpful to healthcare professionals in formulating recommendations and guidelines, as they can monitor and promote the improvement of self-management and analyze its impact by identifying the presence of precursors, attributes, and consequences. Also, the concept of self-management of chronic diseases is helpful for the patient. It offers guidance in self-care for his/her health and disease management and allows his/her more accessible advice in the use of modern technology.

CONCLUSIONS

Clarification and analysis of the concept have shown that the concept is complex. It refers to a complex process that is influenced by many external and internal factors. By taking and implementing measures, a patient with a chronic disease affects the improvement or maintenance of his/her health condition, thus improving the quality of life and reducing medical treatments and related costs. Further analyzes are needed to apply the concept in a clinical setting. It is necessary to consider the individual characteristics of patients and adapt the concept to different groups of patients, the type of chronic disease of the patient, and the type of treatment.

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