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A Multicentre Study of Psychological Variables and the Prevalence of Burnout among Primary Health Care Nurses

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Abstract: Nurses in primary health care (PHC) have multiple responsibilities but must often work with limited resources. The study's aim was to estimate burnout levels among PHC nurses. A Quantitative, observational, cross-sectional, multicentre study of 338 nurses working in PHC in the Andalusian Public Health Service (Spain) is presented. A total of 40.24% of the nurses studied had high levels of burnout. The dimensions of emotional exhaustion and depersonalisation were significantly associated with anxiety, depression, neuroticism, on-call duty and seniority-profession and inversely related to agreeableness. In addition, depersonalisation was significantly associated with gender, and emotional exhaustion correlated inversely with age. Personal achievement was inversely associated with anxiety and depression and positively correlated with agreeableness, extraversion and responsibility. There is a high prevalence of burnout among nurses in PHC. Those most likely to suffer burnout syndrome are relatively young, suffer from anxiety and depression and present high scores for neuroticism and low ones for agreeableness, responsibility and extraversion.

Keywords: anxiety; burnout; depression; nursing; occupational health; personality factors; public health service

1. Introduction

Primary health care (PHC) can be defined as basic, essential health care that is accessible to all members of a community. The cost of the service must be affordable to the participants, the community and the country. These considerations were highlighted at an international conference in this respect held in Alma-Ata in September 1978, where the urgent need was expressed for all governments and personnel involved in the development and promotion of health care to work for its universal availability [1]. According to a recent study, countries which emphasise the provision of PHC are better able to achieve their sustainable development goals and to promote the fairness and social justice on which the provision of universal health care is based [2].

Maslach and Jackson [3] provided the most widely accepted definition of burnout, describing it as a three-dimensional syndrome in which a worker experiences emotional exhaustion (EE), or feelings of physical overexertion and emotional fatigue as a result of the continuous interactions required between the worker and users of the service; depersonalisation (D) or the existence of cynical attitudes and responses towards the persons to whom services are provided; and a sensation of low personal

achievement (PA) or the loss of confidence and the appearance of a negative self-concept due to encounters with unrewarding situation [4]. Among the various instruments proposed for assessing burnout, one of the most commonly used is the Maslach Burnout Inventory (MBI) [3]. Those affected by burnout usually work in contact with the public, as is the case of the health professions, and within this group, nurses are especially prone to burnout [5]. This syndrome not only impacts on workers but can also reduce the quality of care provided [6,7]. In recent years, the question of burnout syndrome has been addressed in literature reviews [8–11] and empirical studies [4,5], and work continues in this field, highlighting its importance in society [12].

In this context, an important consideration is that hospital nurses work in a specific clinical environment. Thus, the tasks performed regularly by nurses working in A & E, oncology or paediatrics departments, for example, differ greatly from those carried out in PHC [9,13–15].

The impact of burnout syndrome is normally analysed by reference to the different variables related to its presence. These may be sociodemographic (age, sex, marital status, number of children, etc.), employment-related (the hospital service in question, seniority in the workplace, seniority in the profession, etc.) or psychological (anxiety, stress, depression, personality traits, etc.). Identification of the variables/factors that influence the development of burnout syndrome would contribute to determining risk profiles for the nursing profession [16].

Little empirical research has been conducted into burnout syndrome in PHC nurses, in comparison with other hospital settings [17,18]. Further investigation in this respect, therefore, would help determine the prevalence of burnout in PHC nurses and facilitate its prevention [19].

This study has the following aims: (1) to estimate the level of burnout among nurses working in PHC in the Andalusian Public Health Service; (2) to determine the phases of burnout that most affect these nurses; (3) to analyse the relationship between sociodemographic, employment-related and personality variables and the burnout syndrome suffered by this group of persons.

2. Materials and Methods

2.1. Participants

The study sample was composed of 338 PHC nurses working in the Andalusian Public Health Service (Spain). These nurses were specialists or generalists who worked in community health centers, serving the entire community. The participants' average age was 45.92 years (SD = 7.51), and 58% were female. All had university studies in nursing and were employed in this capacity. The response rate was 84.5%.

2.2. Variables, Instruments and Data Collection

A research questionnaire was used to record the data compiled. The sociodemographic variables studied were gender (male-female), age (years), marital status (single, married, separated/divorced, widowed) and number of children (none, one, two, three or more). The employment-related variables considered were work pattern (fixed or rotating shifts), on-call obligation (yes-no); seniority in the workplace (months) and seniority in the profession (months).

Burnout syndrome was measured using the MBI [3] in a version adapted to a Spanish-speaking population [20]. The instrument consisted of 22 items, scored on a seven-point Likert-scale, from zero (never) to six (every day), with respect to three dimensions: EE (nine items), D (five items) and PA (eight items). Cut-off points for the presence of burnout were defined by reference to established values for the Spanish population, namely, EE > 24, D > 9 and PA < 33. The estimated coefficients of reliability for these MBI scales were EE (α = 0.91), D (α = 0.72) and PA (α = 0.86).

The revised NEO personality inventory (NEO-FFI) instrument [21], adapted for use with a Spanish-speaking population [22], was also used. This instrument is composed of five personality factors: neuroticism, agreeableness, responsibility, extraversion and openness. Twelve items were considered for each of these dimensions (total, 60 items), and scored on a five-point Likert scale. The