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Clinical Validation of the Related Factors of Ineffective Health Management in Patients With Celiac Disease

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Knowing the key related factors of nursing diagnoses is essential to identify possible causal relationships and define specific nursing interventions for specific populations (Herdman, & Kamitsuru, 2018; Rocha, Gandolfi, & Santos, 2016; Carneiro, Lopes, Lopes, Santos, Bachion, & Barros, 2015; Lopes, Silva, & Araújo, 2013). The interest in developing this study was based on the need to define nursing interventions to control the health of celiac patients. However, due to the scarcity of scientific evidence that supports interventions and to address the diagnosis Ineffective health management with this population, it was decided to investigate which related factors increase the chance of developing it. The objective was to validate the related factors of the nursing diagnosis Ineffective health management in celiac participants. A cross-sectional study was conducted with 83 celiac patients of both gender who lived in Ceará state, Brazil, selected from the Celiac Association of Brazil-Ceará Section and in the networks and social media linked to this association. Data collection was performed from May to September 2017. An instrument with the defining characteristics and related factors of Ineffective health management and clinical/sociodemographic variables was applied. For data analysis, a Latent Class method and logistic regression model were applied. The following tests were used: Wald, Omnibus, Hosmer-Lemeshow, R² of Cox & Snell and R² of Nagelkerke. In accordance with the guidelines from Resolution 466/2012, this study was submitted to and approved by the Ethics Research Committee at the Federal University of Ceará. The majority of celiac participants were female, white, employed, had no partner, declared being a member of religion which uses gluten in its rituals, lived in Fortaleza in the II and IV regionals, had no children, had health insurance, declared not using or having never used the Brazilian Unified Health System for following-up regarding having celiac disease. It was verified that half of the celiac patients were up to 33 years, had 18 years of formal education, declared a per capita income of R\$ 2,333.33, had no children, lived with three relatives, had been diagnosed with celiac disease for 48 months, and were members of a celiac association for 24 months. The number of people living in the same house was significantly lower among the celiac patients who did not have Ineffective health management ($p=0.009$). The prevalence of Ineffective health management was 55.69%. The most prevalent defining characteristics were: Failure to include treatment regimen in daily living (96.4%), Failure to take action to reduce risk factor (80.7%) and Ineffective choices in daily living for meeting health goal (72.3%). Among the celiac patients who had Ineffective health management, the most prevalent related factors were: Perceived barrier, Fatigue, Complex treatment regimen, Anxiety and Complexity of healthcare system. Perceived benefit ($p=0.034$ and $OR= 0.298$) and Excessive demands ($p=0.013$ and $OR=0.304$) had a statistical association with Ineffective health management; therefore, in the absence of these related factors, the interviewed participants were approximately 70% less likely to develop Ineffective health management. According to the logistic regression, the celiac patients with the related factors Complex treatment regimen ($p=0.011$), Depression ($p=0.034$) and Excessive demands ($p=0.049$) presented, respectively, a chance of 4.48; 3.29; 2.81 for developing Ineffective health management. These related factors influence in 22.5% the establishment of Ineffective health management. Nurses need to pay attention to the complexity of the celiac disease, which involves personal and family aspects, adherence to the gluten-free diet, maintenance of treatment, multiprofessional care, quality of life and morbidities and/or complications related to irregular care in the control of this chronic disease (Guandalini, Tundia,

Thakkar, Macaulay, Essenmacher, & Fuldeore, 2016; Rocha et al., 2016; World Gastroenterology Organization, 2013). This study may contribute to expand publications about celiac disease and nursing care and improve early actions and strategies to avoid comorbidities and/or health complications.

Title:

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References:

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Abstract Summary:

Knowing the key related factors of nursing diagnoses Ineffective health management is essential to identify possible causal relationships and define specific nursing interventions for specific populations. This study may contribute to improve early actions and strategies to avoid comorbidities and/or health complications of the celiac disease.

Content Outline:**I. Introduction**

Knowing the key related factors of nursing diagnoses is essential to identify possible causal relationships and define specific nursing interventions for specific populations (Herdman, & Kamitsuru, 2018; Rocha, Gandolfi, & Santos, 2016; Carneiro, Lopes, Lopes, Santos, Bachion, & Barros, 2015; Lopes, Silva, & Araújo, 2013). The interest in developing this study was based on the need to define nursing interventions to control the health of celiac patients. However, due to the scarcity of scientific evidence that supports interventions and to address the diagnosis Ineffective health management with this population, it was decided to investigate which related factors increase the chance of developing it.

II. Body

A. Objective: To validate the related factors of the nursing diagnosis Ineffective health management in celiac participants.

B. Methods: A cross-sectional study was conducted with 83 celiac patients of both gender who lived in Ceará state, Brazil, selected from the Celiac Association of Brazil-Ceará Section and in the networks and social media linked to this association. Data collection was performed from May to September 2017. An instrument with the defining characteristics and related factors of Ineffective health management and clinical/sociodemographic variables was applied. For data analysis, a Latent Class method and logistic regression model were applied. The following tests were used: Wald, Omnibus, Hosmer-Lemeshow, R² of Cox & Snell and R² of Nagelkerke. In accordance with the guidelines from Resolution 466/2012, this study was submitted to and approved by the Ethics Research Committee at the Federal University of Ceará.

C. Results: The majority of celiac participants were female, white, employed, had no partner, declared being a member of religion which uses gluten in its rituals, lived in Fortaleza in the II and IV regionals, had no children, had health insurance, declared not using or having never used the Brazilian Unified Health System for following-up regarding having celiac disease. It was verified that half of the celiac patients were up to 33 years, had 18 years of formal education, declared a per capita income of R\$ 2,333.33, had no children, lived with three relatives, had been diagnosed with celiac disease for 48 months, and were members of a celiac association for 24 months. The number of people living in the same house was significantly lower among the celiac patients who did not have Ineffective health management ($p=0.009$). The prevalence of Ineffective health management was 55.69%. The most prevalent defining characteristics were: Failure to include treatment regimen in daily living (96.4%), Failure to take action to reduce risk factor (80.7%) and Ineffective choices in daily living for meeting health goal (72.3%). Among the celiac patients who had Ineffective health management, the most prevalent related factors were: Perceived barrier, Fatigue, Complex treatment regimen, Anxiety and Complexity of healthcare system. Perceived benefit ($p=0.034$ and $OR= 0.298$) and Excessive demands ($p=0.013$ and $OR=0.304$) had a statistical association with Ineffective health management; therefore, in the absence of these related factors, the interviewed participants were approximately 70% less likely to develop Ineffective health management. According to the logistic regression, the celiac patients with the related factors Complex treatment regimen ($p=0.011$), Depression ($p=0.034$) and Excessive demands ($p=0.049$) presented, respectively, a chance of 4.48; 3.29; 2.81 for developing Ineffective health management. These related factors influence in 22.5% the establishment of Ineffective health management.

D. Discussion: Nurses need to pay attention to the complexity of the celiac disease, which involves personal and family aspects, adherence to the gluten-free diet, maintenance of treatment, multiprofessional care, quality of life and morbidities and/or complications related to irregular care in the control of this chronic disease (Guandalini, Tundia, Thakkar, Macaulay, Essenmacher, & Fuldeore, 2016; Rocha et al., 2016; World Gastroenterology Organization, 2013).

III. Conclusions: This study may contribute to expand publications about celiac disease and nursing care and improve early actions and strategies to avoid comorbidities and/or health complications.

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