# Chapter 16 Learning to Live with Chronic Disease: Coronary Artery Disease

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# **ABSTRACT**

Cardiovascular diseases are chronic diseases with the highest morbidity and mortality rate worldwide. The high number of hospital admissions for coronary artery disease and the low adherence to cardiac rehabilitation programs constitute an opportunity for nurses to develop educational interventions aimed at health promotion, health literacy, empowerment, and accountability of the patient's abilities for an effective self-care. Nurses need to understand chronic patient's priorities and implement patient-centered care considering that caring for patients with chronic disease requires interventions focused on individual human responses. Therefore, the intention of this chapter is to provide an overview of the impact of educational nursing interventions on health literacy and patient empowerment as a method to improve self-care skills that are necessary for dealing with chronic disease.

# INTRODUCTION

In Portugal over the following years, changes in mortality patterns and increases in life expectancy combined with health/disease modification of the populations led to an increase in the incidence of chronic diseases and, consequently, an increase of the level of disability of the aging population. Chronic diseases are responsible for 60% of the global burden of diseases, and it's projected that by 2020 that number could increase to 80% (Bloom et al., 2011; WHO 2017). Population aging, the adoption of unhealthy lifestyles and urbanization contribute to this increase (WHO 2015). In view of this context,

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chronic diseases is a major focus of health care and it becomes evident the need to help patients learn to live with their new health condition.

Considering that approximately half of the deaths caused by chronic diseases are directly associated with cardiovascular diseases (CVD), it is estimated that 7.4 million deaths are due to acute myocardial infarction and 6.7 million deaths due to the cerebrovascular accident (WHO 2017). These diseases caused by common risk factors, such as smoking, sedentarism, diabetes mellitus, obesity, poor eating habits, hypercholesterolemia, hypertension, and excessive stress. They result in an inappropriate relationship of people with their environment. Despite the implementation of primary and secondary prevention strategies for CVD, the World Health Organization (WHO) predicts that in 2030, ischemic heart disease remains the leading cause of death and a major cause of personal incapacity, loss of productive capacity and quality of life in the world (WHO 2014).

Although CVD are avoidable diseases, they continue to affect people that adopt unhealthy behaviors, have low health literacy, and have difficulty or lack of knowledge of how to mitigate/eliminate modifiable risk factors.

Citizens must commit to managing their health, however, need professional support to make healthy decisions. Nurses are health professionals who can offer significant contributions in leadership and support to new models of care (Lall, et al, 2018). According to the nature of nursing care, nurses have the skills to understand the process of adaptation. In addition, the strategies used to facilitate the transitions process are relevant to the research area (Meleis, 2010).

In the health-disease transition, rehabilitation depends largely on health literacy, adherence to rehabilitation programs and active participation of the person in the management of the therapeutic regimen. However, the development of skills and abilities, behavioral change and lifestyle is a challenge, faced with complex treatment regimens (Roger et al., 2011, Rosamond et al., 2007). The processes of change are not simple because they depend on an accurate initial diagnosis and the development of personalized and individualized patient - center care. It is fundamental that the patient is motivated and involved in the therapeutic regimen, and understand the need for developing self-care skills. People are able to become involved in their self-care, but they need educational support to understand the different aspects of selfcare (Orem, 2001). This educational support is essential for adherence to self-care that is determinant in the management of chronic disease, since it involves much more than taking medication and following a food plan, but also, the adoption of changes in lifestyle. Non-adherence to the therapeutic regimen may threaten effective control of the disease; increase the risk of hospitalizations and mortality (Dantas et al., 2016). In addition, authors such as Inglis et al. (2011) emphasize the importance of health interventions that include education programs and self-care promotion because they demonstrate a beneficial effect in reducing hospital admissions. Hospital readmission is important in terms of cost-effectiveness and undoubtedly has major implications for the individual and for health care system (Dalal et al., 2010).

This chapter intends to provide a comprehensive approach to understand the factors that have an important role in the patient's life so that nurses can implement effective interventions and offer the tools necessary for the patient to learn how to live with chronic disease.

# BACKGROUND

WHO defines chronic disease as diseases of long duration and generally slow progression that includes pathologies such as CVD, diabetes, asthma, chronic obstructive pulmonary disease, cancer, HIV / AIDS,

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