

BODY MASS INDEX AND ITS INFLUENCE ON HIV POSITIVE PATIENTS

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- **ABSTRACT**

A cross-sectional study was conducted in Aminu Kano Teaching Hospital, Kano State. with objectives to determine if there is a significant relation between height and weight of HIV positive patients, to test whether or not gender has impact on the BMI of HIV positive patients, to verify the relation between BMI and age of HIV positive patients, to determine whether or not there is a statistically significant difference in BMI of males and females HIV positive patients, as well coming up with a model that predict the height value when the BMI and weight are known. The followings conclusions were derive in order to attain the research objectives and make generalization over the population under study: there is a statistically significant linear relation between the height and weight of HIV positive patients. However, the study prevails that Body Mass Index does not depend on gender. Additionally, there is no significant difference in the BMI of male and female patients. Contrary, the study finalizes that Body Mass Index defends on the age of the HIV positive patients.

Problems, data, previous works

- Must of the people in our society are of the view that HIV Positive patients happen to be underweight or associated with lower body mass, also knowing the condition of your BMI can help you determine any risk you may face incase of it is outside a health border. in the same time those identified as under or over weights are related to some health conditions. Hence, it is essential to know the BMI of this vulnerable population.

Methods

- The total group of HIV positive patients attending Aminu Kano Teaching Hospital is used as the target population, because it possesses the average characteristics to represent the research population. The study is carried out on 104 HIV positive patients of Aminu Kano Teaching Hospital, through which statistical inferences for the whole population are to be made.
- Simple random sampling is used in this research. In order for the problem to be efficiently examined, a cross-sectional study is being applied in this study.
- Pertaining to this study, Chi-Square test of independence, correlation and regression, analyses, as well as an independent t-test are used.

Results and Conclusions

- The followings conclusions are derive in order to attain the research objectives and make generalization over the population under study: there is a statistically significant linear relation between the height and weight of HIV positive patients. However, the study prevails that Body Mass Index does not depend on gender, that is to say Body Mass Index has nothing to do with gender. Additionally, there is no significant difference in the BMI of male and female patients. Contrary, the study finalizes that Body Mass Index defends on the age of the HIV positive patients, that is, there exists a linear relation between Body Mass Index and age of HIV positive patients.
- Last but not least, the study comes up with the following model to estimate the height when the BMI and weight are known: $\text{Height} = 154.611 - 3.94(\text{BMI}) + 1.292(\text{weight})$.