Section A-Research paper
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Burnout Syndrome in Workers of the Health District 10D03 Cotacachi Canton - Imbabura Workers

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Summary:

The main objective of this investigation was to describe the presence of Burnout Syndrome in the medical staff of the Asdrúbal de la Torre Hospital and the administrative staff of the Health District 10D03 Cotacachi in relation to their jobs, a non-probabilistic quantitative study was carried out, where the data of 80 people were collected, of which 37 were administrative and 43 operational personnel, once the investigation was completed, a low risk of developing BS was evident in the Nursing, Laboratory, Obstetrics and X-ray departments, while in the area of Hospital Management there is a tendency to develop it, the treating physicians obtained a medium range in the three scales evaluated, being the most prone, while the resident physicians already suffer from BS. In the administrative area in the Departments of Health Promotion and Equality, Planning and Single Window, there is evidence of a low probability of developing BS, in the area of Provision and quality of ICT services and technical support there is evidence of a medium probability of BS, a category described in the study is the tendency to profile 1 in which the Financial Administrative and District Management departments are found, and finally profile 1 is described where it is already evident at a critical level for the development of SB here are the Portfolio Recovery and health surveillance departments, it is not possible to show departments with profile 2 because there are no critical levels of fault.

Keywords: Burnout syndrome, depersonalization, emotional exhaustion, guilt, indolence, mental exhaustion.

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1. Introduction

The International Labor Organization (ILO), defines stress as a harmful physical and emotional response caused by an imbalance between their high labor demand and the ability of an individual to solve their problems, with the above and knowing that health care represents a fundamental right in all people, mentions that the personnel who work in this area handle high levels of tension due to the demands of the environment. On the other hand Tapullima et al. (2021) , several studies show that health personnel constantly live situations of work stress, which when intensified can become Burnout Syndrome (BS), whose most accepted version is currently the one made by Maslach and Jackson who define it as a three-dimensional syndrome characterized by emotional exhaustion, depersonalization and low personal fulfillment. (2021) (Lopez et al., 2021) .

Similarly, he states Intrigue (2019) that the concept of stress developed by biology has had a powerful influence in the fields of psychology and medicine, since there are multiple stressors that keep the body in a state of hyperactivation and one of these most common stressors is the work environment. For this research, it was taken as a reference to , where it states that the main signs and symptoms of medical exhaustion are not usually recognized by the affected person, the individual who comes to suffer from BS complains of being tired of his work activity and fails to recover from his exhaustion (Engstrom, 2013)even outside his day, He begins to develop negative attitudes, becomes insensitive to patients and their concerns, looking at his work in a negative way, becoming incompetent in his performance and work productivity and even putting his life at risk due to ignorance and inadequate way of handling chronic stress.

With this background, this research focuses on health personnel working in the district offices, that is, administrative personnel, who in their daily work maintain direct contact with the professionals of the operating units that make up the Health District 10D03, as they are the ones who lead the most important processes at the level of the Ministry of Public Health and the operational personnel where the health personnel working at the Asdrúbal Hospital are included. de la Torre, who are mostly nurses and doctors, the main objective of this study is to determine the incidence of SB in the aforementioned personnel in relation to their jobs, thus promoting a descriptive statistical analysis to meet the objective.

2. Materials and Methods

A quantitative descriptive, non-probabilistic study was conducted and the following inclusion criteria were taken into account: workers from the administrative area belonging to the Health District 10D03 Cotacachi and operational workers from the Asdrúbal de la Torre Hospital, who are performing their work with a multidisciplinary team and are currently working. Data were collected from 80 people, which were

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divided into two groups: the first belonging to the administrative staff working in the offices of the District where there were a total of 37 people, of whom 70.27% (N = 26) were women and 29.72% (N = 11) were men, aged between 24 and 53 years, In addition, the working time in years in the institution ranging from 1 to 24 years was taken into account and as a final point it was included in the work area in which they work. The second group studied belongs to the operational staff working in the Hospital where health personnel were included among which are also doctors and nurses studying their year of rural health, where there were a total of 43 people, of whom 72.09% (N = 31) were women and 27.90% (N = 12) were men, With ages between 24 and 57 years, the working time in years in the institution ranging from 1 to 27 years was taken into account and as a final point the work area in which they work was included. The prior consent of the highest district authority was obtained and no person working in the institution was excluded.

The cognitive assessment was performed with two measurement instruments, first, the Maslach Burnout Inventory (MBI) questionnaire of Maslach and Jackson (1986) was used for health personnel working in the Hospital, consisting of items divided into three dimensions or subscales: Emotional Exhaustion (AE), Depersonalization (PD) and Personal Fulfillment (PR). It consists of 22 items with answers on a Likert scale with scores from 0 (never) to 6 (every day). The AE scale is composed of 9 items that measure feelings of emotional overload whose maximum score is 54 points. The PD subscale is composed of 5 items that assess the worker's feelings with the patient, with a maximum score of 30 points. The PR subscale consists of 8 items that measure the feelings of achievement obtained, with the maximum score of 48 points.

For the final analysis, high scores in EC and PD and low scores in PR that would indicate the presence of this syndrome are taken into account. Specifically, the total score of this standardized questionnaire is divided into three thirds, meaning the high level a diagnosis of burnout, the intermediate tendency to burnout and the low without risk of suffering from this syndrome. The scores are based as follows:

- Scores equal to or greater than 25 in AE, are determined as high level, between 16-24 an intermediate level and less than 15 a low level.
- Scores equal to or greater than 9 in PD is a high level, between 4-8 medium level and less than 3 a low level.
- PR scores of 0-35 would speak of a low level, between 36-39 intermediate level and more than 40 a high level (Sanz et al., 2022) .

In the second study group, the questionnaire (CESQT) was used, which is made up of 20 items that are distributed in 4 subscales Illusion for work, Psychic exhaustion, Indolence, and Guilt. For the general assessment, a global score is made with Enthusiasm for work, psychic exhaustion and indolence; In addition, the guilt variable is added that allows differentiating two profiles, one with guilt and the other without

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guilt, giving rise to different consequences. All items are assessed using a Likert scale, where their answers are 0=never, 1= rarely (a few times a year), 2= sometimes (a few times a month), 3= frequently (a few times a week) and 4= very frequently (every day).

To understand the assessment of each of the subscales, the following parameters are taken into account:

- In Illusion for work (It), the desire of the person to achieve work goals is valued, therefore, he perceives his work as attractive and a source to achieve professional goals. Here 5 items that are positive are taken into account, so low scores indicate high probability of developing SQT.
- In relation to psychic exhaustion (Dp), the presence of emotional and physical exhaustion is analyzed through daily contact with people in the environment who present or cause problems, it is made up of 4 items.
- On the other hand, Indolence (In), evaluates the presence of negative attitudes of indifference and cynicism towards other people, is made up of 6 items and when they show high scores they determine insensitivity to the problems of others.
- Finally, Guilt (C) is evaluated, based on the behavior and negative attitudes that develop at work mainly with people with whom you have labor relations, consists of 5 items

To make a total assessment it is necessary to obtain an average of the scores obtained in the items of It, Dp, and In, the guilt score is not included in the total score, but to determine the profile of the person evaluated. Taking that the SQT contains 6 levels of which are determined by very low, low, medium, high to others there are two critical levels that determine if the person has a profile 1 or a profile 2 of the Burnout syndrome (Gil, 2011) .

For the present study, parametric tests were used, which have a statistical significance in order to quantify the association or independence between quantitative variables and a categorical one. . (Rubio, 2012)

The statistical tests used in this research were Chi-square and arithmetic mean are intended to determine on the scale of Maslash if the mean values are at high, medium or low level. (Flores et al., 2017)

3. Results

The research is supported by international antecedents, which were based on a quantitative study, with a correlational design, where the entire administrative and operational population of the 10D03 Health District and the Asdrúbal de la Torre Hospital were analyzed, as a technique the MBI and CESQT questionnaire was used.

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Table 1 shows the mean values and their respective standard deviation of the first study group corresponding to the staff working at the Asdrúbal de la Torre Hospital, where the following results are obtained:

TABLE 1: Descriptive data of Burnout Syndrome in relation to the job in operational staff

Workspace	Emotional Exhaustion	Depersonalization	Personal fulfillment	Diagnosis
Hospital management	27.50 ± 19.09	13.00 ± 5.66	42.50 ± 7.78	Tendency to Burnout
Infirmary	9.17 ± 9.75	2.50 ± 3.63	40.90 ± 8.57	No risk
Laboratory	7.80 ± 5.97	2.80 ± 5.22	42.00 ± 3.81	No risk
General Medicine	23.50 ± 11.09	9.30 ± 6.18	31.60 ± 7.74	Burnout syndrome
Attending Physicians	10.00 ± 11.28	3.00 ± 4.76	36.50 ± 14.11	Tendency to Burnout
Nutrition	18.00 ± 0.00	8.00 ± 0.00	38.00 ± 0.00	Tendency to Burnout
Obstetrics	16.00 ± 8.49	1.50 ± 2.12	45.50 ± 3.54	No risk
X-rays	3.00 ± 0.00	3.00 ± 0.00	32.00 ± 0.00	No risk

Source: Staff of the Asdrúbal de la Torre Hospital

In the departments of Nursing, Laboratory, Obstetrics and X-rays, they have a low risk of developing Burnout Syndrome, having obtained low scores in Emotional Exhaustion (AE<15), Depersonalization (DP<3) and high scores in Personal Fulfillment (RP>40).

In the hospital management department the values obtained were high (AE>25), (DP>9) but there is evidence of a high score also in (PR>40) so a SB is not marked but a trend to develop it, in relation to Treating Physicians low scores were obtained in (AE<15) and (DP<3) and medium in (PR=36.5), so it is classified as a medium risk; in the nutrition department, intermediate range scores were obtained in the three scales assessed (AE=18), (DP=8) and (PR=38), being the department most prone to developing SB.

In the only department that evidences SB is in resident doctors obtaining a medium score is the scale of (AE = 23.50), high in (SD >9) and low in (PR<35).

Table 2: Results of the General Medical Staff of the Asdrúbal de la Torre Hospital

Measurement Scales	Stocking ($\bar{x}$)	Chi Square
Emotional Exhaustion	27,38	16,00
Depersonalization	11,7	13,33
Personal fulfillment	31,63	13,33

Source: Staff of the Asdrúbal de la Torre Hospital

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Table 2 details the scales valued in general practitioners of the institution, which already have SB, reaching a general mean in emotional exhaustion of 27.38 considered as a high score on this scale, for depersonalization there is an average of 13.33 also cataloged as high and finally in the scale of personal fulfillment a value of 31.63 is obtained with a low value, which adjusts according to the Maslash scale the presence of SB. When analyzing in each scale the Chi Square it is observed that they are different from 0 so it gives us to understand that a null hypothesis is eliminated and it is accepted that general practitioners have SB, mainly because of the low scores in personal fulfillment, because in the country it is very difficult to access a specialization due to high costs and limited quotas for access and permanent work overload.

Table 3 shows the data of the second study group, which is the administrative staff working in Health District 10D03, based on the application of the CESQT Questionnaire where the following results are obtained:

Table 3: Descriptive data of Burnout Syndrome in relation to the job in administrative staff

LABOR AREA	Enthusiasm for work	Scale	Psychic burnout	Scale	Indolence	Scale	Total	Fault	Scale	Diagnosis
Financial Administrative	14,33	30	4,66	40	11,66	90	75	2	30	TREND PROFILE 1
District address	10,93	15	6,88	60	4,5	45	70	3,19	40	TREND PROFILE 1
Planning	17	55	4,66	40	0,66	10	20	1,33	20	LOW PROBABILITY
Health promotion and equality	16	50	3,5	33	1,25	20	25	2,75	35	LOW PROBABILITY
Provision and quality of services	13,4	25	6,8	60	3,6	45	60	2,8	35	MEDIUM PROBABILITY
Portfolio Recovery	9	10	14	96	9	85	97	2,5	35	PROFILE 1
Technical support ticks	14	30	6,5	55	3	35	50	0	10	MEDIUM PROBABILITY
One-stop shop for customer service	16	50	0	5	1	15	10	0	10	LOW PROBABILITY
Health surveillance	11	15	12	90	7	66	90	7	80	PROFILE 1

Source: Health District Staff 100D03

In the Department of Health Promotion and Equality a Total Scale of 20 and 35 fault is obtained, for the Planning area, the Total and Fault Scales are 20 for each and the Single Window User Service department, the Scales obtained were 10 both in the Total and in fault, evidencing a low probability of SB in the three departments.

For the area of Provision and quality of services, a Total Scale of 60 and 35 fault is obtained and in the Technical Support section, the total Scales is 50 and 10 are guilt, cataloging them in a medium probability of SB in the two departments.

Another category described in this group is the tendency to profile 1 in which the departments that approach the lower limit corresponding to profile 1 are included, where the Financial Administrative department with a total scale of 75 and 30 fault and District Management with a total scale of 70 and guilt of 40 are included.

Profile 1 is characterized because the total scale is at a critical level after making an average between Illusion for work, psychic exhaustion and indolence without including the Scale of guilt, within this group are the area of Portfolio Recovery with a total Scale of 97 and one of guilt of 35 and the Department of Health Surveillance with a total Scale of 90 and guilt of 80.

Profile 2 is not evident in this study group, because critical levels of guilt are not obtained.

4. Discussion

After analyzing the results, it can be determined that there are other investigations such as that of those who refer to a decrease in medical well-being in their professional life, because several studies conducted in the United States show that the symptoms of exhaustion affect 30% to 68% in medical personnel surpassing all other professions, which is evidenced in this research since medical staff already have Burnout Syndrome, specifically in resident doctors and treating physicians are the most likely to develop it. Schrijver (2016)

Linares et al (2021) on the other hand, it conducts an investigation in Spain and Latin America which yields the following results based on the prevalence of SB in health personnel, it was evidenced by 14.9% in Spain, 14.4% in Argentina, 7.9% in Uruguay, 4.2% in Mexico, 4% in Ecuador, 4.3% in Peru, 5.9% in Colombia, 4.5 per cent in Guatemala and 2.5 per cent in El Salvador. Relating to the percentage. In the district of Health 10D03 8% of the staff has Pelfil 1 for the development of Burnout Syndrome and 51% that corresponds to the personnel working in the dependencies of District and Financial Administrative Management.

Balladares & Hablick (2017) They carry out a systematic review where they argue that SB also has symptoms at the physical level such as: muscular and joint conditions usually caused by muscle contractures; It can also show gastrointestinal problems, cardiovascular problems, skin conditions, headaches, and even alterations in sexual appetite and increased risk of obesity. With regard to Burnout syndrome in administrative staff, no studies have been found as such, but obesity and sedentary lifestyle can be identified when exposed to long working hours and physical and mental fatigue.

Curry & Thompson (2 014) states that a sedentary lifestyle involves at least one of the following criteria: a) a level of moderate physical activity or walks in a range of less than 30 minutes per session, carried out less frequently than 5 days per week; or b)

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perform intense physical activity in a period of less than 20 minutes per session, less than 3 times per week or c) lose less than 600 Metabolic Activity Equivalents (METs), when adding the energy expenditure of moderate, intense physical activity and walks per week, all this is seen more frequently in administrative staff who even have problems of overweight and obesity.

Bedoya (2017) It argues that the most affected workers are female in a proportion close to 62.5%; however, health personnel are permanently exposed to exhausting situations in their daily activity, due to the number of functions they perform daily in the hospital environment. In relation to this research, it is evident that the female gender leads most of the processes in both administrative and operational personnel, thus promoting a higher percentage for the development of psychosocial risk.

On the other hand, it conducts a study Lopez et al., (2007) in 73 physicians identifying burnout syndrome, in 58 people (79.4 %) who performed three or more guards per week and 15 (20.55 %), two or less; evidencing a relationship directly proportional to the number of guards per week, determining substantial statistical significance ($p = 0.002$). This is evidenced in the resident doctors of the Asdrúbal de la Torre Hospital who perform 12-hour guards 3 to 4 times a week, which means that the resident doctors already have SB in this institution.

5. Conclusions

In this research it was evidenced in the administrative staff of the Health District 10D03, that the area of Portfolio Recovery and Health Surveillance present a profile 1 for the development of SB, evidencing low scores in enthusiasm for work and high scores in psychic exhaustion and indolence, with Scales of 97 and 90 respectively it is not possible to obtain a profile 2 because the fault scores are not reached with scales of 35 and 80. In the departments of Financial Administrative and District Management, total scales of 75 and 70 are evidenced, entering a high level of developing a Burnout Worker Syndrome (SQT) which is cataloged in this study as a tendency to develop SQT, nor are high levels of guilt evident; in the rest of the evidence departments a low probability to develop BS.

On the other hand, the results obtained in the analysis of the operational staff of the Asdrúbal de la Torre Hospital reflect that the areas of Nursing, Obstetrics, X-rays and laboratory do not present a risk to develop SB with low scores in the three scales assessed, instead the departments of Hospital Management, Nutrition and Treating Physicians when obtaining high levels in the three scales and the resident doctors already have SB when obtaining high levels in exhaustion emotional and depersonalization and low levels of personal fulfillment.

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AUTHORSHIP CONTRIBUTION

MEE: You designed the methodology, conducted the research, conceptualized the research, analyzed the data, and wrote the initial draft.

SRM: Designed the methodology, performed the initial revision of the draft and reviewed the final work.

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