



29TH INTERNATIONAL NURSING RESEARCH CONGRESS

COMPARISON OF THE RISK OF DEVELOPING TYPE 2 DIABETES IN MINING AND ADMINISTRATIVE WORKERS

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Diabetes

- The term diabetes describes a metabolic disorder of multiple etiologies, characterized by chronic hyperglycemia with disturbances in the metabolism of carbohydrates, fats and proteins and resulting from defects in the secretion and / or action of insulin.

some statistics about diabetes...

Risk of developing in children of parents with diabetes

- 1 of 7 (before the age of 50)
- 1 of 13 (after age 50)

American Diabetes Association, 2014

193 million people are not diagnosed

- 1 in 11 have type 2 diabetes
- 215,2 million men have diabetes, in 2040 there will be 328,4 million
- 199,5 million women have diabetes, in 2040 there will be 313,3 million

International Diabetes Federation, 2015

Risk factors and Beliefs

- 85% of the population think that the current lifestyle causes diabetes
- 86% consider a cause a family history
- Increase in physical activity, balanced diet and weight reduction, reduces risk between 34 and 43%

Mexican Diabetes Federation, 2016

Objetivo

Assess the risk of developing type 2 diabetes in the Guanajuato population located in two different working contexts, to obtain information that allows to establish a preventive education interventions and delay the presentation of the disease.

Methods

- Quantitative cross-sectional study was carried out
- Convenience simple
- People over 18 years of age and in productive age
- Findrisk test
- Data analyzed and processed in statistical package spss versión 21
- Attached to the stipulations of the regulation of the general health law on health research

Results

227 people were evaluated



132 are administrative personnel



95 mining personnel

Administrative Personnel



49.2%



50.8%

Age range of 20 to 60 years, an average of 35 ± 9 years

9.8% have high school studies, 59.8% have a bachelor's degree and 30.3% have a Master's degree

with respect to marital status, 51.9% are single, 44.2% are married and 3.8% are divorced.

Clinical information

- The weight is in a range of 25 to 135 Kg, with an average of 73.5 ± 16.3 Kg.
- The size between 1.49 m to 1.9 mt with an average of 1.65 ± 0.08 mt .
- The abdominal perimeter with a range of 64 to 131 cm, with an average of 89.5 ± 12.3 cm.
- Capillary glucose from 74 to 178 mg/dl, with a mean of 104 ± 15 mg/dl.
- The systolic pressure was 82 to 135 mmHg, with a mean of 115 ± 8 mmHg and a diastolic pressure of 51 to 90 mmHg, with a mean of 72 ± 8 mmHg.

Mining Personnel



85.3%



14.7%

Age range of 18 to 77 years, an average of 36 ± 11 years

4.3% have no studies, 16.8% have primary studies, 35.8 Secondary%, 23.4% preparatory and 20% undergraduate

with respect to marital status, 30.5% are single, 66.3% married and 3.2% divorced.

Clinical information

- The weight range was from 47.6 to 118.9 Kg, with an average of 80.3 ± 14 Kg.
- The size from 1.48 to 1.84 mt, with an average of 1.69 ± 0.07 mt.
- The abdominal perimeter of 75 to 122 cm, with an average of 96 ± 11.1 cm.
- Capillary glucose from 73 to 413 mg/dl, with an average of 98 ± 4.1 mg/dl.
- The systolic pressure of 90 to 189 mmHg with a mean of 133 ± 14 mmHg and a diastolic pressure of 35 to 109, with a mean of 80 ± 10 mmHg.



- It was found that 60.6% of the administrative staff have problems with weight, ranging from chronic malnutrition to obesity.

Body mass index

- 41.7% low risk
- 39.4% slightly elevated
- 12.9% moderate risk
- 6.1% high risk

Risk of developing type 2 diabetes



- In the mining personnel 77.9% presents situations of overweight and obesity.

- 43.2% low risk
- 32.6% slightly elevated
- 10.5% moderate risk
- 11.6% high risk
- 2.1% very high risk

Conclusion

- It is alarming to note that 57% of the valued population will develop type 2 diabetes in less than 10 years.
- It is important to highlight the high levels of overweight and obesity that were shown in both personal, therefore the relevance of implementing interventions related to those modifiable risk factors, nutrition and physical activation.
- This information is a source of alert for labor institutions, which will have to invest in actions to improve the health of their workers and avoid a higher cost, due to the loss of their human resources.
- For the nursing professional, these data allow to expand fields of action and to enter with greater presence in occupational health.



THANK YOU
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