

## Self-Management as an Integral Method of Attention in the Treatment of the Patient with Chronic Kidney Disease

El automanejo como método integral de atención en el tratamiento del paciente renal crónico

*María José Vázquez-Atanacio*

*Corresponding author:* Institution: Hospital General, Pachuca de Soto, Hidalgo. México, Address: Carretera Pachuca-Tulancingo No. 101, Colonia Ciudad de los Niños. CP42070, Phone: 7751669114, E-mail: nutri.mjva@gmail.com

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### Abstract:

Currently, the health care methods for chronic diseases are leaving behind the paternalism and the doctor-patient relationship, giving way to a new model, in which people with any chronic disease play an important role in their own health care with the support of the health care provider, this is called self-management. An important aspect of the self-management of diseases is the determination and elaboration of specific strategies in the patient's empowerment through knowledge, in order to face all the challenges and demands of living with this disease.

### Key words:

*self-management, empowerment, knowledge, effective treatment*

### Resumen:

Actualmente los métodos de atención de las enfermedades crónicas están dejando atrás la relación paternalista tradicional entre el prestador del servicio de salud y el paciente, dando paso a un nuevo modelo, en el cual las personas con alguna enfermedad crónica desempeñen una función central en su propio cuidado, con apoyo de los prestadores de atención de salud, herramienta a la que se le denomina automanejo. Un aspecto central del automanejo de las enfermedades es la determinación y elaboración de estrategias específicas centradas en el empoderamiento del paciente a través del conocimiento, para hacer frente a todos los retos y exigencias que conllevan vivir con esta enfermedad.

### Palabras Clave:

*enfermedad renal, automanejo, empoderamiento, conocimientos, tratamiento efectivo*

## INTRODUCTION

The World Health Organization (WHO) refers to self-management as a multidimensional phenomenon determined by the reciprocal action of a set of factors related to: the health care system or equipment, the disease, socioeconomic aspects, treatment and the patient.<sup>1,2</sup>

Due to the variety of factors that determine it, it is of great importance to seek methods that allow them to have control over chronic symptoms but also allowing the patient to maintain their independence and life quality, allowing them to follow the treatment on their own, leaving aside the traditional paternalistic health care mechanism.<sup>3-5</sup>

Despite its great relevance, the development of self-management is a prevalent problem in clinical practice, mainly in patients with chronic diseases, considered a priority issue of

public health care due to the negative consequences that it entails, such as therapeutic failures, higher hospitalization rates and the increase of healthcare costs.<sup>6,7</sup>

Given the multifactorial origin of this unfulfillment and that the strategies that have been implemented have been addressed to chronic diseases in general and not to specific situations such as chronic kidney disease, it is necessary to develop specific strategies that are effective for these patients and improve the health outcomes of the populations.<sup>8</sup>

## CONCEPTUAL FRAMEWORK OF CHRONIC KIDNEY DISEASE AND ITS COMPLICATIONS

Chronic kidney disease is defined by the Kidney Disease Improved Global Outcomes (KDIGO), as a decrease in the glomerular filtration rate below 60 ml/min accompanied by

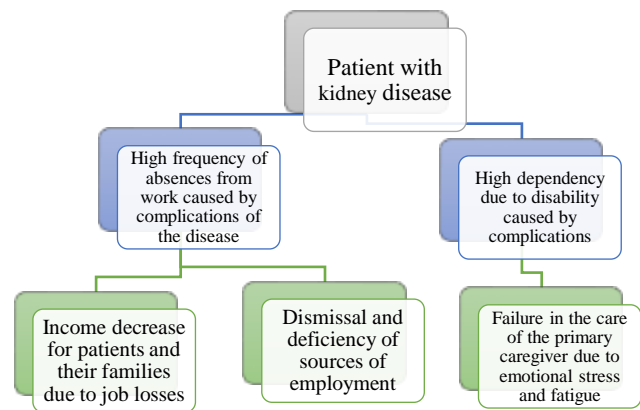
structural or functional abnormalities present for more than three months, with important implications for health.<sup>9</sup>

Complications associated with this pathological condition include: high cardiovascular mortality, anemic syndrome, cognitive deterioration and bone and mineral disorders that can culminate in fractures, as well as deterioration of the patient's life quality.<sup>10</sup>

The disease is classified into five stages according to the albuminuria and the glomerular filtration rate; in stages 1 to 4 the patient requires specific medical and nutritional care and control, while in stage 5, known as an advanced chronic kidney disease, renal replacement therapy is required, because if this is not treated early and effectively it can lead to the development of complications, such as the mentioned above, and these could lead to death.<sup>8-11</sup>

### PREVALENCE AND IMPLICATIONS OF CHRONIC DISEASE IN MEXICO

Renal disease is mainly associated with four chronic diseases of high prevalence in Mexico, such as: diabetes mellitus, hypertension, heart failure and ischemic heart disease, which is why an emerging problem is mentioned.<sup>12</sup> In our country, the main cause of chronic kidney disease is type 2 diabetes mellitus that affects 6.4 million Mexican adults, followed by arterial hypertension that affects 22.4 million according to data published by the National Health and Nutrition Survey (Encuesta Nacional de Salud y Nutrición: ENSANUT) 2012.<sup>13</sup> In Mexico the national registry of kidney patients is still pending, however, the Mexican Social Security Institute (Instituto Mexicano del Seguro Social: IMSS) has data that give a real picture of the problem. In 2007, Paniagua et al. published an analysis of the situation of chronic kidney disease and dialysis in Mexico, revealing that the beneficiaries of the IMSS have a prevalence of chronic kidney disease (CKD) higher than 1,000 per million beneficiaries, which gives us a magnitude of the epidemiological importance of this disease in the country.<sup>14</sup> This disease not only affects the life quality of patients suffering from it, but also generates social, economic and psychological conflicts, both for the patient and his family and for the whole society. Due to its chronic-degenerative nature, the difficult access to health institutions and the deficiency of sources of employment due to the development of the disease and the high cost of the treatment (expenses and loss of working hours), this disease leaves many patients unattended by their families ending in social abandonment<sup>13,14</sup>, as it can be seen in Figure 1.



**Figure 1. Impact of chronic kidney disease on patients and their life quality.**

**Source: Own elaboration based on <sup>13</sup>.**

As it can be seen in Figure 1, patients with chronic kidney disease suffer from many changes not only organic changes, but also economic and autonomy changes that make even harder to deal with the self-management of the disease complications. Therefore, considering its high incidence in the Mexican population and its great impact as a public health problem, it is then very important to develop practical guidelines for the early detection of the disease and for the attention of early difficulties, aiming at delaying the progression and complications of the disease.

### EDUCATION, EMPOWERMENT AND SELF-MANAGEMENT OF THE CHRONIC KIDNEY PATIENT

As discussed above, because kidney disease is a public health problem in Mexico of high prevalence, it is essential to implement strategies that allow the patients to self-manage their illness, to reduce complications and also reduce health sector expenses.

One of the aspects that would help to diminish the complications and that would develop a self-management ability in the patient is the education provided by health care staff to the patients about the illness and its treatment. By providing this knowledge, about the anatomy and functionality of the urinary system, as well as the kidney disease itself and the reason for its medical and nutritional treatments, the patient will develop the skills to reduce the physical and emotional impact produced by the disease with or without the health care team.<sup>15,16</sup>

There is evidence that education provided to chronic patients is crucial for the self-management of the disease, as it can be seen in a study in which the effects of an educational intervention program with women who had fibromyalgia were analysed. In that program, they worked in strengthening the empowerment

and self-efficacy of the patient. At the end of the educational sessions, statistically significant improvements were achieved in the modification of habits and self-efficacy.<sup>17</sup>

In addition, in different studies, the effects that self-management programs have on patients with chronic kidney disease have been evaluated, mainly regarding the medical and emotional control as well as their life quality. Some meta-analyses included searches in databases like PubMed, Cochrane and Web of Science with key words about this topic. The results of the analysed studies revealed that self-management programs significantly improve medical and emotional control, also having a small effect on controlling the interdialytic weight gain.<sup>18-20</sup>

These self-management activities are very important because they help controlling the main risk factors that cause complications in the renal patient. Therefore, the knowledge about how to take care of oneself and the skills to do it increase the capacity of people to evaluate their health condition and determine the need to seek for professional attention.<sup>4</sup> Here is where patients themselves look after the evolution of their illness and have more control over it, besides continuing with their daily life and choosing behaviours and alternatives that allow them being healthy despite their disease.<sup>7,21,22</sup>

However, health care professionals and the health care system itself tend to consider the patient's education as a delayed process, with poor and barely quantifiable results. But it is important to emphasize that, if it is incorporated as a process in the interaction between the health professional and the patient in each consultation, the result will be a better adherence to the recommendations and the therapy, fewer warnings and fewer hospitalizations; resulting in a cost-effective behaviour that benefits both the patient and the health care system.<sup>2</sup>

In addition to this, reinforcing the patient's empowerment for decision-making is very important, since an empowered patient is a patient able to decide, satisfy his/her needs and solve problems, with critical thinking and control over his/her life. For this reason, it is essential to use as a strategy to optimize the therapeutic compliance, developing didactic approaches that make the patient to voluntarily adopt a positive attitude towards the changes he or she has to make, and that this occurs by providing them knowledge about their disease, its treatment and the importance of adhering to it.<sup>1,21</sup>

Therefore, an empowered patient must be an informed patient, having sufficient knowledge to understand the disease and its treatment. This patient's collaboration allows customizing the treatments, adapting them to the living conditions of each person and increasing their safety.<sup>19</sup> The fact of giving the patient this responsibility implies letting him or her be in charge with the maximum autonomy and rely on him or her to warn of an incident if it occurs and transmit it to the health care professional. Besides, trusting the patient has positive effects on his or her recovery.<sup>1,16</sup>

## **INCREASE IN PATIENT SELF-MANAGEMENT AND ITS IMPACT ON PUBLIC HEALTH**

In 2002, the WHO recognized that self-management was the cornerstone in the attention of people with chronic diseases. Different investigations have shown that self-management is an important element to improve health care outcomes for these diseases, providing education and empowerment to patients to encourage them to develop these self-management skills, effectively improving their attention.<sup>1</sup>

In these researches, educational intervention strategies guided by the multidisciplinary health teams have been evaluated, in which they work on emotional management, nutritional patterns, exercise and problems related to the disease mismanagement. The results after implementing these educational models have shown significant differences in changing negative lifestyle and eating habits; they are also an evidence that by connecting patients with adequate information and encouraging the formation of support networks among people suffering from the same disease it helps developing self-management and a more effective control of chronic kidney disease.<sup>24-26</sup>

These results are of great relevance, since reducing the lack of self-management is not only getting patients to take their medication or stick to the nutritional regimen but understanding the reasons why they should or should not do it, to take the patient from a passive and non-participatory state to an active, expert and committed to the treatment state.<sup>6,27,28</sup>

That is why developing strategies in this area is of great importance as it would have an impact on the health care staff who deal with patients with chronic kidney disease, by taking them to gradually change their lifestyle and their mentality about receiving instructions from specialists about the treatment they will follow. This would generate a positive effect on each of them to totally adhere to their treatment, decreasing the prevalence of this disease in Mexico and mainly its complications and cost increases, benefiting not only the patient but also the health care system.<sup>4,29</sup>

## **CONCLUSION**

As this chronic disease becomes more important in the field of public health, self-management will be the most important approach to treat it, prevent it and promote patients' well-being, offering them a way to maintain or even improve their life quality. Therefore, it is necessary to develop strategies based on the development of these skills because self-management represents a fusion of the patient, the family, the community and the health care staff goals. They all work together to tackle better the disease, also facilitating comprehensive care and going beyond traditional paternalistic treatment, including a broader concept and supporting the patient to live well physically, emotionally and socially despite their condition.

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