

CHRONIC HEALTH CONDITIONS IN ADULTS: CONCEPT ANALYSIS¹

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This study aimed to define the concept of chronic health condition in adults as presented in literature. An evolutionary perspective of concept analysis was used, as presented by Rodgers, emphasizing the essential attributes, antecedents, consequences and related concepts. The adult's chronic health condition was presented by the characteristics of permanence, irreversibility, residual handicap, incurable and degenerative as essential attributes. The antecedents were: genetic heritage, old age, birth condition, smoking and foods with saturated fat; and, for the consequences: physical, social and psychological changes, handicaps and disabilities, life style changes, needs to adapt and cope. Related concepts were: not transmissible diseases, functional deficiency, limitations, illness or impairment for more than three months. Chronic health condition is a complex construction of concepts defined as a modifying force of the life process over time.

DESCRIPTORS: chronic illness; health; adult; concept formation

CONDICIÓN CRÓNICA DE SALUD DEL ADULTO: ANÁLISIS DE CONCEPTO

Tuvo como objetivo definir el concepto de condición crónica de salud del adulto, expresado por la literatura. Se utilizó en esta investigación el análisis de concepto, en la perspectiva evolutiva de Rodgers, destacando los atributos esenciales, eventos antecedentes, eventos consecuentes y conceptos relacionados. La condición crónica de salud del adulto es expresada por las características de permanencia, irreversibilidad, incapacidad residual, incurabilidad, degeneración y larga duración, configurando estas los atributos esenciales. Dentro de los eventos antecedentes constan: la herencia genética, edad avanzada, causas congénitas, tabaquismo y alimentos con exceso de grasas saturadas, de los eventos consecuentes las modificaciones físicas, sociales y psicológicas, incapacidades/inhabilidades, cambios en los estilos de vida, necesidades de adaptación y enfrentamiento. Los conceptos relacionados fueron: enfermedades no-transmisibles, deficiencia funcional, limitaciones, enfermedad o incapacidad con duración mayor de tres meses. Se concluye que la condición crónica de salud es una construcción compleja de conceptos, definida como fuerza modificadora del proceso vital en el tiempo.

DESCRIPTORES: enfermedad crónica; salud; adulto; formación de concepto

CONDIÇÃO CRÔNICA: ANÁLISE DO CONCEITO NO CONTEXTO DA SAÚDE DO ADULTO

Objetivo: definir o conceito de condição crônica no contexto da saúde no adulto, expresso pela literatura. Utilizou-se a análise de conceito, na perspectiva evolucionária de Rodgers, destacando os atributos essenciais, eventos antecedentes, eventos consequentes e conceitos relacionados. A condição crônica de saúde do adulto é expressa pelas características de permanência, irreversibilidade, incapacidade residual, incurável, degenerativa e longa duração, figurando os atributos essenciais. Dentre os eventos antecedentes constam: herança genética, idade avançada, causa congênita, tabagismo e alimentos com excesso de gordura saturada; os eventos consequentes referem-se às modificações físicas, sociais e psicológicas, incapacidades/inabilidades, mudanças no estilo de vida, necessidades de adaptação e enfrentamento. Os conceitos relacionados foram: doenças não-transmissíveis, deficiência funcional, limitações, doença ou incapacidade com duração maior que três meses. Concluiu-se que condição crônica de saúde é uma construção complexa de conceitos, definida como força modificadora do processo vital no tempo.

DESCRIPTORES: doença crônica; saúde; adulto; formação de conceito

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INTRODUCTION

Current scientific advancements have provided humans with the opportunity to considerably extend their life, which directly affects life expectancy. Man has pursued this goal since primitive times, seeking to understand essential and restless issues regarding life and death. In this view, disease research becomes essential for human survival.

Several studies aim to understand the health-disease process, and some focus specifically on chronic health situations. At first, there was a prevalence of research in the medical field. However, more recently, other fields have been involved, including sociology, psychology, anthropology and nursing.

In this sense, it is acknowledged that the current epidemiologic profile in Brazil is represented by diseases related to underdevelopment as well as modern issues. Therefore, the country faces difficulties in directing actions toward health promotion and protection, which comprise the control of transmissible diseases (TD) as well as chronic non-transmissible diseases (CNTD)⁽¹⁾.

Mortality rates regarding infectious-contagious diseases have been controlled by indicating medications for their inhibition, control or dissipation. Moreover, control has been performed by using technology resources that allow for early detection of organic and physical changes in populations, thus implementing resources in public health policies.

Furthermore, technological and scientific developments have made it possible to reach early diagnoses and, thus, anticipate appropriate therapy. This provides promising outcomes for disease evolution control and/or cure, and helps to characterize difficulties and inefficient measures.

Science contributes not only by discovering and using treatments with medications or natural active principles, but also through research that expands the analysis of life-limiting situations, such as limb or body segment amputation and paraplegias, creating alternatives and adjustment instruments capable of offering better life conditions.

Along with the effort to broaden discussions about the health-disease process, this study aims to understand chronic health condition in adults from a perspective of healthy living, considering that people in this condition seek to promote adjustments in order to balance harms and limitations posed by the disease or life situations with health promotion measures.

Defining nursing concepts has the purpose to provide more precise terminology, with a view to facilitating and expanding comprehension among health agents. Word meanings and their connection to their history or origin are important because they represent symbols and meanings established by use, traditions or associations⁽²⁾.

The objective of this research is to define the concept of chronic health condition in adults, as expressed in health literature.

This study uses the evolutionary model of concept analysis⁽³⁾, which idealizes the following phases: to identify the concept of interest and associated expressions; to identify and select the appropriate field for data collection; data collection, recognizing attributes of the concept and substitute, associated, antecedent, and consequent terms; to analyze the data and identify concept characteristics and its antecedent, consequent, and substitute terms; to identify concepts of interest; to identify the concept's case model; to identify hypotheses and implications for further studies.

However, in this study, the substitute terms, model case, hypotheses and its implications are not discussed.

METHOD

This study followed documental research principles. The study construction permitted the identification of authors who have studied chronic illnesses, thus allowing for the expression of their views about the health area.

Documental research implies choosing the type of document and the theme to be investigated. In addition, since it is not random, it reflects researchers' purposes, ideas and presuppositions guiding the study. After selecting a type of document, the next step is to objectively examine the messages, which, inserted in a field of theoretical comprehension, will permit to classify, code and categorize the concepts⁽⁴⁾.

The keywords used to find publications were *chronic disease* and *chronic illness in adults*. A great number of studies focusing on disease were located. Then, it was established that the study period, for national and foreign literature, would be the five years preceding the moment of study, that is, 1994 to 1998.

The LILACS, MEDLINE and CINAHL databases were used, which were supplemented with

dissertations, theses and books published in Brazil, in addition to the base of the Center for Nursing Studies and Research (CEPEEn), produced by the Brazilian Nursing Association (ABEn).

To guide the first selection, the authors chose articles that included the following expressions, in the three languages: in Portuguese: *condição crônica*, *doença crônica*, *doença de longa duração*, *cronicidade* and *adulto*; in English: chronic illness, chronic disease and adult middle age; and in Spanish, *enfermedades crônicas* and *adulto*.

Languages were chosen based on researchers' language abilities. However, articles in other languages were found, including French and German.

After analyzing the abstracts, articles were excluded if they mentioned children or adolescents, or if they focused on infectious-contagious processes. Another established criterion was that, in addition to the keyword in the title, authors should present a definition of chronic disease or chronic illness in the manuscript.

After these steps, a new reading was performed and documents that met the established criteria were selected.

The time sample used to analyze the concept of chronic health condition consisted of 119 articles, listed in Table 1, according to publication year and number in the respective source.

To provide reliability to a documental research, the set of articles should consist of at least 30% of the total amount analyzed according to the established criteria.

Table 1 - Number of publications and year, according to the database. Ribeirao Preto, 1999

Year	MEDLINE	LILACS	CINAHL	CEPEEn	Total
1994	08	02	05	02	17
1995	09	03	12	03	27
1996	11	05	13	02	31
1997	06	01	08	02	17
1998	10	03	11	03	27
Total	44	14	49	12	119

The total did not consider studies cited simultaneously in more than one source.

Based on this set of documents, the body of analysis could be determined, which represented about 30% of the studies, that is, a total of 41.

The 41 studies were randomly selected from the original 119 numbered articles, with a view to obtaining greater diversity of concepts regarding

chronic health condition in adults. Articles that cited the same theoretical framework were excluded.

Table 2 lists publications, according to their sources and languages, found in literature published in Portuguese, Spanish and English. The list includes indexed journals, books and chapters, dissertations and theses in nursing and other professions.

Table 2 - Distribution of publications in nursing and other professions, according to source, frequency, language, and research period. Ribeirao Preto, 1999

Source	Frequency			Total
	English	Portuguese	Spanish	
Journals	17	3	2	22
Books	3	7	-	10
Thesis	-	2	-	2
Dissertations	-	7	-	7
Total	20	19	2	41

Table 2 shows the set of documents that met the research criteria, which were used to analyze the concept of interest - chronic health condition in adults.

Articles were obtained at a public university and through an interlibrary loan network. Each document was subjected to a brief reading to analyze title and content, and to check if they met the criteria: address the theme and present the chronic health condition concept in adults.

This reading allowed for a closer look at these articles, and the selection of articles for the body of analysis, in addition to the refinement of the sensitivity in terms of recognizing the concept assigned by the articles' authors, identifying phrases, themes, words/terms, expressions, and, when possible, paragraphs. All identified information was recorded on a separate piece of paper in order to better organize the concept analysis.

The chronic illness phenomenon is observed through the following terms: disease/illness (incurable, long term, for life); condition; problem; characteristics; symptoms; severe and advanced status; group of diseases that often appear with age and unhealthy life styles.

Therefore, chronic illness is understood as the medical condition or health problem with symptoms or limitations that require long term management⁽⁵⁾.

These samples were analyzed, searching for descriptions regarding the concepts of chronic illness and chronic illness in adults. After the readings, the data were reviewed and organized to assure a consistent approach and reduce investigation biases. It was clear that the expressions chronic health

condition and chronic illness prevailed as those used to refer to the concept.

Another strategy used to state and broaden concepts was to pair the identified samples. Hence, after taking note of words and/or expressions that most closely expressed the ideas, essential attributes that permitted to understand the concept were highlighted, in addition to antecedent and consequent events.

However, this investigation reveals a surprising and ordered use of interpretations, expressed as chronic illness, whereas few studies address the issue as chronic health condition, in the perspective of being healthy.

The chronic health condition concept has attracted much interest because it emphasizes prevention over cure, delay over palliation and autonomy over paternalistic health care⁽³⁾.

This idea reaffirms the need to define the comprehension of chronic health condition within the health context, associated with the relationship between people and environment, determining their needs, view of the world and orientation in life.

CONCEPT ANALYSIS ACCORDING TO RODGERS

Attributes of the study concept

Attempts were made to observe how the concept is defined, as well as the attributed characteristics, and the ideas that discuss chronic health conditions in adults, since the essential attributes express the concept's nature.

The following guiding questions were used to identify the concept: How does the author define the concept? What characteristics/attributes does the author state? What ideas does the author discuss regarding the concept of chronic health conditions in adults?

Seven attributes were always present in the chronic health condition and permitted to recognize the effects on the person, family and community: long term health condition; causes residual incapacity and inability; requires more palliative effort; favors the onset of multiple illnesses; requires continuous monitoring; requires a broad support service network; and is costly.

The concept assembles attributes that permit to differentiate them from expressions with false concepts, which are evidenced by their use. Attributes

are words and/or expressions that are frequently used and presented as statements of the elaborated concepts, which are considered essential⁽³⁾. Among the attributes identified in the analysis of the 41 documents, some were stated more often than others, as shown in Table 3.

Table 3 - The most often stated essential attributes about chronic disease and chronic health condition, according to the number of authors. Ribeirao Preto, 1999

Essential attributes	Number of authors
Permanent character	17
Residual incapacity	17
Long term	15
Incurable	12
Degenerative	07
Irreversible	07
Continuous medication dependence	07
Recurring character	05

Chronic health condition can be considered a life experience that involves permanence and a deviation from normality, caused by pathologies that imply loss and dysfunction, in addition to the permanent change in everyday life. Furthermore, it expresses that this permanence causes stress due to the changes to body image, the need for social and psychological adjustment and the change in life expectancy⁽⁶⁾.

The following attributes refer to concepts stated by the aforementioned authors.

Chronic health condition implies a complex, continuous, permanent situation, and requires specific strategies to change one's lifestyle; Chronic health condition is characterized by its long term and requires mental preparation to adjust and adopt precautions in life, which involves strategies to deal with the symptoms and face the changes in lifestyle, and family and social relationships; Chronic illness is an incapacitating condition that requires long term care, in addition to continuous and simultaneous primary and secondary prevention, as well as rehabilitation services. The cure process is very slow or inexistent with age, which generates residual incapacity and sometimes frequent illness recurrences (A1, A2, and A3).

Other attributes are stated, including: advanced age, limitations, inabilities, deviation from normality, disease or incapacity for over three months, a slow and progressive illness, one that changes relationships, and causes deformations and severe functional impairment.

The distinction between secondary and essential attributes. Secondary attributes represent expressions associated with the concept of interest,

whereas essential attributes allow for broad comprehension⁽⁷⁾.

Some authors refer to *advanced age* as a secondary attribute of chronic health conditions, as shown in the following article excerpts.

Chronic health condition is entirely associated with elderly adults but, in some situations, it does not limit the performance of health promotion activities. Chronic health condition is the age label and appears as people get older. It means life span has increased; sometimes it is self-generated, inherent to the lifestyle and environmental risks (A4 and A5).

Although these authors referred to advanced age as an attribute of chronic health conditions in adults, it is acknowledged that this concept is not well defined, since it would be more appropriate to characterize antecedent events.

The purpose of analyzing the concept chronic health condition in adults is to provide a number of new pathways and information regarding the construction of the expression. This would make it less disperse and ambiguous. It is important to identify the attributes of the expression in order to obtain a broader comprehension of this concept.

CONCEPT ANTECEDENTS

Antecedents are referred to as situations, events or phenomena that precede a concept of interest. They help to understand the social context in which the concept is generally used, and they favor refining that concept.

In this investigation, antecedent events were identified through answers to the following question: What events contribute to the eminence of the chronic health condition concept?

Some of the analyzed documents revealed antecedents that emerged more frequently than others, as shown in Table 4:

Table 4 - Most frequent antecedents for the chronic health condition concept, according to the number of authors. Ribeirao Preto, 1999

Antecedents	Number of authors
Unhealthy life style (smoking, alcoholism, fatty foods...)	29
Genetic inheritance	19
Non compliance with treatment	17
Environmental, pyschosocial and economic factors	16
High stress levels	13
Congenital causes	11
Advanced age	09
Accidents	06
Technological advancement	06

Among the identified antecedents, it is observed that genetic inheritance is appointed as the main generator of health problems, including chronic illness.

Studies have sought to identify, in genetic structure, the main generator of any health problem. Due to its characteristics, strengthening that factor would represent the supreme expression of biologization in illness causes and individualization in health care practice⁽¹⁾.

The following statements report these antecedents.

Diabetes has a hereditary component, but also obliges to factors associated with lifestyle; continuous genetic following could lead to early treatment and allow for reducing complications. However, it is essential to manage not only the illness but also the associated risk factors; Habits of modern society also contribute to increasing the incidence of chronic illness. Diets rich in saturated fat and cholesterol, sedentary lifestyles, substance abuse, smoking, and high stress levels are all related to the development of chronic health conditions in genetically susceptible individuals (A1 and A8).

Moreover, other antecedent events have also been stated as being responsible for the group of determinants that cause chronic health condition in adults, that is, life/lifestyle conditions (sedentariness, obesity, alcohol misuse, hypercholesterolemia), high stress levels, environmental factors (workers exposed to electromagnetic waves in electricity companies), besides conditions resulting from technological advancements and accidents, which are found in the following segments:

Exogenous factors, particularly the incorporation of new technologies, have a predominant role in setting new morbid standards, regardless of the social and economic development characteristics, the forms of social organization, and the construction of social policies, which consist of particularities intrinsic to each society⁽¹⁾.

Chronic health condition is usually linked to the stress affecting all life components, represented through personal internal and external factors; A continuous disease that makes people dependent on specialist care and therapies, which demand people to quit smoking, change their lifestyle, and manage stress (A9 e A10).

In this sense, it is believed that, for the twentieth century, chronic health conditions will be responsible for major health problems in the world, compromising especially the elderly. Highlighted causes are: lifestyle, environmental factors, stress, and car accidents⁽⁸⁾.

CONCEPT CONSEQUENCES

Consequent events refer to events or situations resulting from chronic health conditions in adults, which are evident in the effective concept use. They were identified based on the following question: What consequences were evident after adult chronic illness settled in?

Consequent events are useful because they provide new research ideas, since they allow for broader research regarding all aspects of the concept and study⁽⁷⁾.

The examined documents, rich in information regarding the concept of interest, contained consequent events, which are discussed in biological as well as social and cultural questions.

Table 5 - Events consequent to chronic health condition in adults and chronic disease, according to the number of authors analyzed

Consequent event	Number of authors
Physical, social, and psychological changes	21
Changes in life style	25
Incapacity/inability	11
Need to adapt to and cope with situations	17
Stigma	06
Need to comply with a continuous treatment	05
Depression	05
Musculoskeletal, circulatory, respiratory and digestive disorders	05
Dependence	05

Chronicity can also be implied in topics involving various consequent events, listed in Table 5, pointing to other indicators, for instance: controlling multiple nature problems, changes and identifications of events in several disease course arrangements⁽⁵⁾.

Chronic illness generates other chronic health conditions, affecting families that take up greater responsibilities in controlling these events, through daily discoveries, which demand special medical, social and emotional abilities inherent to the condition. This makes families live with uncertainty and face ethical, individual, social and professional dilemmas, in addition to the obligation of being responsible for onerous and continuous expenses with treatment.

Consequent events are considered as such because people demand family intervention, changes in lifestyle, reduction in pain, social isolation and early retirement. These family responsibilities add up to depression and evidence the increase in costs as a result of chronic health condition in adults⁽⁹⁾.

The analysis of consequent events can, in some cases, evidence other concepts of interest, which are associated with chronic health condition.

Therefore, it is acknowledged that events consequent to chronic health conditions include: social stigma, problems related to sex life, reduction in self-esteem, need for daily health monitoring, need to adapt to the continuous use of medication, and professional and social changes⁽¹⁰⁾.

These situations cause changes in everyday life, involving the understanding of problems that demand the implementation of strategies to reduce, avoid and/or solve risks and complications due to chronic health conditions. These efforts can promote an extended healthy life time.

Other authors have presented the following statements regarding consequent events, listed in Table 5.

Chronic illness appears as an event that causes significant changes in family life, which are often permanent. There are social, economic and personal losses, changing normality in family life, breaking social relationships, and sometimes causing depression; The need to change one's lifestyle, cultural factors, and daily activities due to life habits considered healthy, causes conflicts to some people, even when it is clear that the reason for those changes is to prevent recurrences and chronic illness complications (A13 and A11).

The social stigma shown by people with chronic health conditions is caused by the changes in mobility, body image, and sexuality. The psychosocial impact includes loss of self-esteem, anxiety and isolation⁽¹⁰⁾.

Hence, it is observed that people with chronic health conditions go through distinct phases that lead to periods of stability and instability, which exacerbate remission. Each phase has its own set of physical, psychological and social problems, which require different forms and types of management⁽⁸⁾.

The complexity and extension of the problems inherent to having a chronic illness has encouraged many authors to develop studies aimed at analyzing the impact and consequences of this condition. In this case, it is observed that all help actions toward people with chronic health conditions involve individually facing the problem, with effective psychosocial adjustment, building support to find favorable pathways and to deal with these life experiences in a healthy way.

Moreover, consequent psychological and social manifestations are evidenced according to the

evolution of life quality, chronic illness course, and subsequent chronicity condition, manifestations and complications.

RELATED CONCEPTS

The reported concepts gather some secondary attributes that do not agree with those considered essential to the investigated concept. Many of these concepts are close to the phenomena they represent, or are connected with the specific facts or events to be investigated.

The literature review indicated concepts associated with chronic health condition, including: limitations, non-transmissible diseases, illness or incapacity for over three months, imperfections, and inability and functional impairment.

Chronic illness is perceived as something bad, that causes changes and life troubles like limitations, inabilities, and organic and body dysfunctions; This illness results from the social way of organizing life, transitory imperfections or not, due to society's delay in advancing, presenting many defects, besides the hypertrophy of health services that treat those imperfections; Non-infectious, non-transmissible or chronic-degenerative diseases are terms used to define groups of pathologies characterized by the absence of a microorganism in the epidemiological mode, by non-transmissibility, by long clinical course and irreversibility (A14, A15 and A16).

The identification of the associated concepts allows researchers to renovate the meaning of the concept of interest because, thus, the philosophical beliefs that ground the concepts are recognized and strengthened.

In this sense, it is observed that the knowledge construction process and its recent technological and scientific advancements regarding this kind of phenomena has increased, influencing the perspective of health care professionals, including nurses, about the condition in which many diseases are presented in an irreversible state; thus, health care conducts should be reviewed, adopting new technological innovations in addition to humanistic strategies in a balanced way⁽¹¹⁾.

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Nurses, when taking responsibility for care delivery to people with chronic illness, should differentiate personal objectives from real situations, in which these people and their families live. Moreover, they should take cultural, religious, social and psychological factors into consideration in the expressed conducts, which demand professional care.

FINAL CONSIDERATIONS

Concept analysis, guided by the evolutionary perspective, goes through stages to identify the essential attributes that characterize that concept; to recognize preceding and following events as well as the associated concepts, situated in the contexts in which authors develop research.

The concept of chronic health condition in adults showed an association with chronic illness, specifically when focusing on the attributes that characterize the rhythm and direction of the living process over time.

This complex dynamics regarding the changes that occur is indispensable to health care professional knowledge, since it offers the support needed to provide patient care that values knowledge exchange in different subject fields. These fields include nursing, which has attempted to develop its own body of knowledge, for which these concepts are essential.

Analysis results show there are implications for nursing development, because knowledge organization regarding the chronic health condition concept favors the understanding of situations associated with their practice, thus avoiding false concepts.

The investigation also allowed for the recognition of different attributes, events that cause them, as well as outcomes of chronic health conditions in adults, which are relevant to guide health care. It also allowed for observing that chronic health condition involves the health concept in a dynamic relation with the disease, in which permanent irreversible changes occur to people's lives, compatible with chronicity.

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