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# "RELATIONSHIP BETWEEN PHYSICAL ACTIVITY LEVEL MEASURED WITH *IPAQ QUESTIONARY* AND GLUCOSE LEVEL IN PEOPLE WITH DIABETES."

# **AETIOLOGIC EPIDEMIOLOGY**

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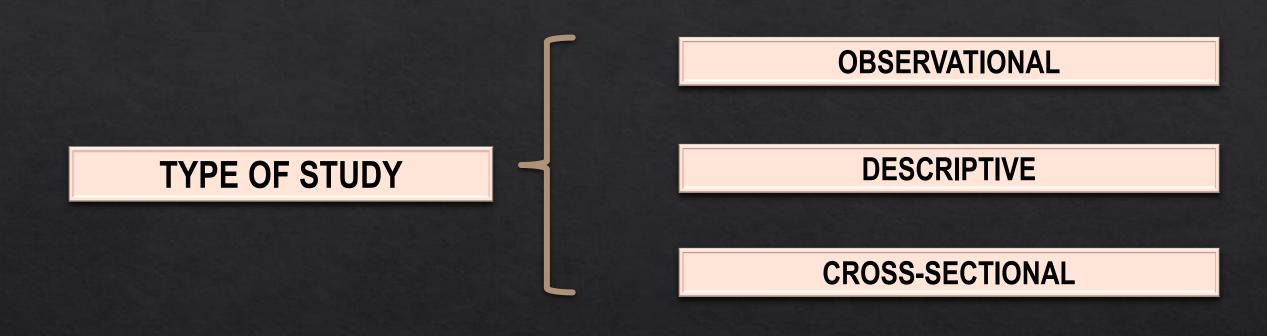
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### **OBJECTIVE**

# TO DETERMINATE THE RELATIONSHIP BETWEEN PHYSICAL ACTIVITY LEVEL MEASURED WITH IPAQ QUESTIONARY AND GLUCOSE CONTROL IN PEOPLE WITH DIABETES.

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#### PATIENTS WITH TYPE 1 AND TYPE 2 DIABETES OVER 18 YEARS OLD.

JANUARY 2019 – JANUARY 2021.

HEROES DEL MONCADA POLYCLINIC, HAVANA.

1) SUBJECT OF STUDY:

2) TIME TABLE



Ρ

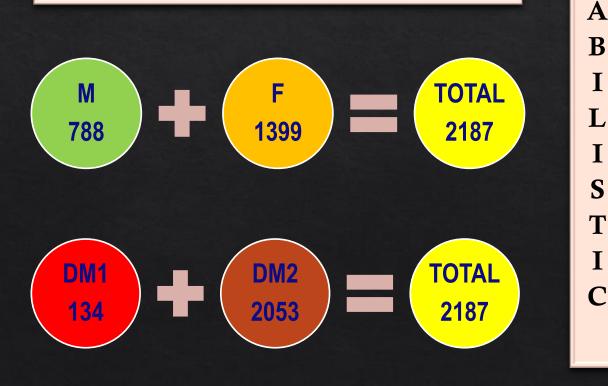
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B

#### **POPULATION:**

### REGISTERED POPULATION AS PEOPLE WITH DIABETES IN THE POLICLINIC.



#### SAMPLE:

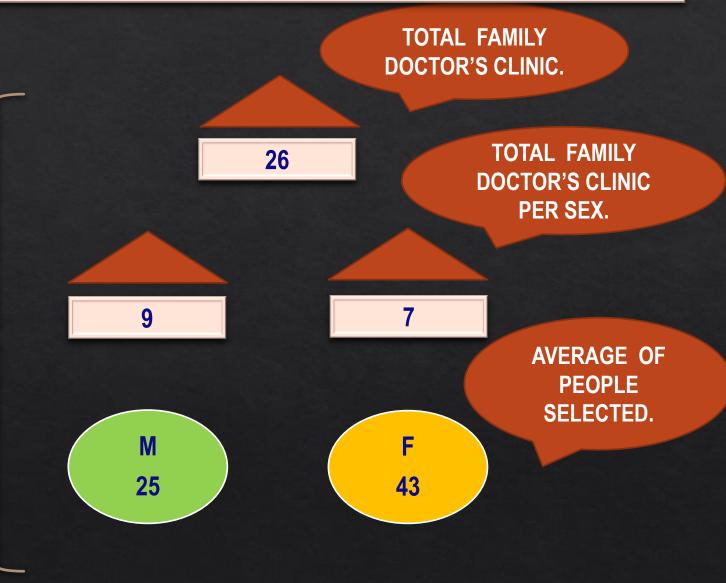
### EXPECTED FREQUENCY OF NON PHYSICAL ACTIVITY MEN: 29,8%; WOMEN: 50,8%.

MAXIMAL ADMITED MISTAKE IN THE ESTIMATION: 5%; CONFIABILITY: 95%.

# INCREASING OF SAMPLE ACCORDING OF NON PROBABLE ANSWER 5%.



SAMPLE SELECTION (SELECTION OF FAMILY DOCTOR'S CLINIC): SIMPLE RANDOM SAMPLE.



# **INCLUSION CRITERIA**

◇ -PATIENT MORE THAN 18
 YEARS OLD WITH INDIVIDUAL
 CLINICAL HISTORY

# **EXCLUSION CRITERIA**

 
 ◆ -PATIENTS WITH HANDICAP CHRONIC COMPLICATION OF DIABETES.

♦ -GLYCEMIC CONTROL ABOVE 14 mmol/L.

♦ -PREGNANCY.

### **GENERAL PROCEDURES OF THE RESEARCH:**

#### **PATIENT CONSENT SIGNED**

**DATA COLLECTION** 

#### **PATIENT INTERVIEW**

PHYSICAL EXAMINATION (WEIGHT,HEIGHT, BMI,ABDOMINAL CIRCUMFERENCE INDIVIDUAL CLINICAL HISTORY FAMILY CLINICAL HISTORY

COMPLEMENTARY EXAMS HbAc1 and Gluc Ay.

#### **IPAQ QUESTIONAIRE (LOW, MODERATE AND HIGH LEVEL)**

D

1

2

DATA FORM

# STATISTIC TECHNIQUES

COMPARE MEAN VALUES OF QUANTITATIVE VARIABLES(HbA1c) BETWEEN ESTABLISHED GROUPS ACCORDING PHYSICAL ACTIVITY LEVEL.

# STATISTIC TECHNIQUES

IT WILL BE USED THE ONE FACTOR ANOVA TEST ACCORDING TO NORMALITY, FOR INDEPENDENT SAMPLE,IN CASE OF NON ACCOMPLISHMENT OF NORMALITY IT WILL BE USED KRUSKAL-WALLIS TEST.

# STATISTIC TECHNIQUES

TO DETERMINE THE RELATION OF THE QUANTITATIVE VARIABLES, THE LEVEL OF PHYSICAL ACTIVITY (ACCUMULATED IN THE LAST WEEK WITH HBA1C (%) AND GLUCOSE AT FASTING, A CORRELATION ANALYSIS WILL BE DONE WITH A PEARSON CORRELATION COEFFICIENT.

# STATISTIC TECHNIQUES

TO DETERMINE ASSOCIATION LEVEL BETWEEN QUALITATIVE VARIABLES AND FISICAL ACTIVITY LEVEL WILL BE USED THE PEARSON (X2), AND WHEN SOME OF THE EXPECTED VALUES BE < 5 OR TOTAL SAMPLE < DE TOTAL SAMPLE TOTAL SAMPLE 30, IT WILL BE USED THE FISHER EXACT TEST.

# STATISTIC TECHNIQUES

FOR THE EVALUATION OF THE LEVEL OF PHYSICAL ACTIVITY A (MET/MINUTES/WEEK) AS PREDICTOR OF GLUCOSE METABÓLIC CONTROL (MEAN VALUES LINEAL OF FASTING GLUCOSE AND HbA1c), A MULTIPLE REGRESION ANALISIS WILL BE CARRY ON, CONSIDERING THE FIRST AND INDEPENDENT VARIABLE AND THE SECONDS AS DEPENDENT, BMI AND DIABETS COMPLICATIONS (AUTONOMIC NEUROPATY OR PERIFERIC VASCULAR INSUFICIENCY), WILL BE INCLUDED IN THE MODEL AS POSSIBLE CONFOUNDERS VARIABLES TO CONTROL.

