

DESIGN OF STRATEGIC INDICATORS FOR THE MANAGEMENT OF HEALTH SECTOR INSTITUTIONS IN MEXICO

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Resumen

Introducción. En los últimos 35 años, la diabetes ha causado miles de muertes en México, siendo esta la principal causa de muerte en el país y aumentando en un 300% desde los años 80. Por tal razón, se ha decidido diseñar un modelo de cuidados crónicos que pueda mejorar la calidad de vida, los procesos y disminuir los costos en las instituciones de salud. **Materiales y métodos.** Se realizó una revisión sistemática de literatura de modelos diseñados y ejecutados con éxito entre los años 2007-2017, siendo aplicados en diferentes instituciones de salud del mundo, incluido México. Analizando los elementos críticos de éxito de cada uno de los modelos, buscando replicar los mismos en la propuesta de modelo. **Resultados.** Se diseñó la propuesta de un modelo basado en tres fases: Estructuras, Procesos y conductas. Cada fase con diferentes elementos que complementan la funcionalidad del modelo que puede llevar a mejorar la calidad de vida del paciente. **Discusión-conclusiones.** Se necesitan la implementación de políticas que permitan la estandarización de los procesos en las instituciones de salud, además de un acompañamiento psicológico y personalizado del personal de salud al paciente el cual pueda transformar su conducta y fomentar el autocuidado.

Abstract.

Introduction. In the last 35 years, diabetes has caused thousands of deaths in Mexico, this being the main cause of death in the country and increasing by 300% since the 80s. For this reason, it has been decided to design a chronic care model that can improve the quality of life, processes and reduce costs in health institutions. **Materials and methods.** A systematic review of the literature of models designed and executed successfully between 2007-2017 was carried out, being applied in different health institutions of the world, including Mexico. Analyzing the critical success elements of each of the models, seeking to replicate them in the model proposal. **Results** The proposal of a model based on three phases was designed: Structures, Processes and behaviors. Each phase with different elements that complement the functionality of the model that can lead to improve the quality of life of the patient. **Discussion-conclusions.** The implementation of policies that allow the standardization of processes in health institutions is needed, as well as a psychological and personalized accompaniment of health personnel to the patient which can transform their behavior and promote self-care.

Key Words:

Disease; Chronic degenerative; Model; Health institution.

INTRODUCTION

Theoretical framework

Chronic disease (CD) is the affectation of health that persists over time and requires continuous and permanent attention, such as cardiovascular diseases, diabetes, cancer, some respiratory diseases, AIDS and some types of depression, among others.[1]

The Ministry of Health of Mexico pointed out that in Mexico it is the main cause of death, with a mortality rate higher than 50%, which mainly affects rural areas, since it is about 75% of the inhabitants suffer from a disease of this kind. In the last 35 years, diabetes has caused thousands of deaths in Mexico, this being the main cause of death throughout the country and increasing by 300% since the 80s.[2]

The Food and Agriculture Organization of the United Nations (FAO) and the Pan American Health Organization (PAHO) call for the promotion of healthy and sustainable food systems that link agriculture, food, nutrition and health. To this end, States must promote the sustainable production of fresh, safe and nutritious food, guaranteeing their supply, diversity and access to them, especially for the most vulnerable sectors. [3]

So, for more than 4 years, the campaign "Chécate, mídete y muévete" has been implemented. This national campaign aims to prevent, control, measure and move citizens, the installation of modules takes place throughout the year in different parts of the country. By disseminating and implementing this strategy, the risks to health are reduced, with the consequent individual, family and social benefit.[4]

A care system based on a Chronic Care Model (CCM) means better care for everyone, not just for people with chronic diseases. Primary care plays a fundamental role as a coordination center, but it must be complemented by more specialized and intensive care centers, such as diagnostic laboratories, specialized care clinics, hospitals and rehabilitation centers.[5]

As a way to fight against this emergency we developed a Chronic Care Model (CCM) based on a systematic review of different types of CCM applied to real life around the world. Looking for those that had more impact and success in health institutions. The main objective in this MCC was to improve health and improve a health system at a reasonable cost.

MATERIALS AND METHODS

It was decided to use the method of systematic review of literature (SRL) in this study since our objective was to identify, evaluate, interpret and synthesize all available studies to answer research questions and establish the state of the evidence, with an analysis in deep. The objective of this SRL was to understand what knowledge-based approaches can be used to improve the quality of CCM. We also investigate what quality attributes matter to CCM, as well as the costs and benefits of using different types of CCM. [6].

An SRL was conducted on knowledge-based approaches in CCM published from 2007 to February 2017. The main objectives of this review are the following: (1) What are the quality attributes most used for CCM? (2) What are the main challenges, problems or deficiencies in CCM? (3) What is the critical success factor for the adoption and implementation of CCM in the health institution? (4) How does the CCM benefit or improve the health institution?

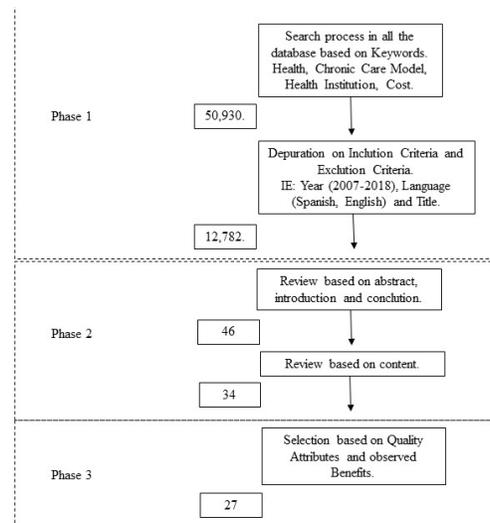
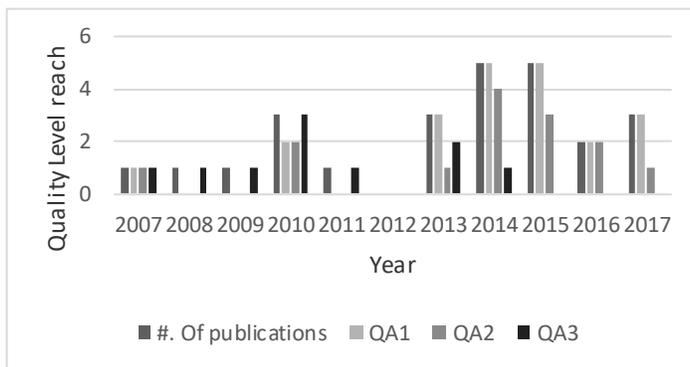


IMAGE 1. SLR Process.

After a deep search in different databases, the RSL resulted in the following way.

As you can see in Phase 1, the articles were taken with the keywords that were designed for this research, in addition to the years and the language. In phase two, they were chosen based on the summary and conclusions, as well as on the basis of the full text and content of the selected articles. Finally, in the third phase, they were revised based on the criteria and quality attributes established and those that met at least two criteria with a maximum rating were chosen. That is, those who had a model designed and implemented successfully in a health institution, in addition to having a high impact and a high level of replicability.

In this chart, you can see the total number of publications per year included in the SRL and analyzed with respect to the years and the quality attribute at level 3, which was the highest that was established to qualify each of the attributes of quality.

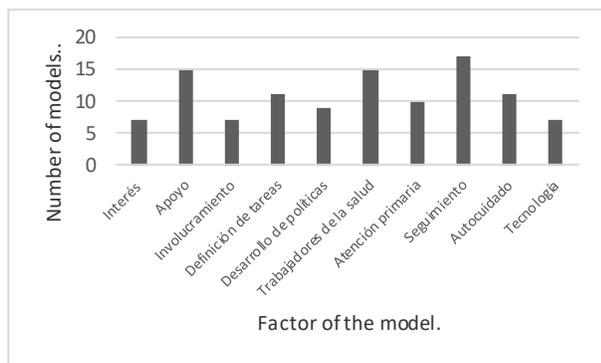


As you can see, the quality levels of the studies fell in 2008 and 2009, but they reinforced their quality levels in 2010. On the other hand, in 2012 no good results were found. However, in recent years the level of studies carried out and the quality of these has grown considerably, allowing better results in the CCM.

GRAPH 1. Quality Level on the studies.

RESULTS AND DISCUSSION

Several main elements were found that coincided in the studies reviewed in the RSL. These elements were considered to make the model proposal, which were the following:



As you can see, support, health workers and patient follow-up are the most mentioned and frequently used elements in the different models applied in health institutions.

Based on these elements, a proposal of its own model was developed, taking into account these factors, as well as others that are considered important for the development and functioning of the care process for patients with chronic diseases.

GRAPH 2: Key factors on CCM

The proposed model has the following structure:

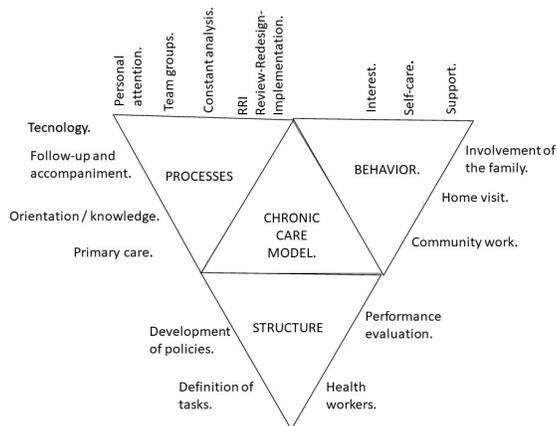


IMAGE 2. Proposed CCM.

It was decided to take the model used in consulting to impact on organizational change, which consists of 3 main stages.

- Behaviors: behavior is part of the functioning of an organism that is dedicated to act or interact with the outside world. [7]
- Structure: Set of relationships that hold together the parts of a whole. Way to organize or order the parts of a whole. [8]
- Process: A process is a set of planned activities that involve the participation of a number of people and coordinated material resources to achieve a previously identified objective. [9]

With this model, it is possible to improve the care system for patients with chronic diseases. Well, implementing each of the elements can improve the quality of life of the patient and reduce costs.

CONCLUSIONS

In Mexico we suffer a serious problem of chronic diseases and a very poor health system. Greater emphasis must be placed on changing the patient's behaviors, encouraging self-care and family involvement, to improve the quality of life, not only of the patient but of the entire family. Changing behavior and lifestyle can help to have a much more effective medical care process. In addition, an important factor should be the standardization of medical care processes in health institutions. Well, due to the constant rotation, the patient cannot have a correct follow-up regarding his illness. Standardizing the processes will allow, no matter where the patient is being treated or which doctor reviews it, they will have the same follow-up and will be able to continue advancing and improving with respect to their chronic illness.

It should be added that the validation of the model will be done through a validation instrument. Which consists of a survey with more than 50 items. This survey will be answered by specialists in chronic diseases. However, this stage of the investigation will be carried out later.

GRATEFULNESS

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