

RESEARCH ARTICLE

INCIDENCE OF OVERWEIGHT AND OBESITY OF WORKERS WHO UNDERSTAND PERIODIC LABOR EXAM AT THE IPS PREVENIR S.O. FROM CUCUTA

INCIDENCIA DE SOBREPESO Y OBESIDAD DE LOS TRABAJADORES QUE SE REALIZAN EXAMEN PERIÓDICO LABORAL EN LA IPS PREVENIR S.O. DE CÚCUTA

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ABSTRACT

General Objective: Determine the incidence of nutritional disorders (overweight and obesity) among workers who undergo periodic work examinations at the IPS Prevent S.O. of Cucuta during the period between January and March 2020. **Specific objectives:** Characterize the population studied based on key variables such as sex, labor section and age range. In addition, the magnitude of obesity and overweight was evaluated. **Methodology:** Descriptive research, where demographic and health data of the participants were collected using specific techniques and instruments for anthropometric evaluation and statistical analysis to determine the incidence of overweight and obesity in the studied population. **Results:** The study had a population of 884 workers, determining a total by anthropometry of 339 overweight people and 115 obese. According to the variables, the following reports were found with overweight and obesity, in gender: the male group 341 and female 113; in labor section, operational 319 and administrative 135 and in age range: youth 50, adulthood 395 and old age 9. Indicating that the incidence rate of overweight and obesity in the IPS Prevent S.O. of Cucuta Norte de Santander is 1 overweight or obese worker for

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every 2 workers. **Conclusion:** According to BMI, people who are in a job section, such as administrators or workers, are equally likely to have obesity. Even so, it is also worth noting that, regardless of the job section, one can also be in a normal BMI range. According to the incidence rate of overweight and obesity, it was observed that a promotion and prevention plan is required to enhance the health of the workers of the IPS Prevent S.O. of Cucuta Norte de Santander, improving its productivity.

KEYWORDS: Incidence, obesity, overweight, occupational health

RESUMEN:

Objetivo General: Determinar la incidencia de alteraciones nutricionales (sobrepeso y obesidad), entre los trabajadores que se someten a exámenes periódicos laborales en la IPS Prevenir S.O. de Cúcuta durante el periodo comprendido entre enero y marzo del 2020. **Objetivos específicos:** Caracterizar la población estudiada en función de variables claves como sexo, sección laboral y rango de edad. Además, se evaluó la magnitud de la obesidad y el sobrepeso. **Metodología:** Investigación descriptiva, donde se recopilaron datos demográficos y de salud de los participantes bajo técnicas e instrumentos específicos para la evaluación antropométrica y análisis estadístico para determinación de la incidencia de sobrepeso y obesidad en la población estudiada. **Resultados:** El estudio contó con una población de 884 trabajadores, determinando un total por antropometría de 339 personas con sobrepeso y 115 con obesidad. De acuerdo con las variables, se encontraron los siguientes reportes con sobrepeso y obesidad, en género: el grupo masculino 341 y femenino 113; en sección laboral, operativos 319 y administrativo 135 y en rango de edad: juventud 50, adultez 395 y vejez 9, indicándonos que la tasa de incidencia de sobrepeso y obesidad en la IPS Prevenir S.O. de Cúcuta Norte de Santander es de 1 trabajador con sobrepeso u obesidad por cada 2 trabajadores. **Conclusión:** Según el IMC, las personas que estén en una sección laboral, como administrativos u operarios, son igualmente propensas a tener obesidad. Aun así, también es de notar que, sin importar la sección laboral, también se puede estar en un rango de IMC de normal. De acuerdo con la tasa de incidencia de sobrepeso y obesidad, se pudo observar que se requiere un plan de promoción y prevención para potencializar la

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salud de los trabajadores de la IPS Prevenir S.O. de Cúcuta Norte de Santander, mejorando su productividad.

PALABRAS CLAVE: Incidencia, obesidad, sobrepeso, salud laboral.

INTRODUCTION

According to the WHO, obesity and overweight are defined as an abnormal or excessive accumulation of fat that may be harmful to health, due to unbalanced food intake, either due to neglect or lack of importance on the part of individuals to maintain their body balance, causing overweight, leading to obesity, and subsequently to chronic diseases such as arterial hypertension (HTN), diabetes (DM), among others.

Obesity and overweight, according to the WHO (2020), are identified by performing the BMI (Body Mass Index), which is a simple indicator of the relationship between weight and height, calculated by dividing a person's weight in kilograms by the square of their height in meters (kg/m^2). In adults, the standard measure is as follows, for both men and women: overweight: BMI equal to or greater than 25, obesity: BMI equal to or greater than 30.

"The World Health Organization (WHO) states that adequate nutrition can increase employee productivity by up to 20%, as a well-nourished person has more opportunities to work better, achieve higher work performance due to adequate energy and nutrient intake; greater physical and mental well-being; and improved productivity by reducing absenteeism due to diet-related illnesses." Torres E. et al (2016).

Overweight (OW) and obesity (OB) are currently considered a public health problem. According to Manzano E. & Hernández E. (2016), globally, the "World Health Organization (WHO) has termed it the '21st-century epidemic.' In a recent epidemiological analysis in Mexico, it was revealed that NCDs (non-communicable chronic diseases) caused 75% of total deaths and 68% of years of potential life lost. Obesity and overweight are metabolic and nutritional disorders with serious health consequences." On the other hand, at the Mexican Social Security Institute, a study in Guanajuato revealed that 66%

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of workers were overweight or obese, with a higher incidence in nursing personnel and men. Zumbardo L. et al (2016).

This article compiles information regarding the incidence of obesity and overweight in the working population attending the IPS, where the population with these conditions, according to their BMI (Body Mass Index), will be identified.

Of course, understanding that obesity and overweight vary according to age, gender, type of work, and other factors that are extensively represented in this section, it can be said that the variables to be taken into account have already been included in the stipulated time period since, being incidence, the variables have already occurred.

The main measure taken is the amount of population intended to be analyzed, which is contemplated as "people who are overweight and obese, undergoing periodic occupational examinations at IPS Prevenir," providing a characterization from an observational descriptive cross-sectional study, which allowed focusing on the final weighted

sample, making comparisons and obtaining a conclusion on the section of work, genders, and ages in which overweight and obesity are most common and evident at IPS Prevenir in Cúcuta in the first 3 months of 2020. Additionally, considering that no published records of overweight and obesity were found to be presented in the municipality of Cúcuta and that due to the lack of information regarding these conditions and their characterization, clear policies have not been able to be implemented in this city to generate action plans regarding the promotion of worker health and the prevention of overweight and obesity, justifying the development of this research as it provides sufficient information for the possible creation and implementation of the same.

METHODOLOGY

Descriptive cross-sectional observational study with information on occupational exams conducted by IPS from January to March 2020; the selected population consisted of 884 individuals who underwent periodic occupational exams at IPS Prevenir S.O., where their BMI indicated overweight or obesity, without considering existing pathologies;

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exclusion criteria included individuals under 18 years old and workers who underwent entry and exit occupational exams.

RESULTS In this study on quantitative observation of the population regarding body mass index versus gender, the results showed that the most frequent

group consisted of individuals with normal BMI, with 322 cases for males and 95 cases for females. In second place, for both genders, was the overweight group with 269 cases in males and 77 cases in females, followed by the obesity group with 79 cases for males and 36 cases for females. See image No.1.

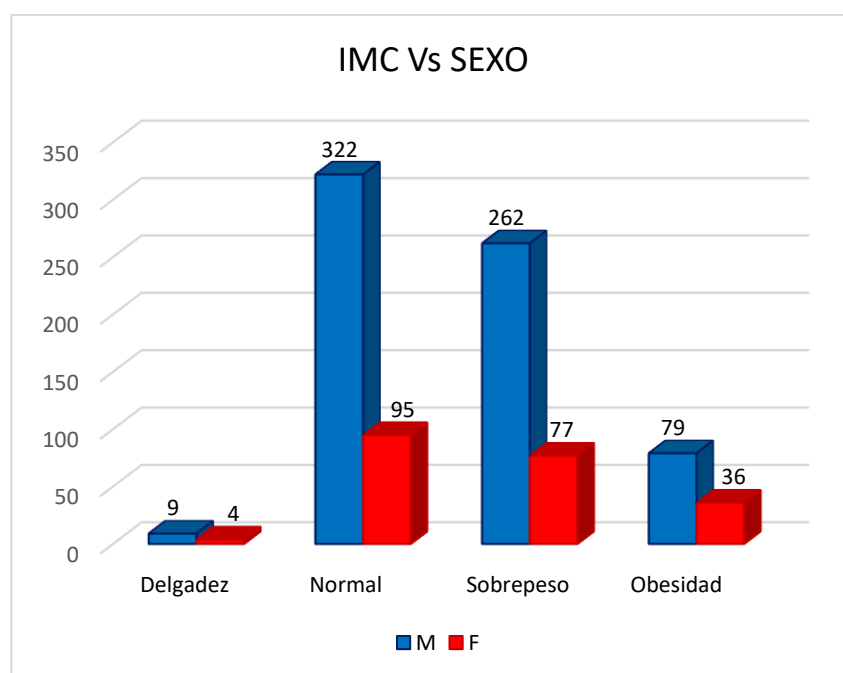


Image No.1. Relationship between body mass index and sex.

Similarly, a comparison is made between BMI and occupational section, highlighting that the population belonging to operational work sections falls within the normal range in 302 cases, while the administrative population has 115 cases; the overweight group consists of 242 and

97 cases for operational and administrative respectively. Regarding the obesity range, there are 77 in the operational population and 38 in the administrative section out of the total population. Finally, the population in the underweight group is composed of 10 cases from the operational population

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and 3 from the administrative population. See image No.2.

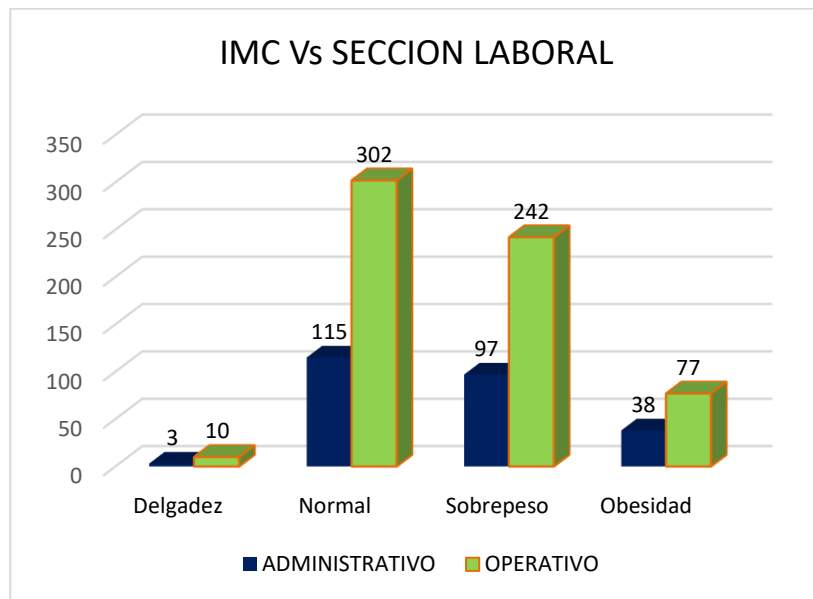


Image No.2. Relationship between body mass index and occupational section.

When considering BMI in relation to age, it is emphasized that the normal BMI range predominates with 315 cases in the adult population, 93 in the youth range, and 9 cases in the elderly range. As a second instance, overweight can be observed with 292 cases in adulthood, 42 in youth, and 5 cases in the elderly range.

Subsequently, the obesity range is found, corresponding to 103 cases in adulthood, 8 in youth, and 4 in old age. Finally, the underweight range is found with 8, 5, and 0 cases in adulthood, youth, and old age respectively. See image No.3.

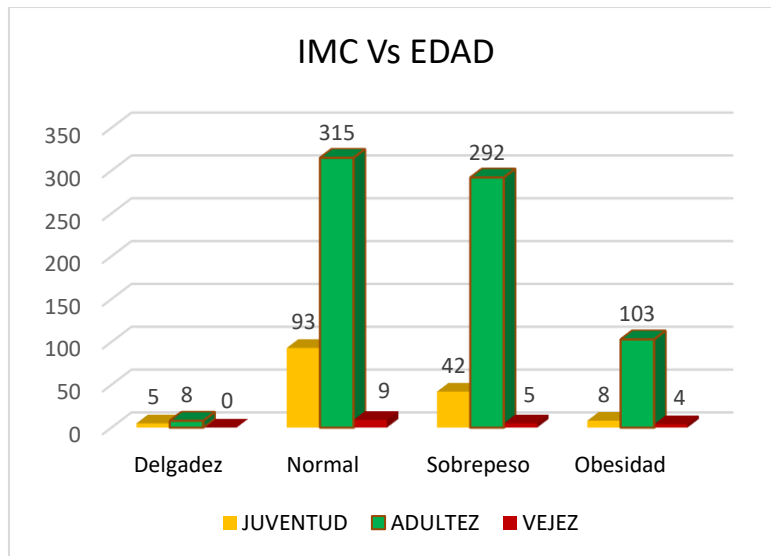


Image No.3. Body mass index relationship with age.

The study of the results, based on the information collected in the review, comprises 884 cases from January to March 2020, indicating a total of 454 sick workers. Therefore, the incidence rate of overweight and obesity at the Prevenir S.O. IPS in Cúcuta Norte de Santander is 1 sick worker for every 2 healthy ones.

CONCLUSIONS

According to BMI, individuals in occupational sections, such as administrative or operational roles, are equally prone to obesity. However, it is also noteworthy that regardless of the occupational section, individuals can still fall within a normal BMI range.

In the analysis, it was observed that the majority of the population is male with 672 cases, and the female population is 212, which did not allow us to determine which gender is more prone to overweight and obesity since the samples are not comparable to each other.

Based on the incidence rate of overweight and obesity, it can be observed that a promotion and prevention plan is required to enhance the health of workers at the Prevenir S.O. IPS in Cúcuta Norte de Santander, improving their productivity.

From an analytical perspective, it is evident that the majority with obesity

and overweight belong to the adult age range when contrasting BMI vs. age.

According to the total population, based on body mass index, regardless of gender, occupational section, or age variables, it was evident that the majority would belong to a normal population.

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