

HEALTH MANAGEMENT IN PATIENTS WITH CHRONIC DISEASES: FACTORS IMPROVING SELF-CARE MASTERING

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Abstract

Background: Chronic Diseases (CD) such as diabetes, musculoskeletal disorders, cardiovascular diseases, neurological disorders, and cancers increase with age and place a burden on individuals and healthcare systems, and more they are associated with a lower Quality of Life (QoL) in the elderly. CD conditions suggested improvements of self-care investigations switching research perspectives from medication or dietary adherence, biological exams, or symptoms management to maintaining health through treatment adherence and health-promoting practices.

Objective: Aim of the present study was to evaluate the health management of chronic disease, analyzing the effectiveness of self-care and the emotional dimensions (anxiety, stress, depression).

Materials and Methods: We conducted an observational study on 132 outpatient patients aged 18 to 75 years (mean age 52.6 years, SD \pm 12.4) diagnosed with CD; 57,5% of the sample were females. The participants were enrolled at the Clinical Medicine Division of S. Salvatore Hospital in L'Aquila, ASL1 Abruzzo (IT). The psychological battery was composed of three standardized self-assessment measured emotional traits (DASS-21), QoL (WHOQOL-26), and Self-Care (SC-CII). Participants were divided into 2 groups based on CD as follows: a) cardiovascular disease (ex. cardiological disease) (CVD) group was composed of 68 patients (51.5%), b) other disease group (ex. disorders of the locomotor, gastrointestinal, and urogenital systems) (OD) was composed of 64 patients (48.5%).

Results: Descriptive analyses based on sociodemographic and clinical characteristics showed no difference among all the variables (gender, education, marital status, occupation, and timing diagnosis). One-way ANOVA was performed comparing the emotional dimensions for both CVD/OD groups. Statistical analysis showed significant difference in the OD group which showed greater signs of anxiety ($p=0.029$), depression ($p=0.007$), and stress ($p=0.013$), than the CVD group. Then, we performed Pearson's correlation to compare the QoL with the ability to self-care index. The results highlighted a significant correlation between self-care maintenance, self-efficacy, and QoL.

Discussion and Conclusion: Our results show that, among CDs, patients with gastrointestinal, locomotor, and urogenital diseases appear to suffer more than patients with cardiovascular disease. The QoL is compromised in the maintenance of physical and mental health, in social relationships and, in self-efficacy index; the study highlights those actions could be planned for a person-centered approach with the aim of planning a better health outcome in CDs to progressively involve patients in overall self-care.

Keywords: *Clinical psychology, chronic diseases, self-care, emotional impact, patient engagement.*

1. Introduction

Self-management education complements traditional patient education in supporting patients to live the best possible quality of life with their chronic condition. Chronically ill patients make daily decisions about self-management of their illnesses. This reality introduces a new paradigm of chronic disease: the patient-professional partnership, which involves collaborative care and self-management education. More factors should be considered to improve the health awareness tailored on disease toward to better patient engagement: usually, gender, aging, comorbidities, sample source, value set were assessed but could be enlarged to individual factors as emotional regulation and psychological dimensions.

2. Study Design

Participants have been enrolled in Clinical Medicine Division of S. Salvatore Hospital in L'Aquila, ASL1 Abruzzo (Italy). This study was approved by the Internal Review Board of the University of L'Aquila, Italy (Prot. N° 107750/2020). Informed consent was obtained from each participant at the time of enrolment and the study adhered to the Declaration of Helsinki.

An observational study was conducted among outpatients diagnosed with CD, as a such as musculoskeletal, urogenital, gastrointestinal, and cardiovascular disorders. Trained clinical psychologists, blind to the objectives of the study, conducted the psychological screening in a quiet, dedicated room. The duration of the evaluations was 15 minutes. Data were collected anonymously.

3. Objective

Aim of the present study was to evaluate the health management of chronic disease, analyzing the effectiveness of self-care and the emotional dimensions, such as anxiety, stress, and depression.

4. Methods

4.1. Participants

Participants were n. 132 outpatients aged 18 to 75 years (mean age 52.6 years, SD ± 12.4) diagnosed with CD; 57,5% of the sample were females; 51,5% (N=68) of the sample were patients with diagnosed of cardiovascular diseases (CVD), while 48,5% (N=64) of the sample were patients with diagnosed with other chronic diseases (OD) including musculoskeletal, gastrointestinal, and urogenital diseases. Participants were divided into 2 groups based on CD as follows: a) CVD group and b) OD group.

4.2. Measurement

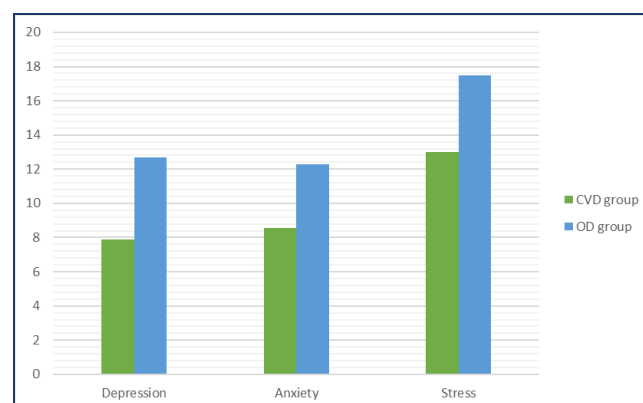
Two types of participant information were collected. First, demographics were collected through participant self-reports. We selected independent variables to be included in the analysis as they were age/stage of life characteristics (e.g., having children, being employed, and marital status) related to the time since diagnosis. Second, clinical data were obtained from the participants' medical records regarding the disease current stage, and the type of medical (pharmacological/surgery) treatment performed.

The psychological battery was composed of three standardized self-assessment measured emotional traits (depression, anxiety, stress) (DASS-21) (Bottesi G., et al, 2015), QoL (physical area, psychological area, environmental area, social relations area) (WHOQOL-26) (De Girolamo G., et al., 2000), and Self-Care indexes (maintenance, monitoring, management, and self-efficacy) (SC-CII) (De Maria M. et al., 2021).

4.3. Statistical Analysis

One-way ANOVA was performed comparing the emotional dimensions (depression, anxiety, and stress) for both CVD/OD groups. Statistical analysis showed significant difference in the OD group which showed greater signs of anxiety ($p=0.029$), depression ($p=0.007$), and stress ($p=0.013$), than the CVD group (Figure 1). The comparison of all variables (self-care index, timing diagnosis or comorbidity) resulted not significantly different.

Figure 1. Representation of the emotional state by CD.



Then, we performed Pearson's correlation to compare the QoL with the ability to self-care. The results highlighted a significant correlation between self-care maintenance, monitoring, management, self-efficacy, and QoL: regard to the psychological health index, a positive correlation emerged between the self-care maintenance ($p=0.002$), monitoring ($p=0.049$) and self-efficacy ($p=0.001$); in the physical health index positive correlation is highlighted with self-efficacy ($p=0.035$).

5. Discussion

Our results draw a clinical scenario useful in view of adopting the biopsychological approach. Among the CD, patients with gastrointestinal, locomotor and urogenital diseases appear to suffer more than cardiovascular diseases: patients with gastrointestinal, locomotor and urogenital diseases show signs of depression, stress, and anxiety and therefore a lesser ability to cope with daily life. By analyzing self-care skills, exposure to emotional distress appears to impair the skills of self-care maintenance, monitoring, management, and self-efficacy. When mental or physical functions are impaired, this may cause disability and frailty, and is often associated with progression of chronic conditions (Bayliss et al., 2003; Graven et al., 2014; Moser et al, 2008; Riegel et al., 2012). According to the literature (Raeann et al., 2018) our study evidenced that the quality of perception of physical health is positively influenced by sense of self-efficacy for self-care: self-efficacy plays an important role in both physical and mental health. Decision-making capacity, necessary for determining a course of action in response to symptoms and fluctuating states of health and wellness, is a result of an active role among CD patients (Riegel et al., 2009). Considering these variables could be enhanced medical protocols and adopted protective coping strategies for patients who have a chronic disease.

6. Conclusion

The overall finding highlighted that CD management should be addressed by empowering individuals who manage their own health conditions. Emerging actions for a person-centered approach to better health outcome in CD could be planned to progressively engage patients in comprehensive self-care, enhancing deeply personalized medicine protocols towards patient health awareness.

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