Impacts of Body Mass Index (BMI) on Diabetes

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Abstract:- This study finds the relation of BMI with Diabetes. BMI (Body Mass Index) is the Height and Weight Ratio which is fixed. As it is very necessary as the person who's BMI is not on that range has fear of diabetes and Pre-diabetes.BMI plays a very important role in person's life to become healthy and fit. To live a better and healthy life one should be taken care of his BMI as to maintain this ratio, one should be careful. Now-a-days it is seen that large number of cases are increasing of diabetes and pre-diabetes and the reason of this is incorrect BMI as incorrect BMI leads to diabetes and Pre-diabetes. This study helps us to decrease the number of cases of Pre-diabetes and Diabetes which are occurring due to incorrect BMI.

Keywords:- BMI (Body Mass Index), Diabetes, Pre-Diabetes.

I. INTRODUCTION

Diabetes is the very dangerous chronic disease. Diabetes kills the person slowly and also weakens the immune system. A diabetic patient is more prone to getting more dangerous diseases like Heart related diseases. There are many factors which are responsible for diabetics and pre-diabetes. In which BMI is the one of the main reason. It is generally seen that the patients who has more fat have more risk of getting Type-2 Diabetes. But sometimes it is not the case. As it is seen that some patients are not have more weight are getting diabetes and some patients have more weight they are not getting diabetes. It means that only weight is not the factor. Some other factor is also there. So the whole concept is the concept of BMI which is the ratio of Height and weight. BMI categories the patients who are having obesity and who aren't. It is seen from BMI that some in physical appearance they look like they are having obesity but there BMI is correct so they are not obese but some are not looking obese but they are. So the deciding factor is BMI. Early knowledge saves anyone from getting this chronic and dangerous disease. As one can maintain their BMI if someone has proper knowledge about BMI.

> Objectives of the study-

The objective of this study is to finds the relationship between BMI (Body Mass Index) and Diabetes.

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II. RESEARCH METHODOLOGY

The data has been collected from various secondary sources like National Surveys and the various research papers.

> BMI and Diabetes Association

Diabetes is a very dangerous chronic disease. India is among one of the countries who are in top ten positions in number of higher patients of diabetes. Diabetes is the disease which weakens the immune system of the body and it slowly eats the body. Diabetes is leading its patients more prone to other diseases like Heart Diseases. BMI (Body Mass Index) is also a reason of more diabetic patients.

BMI (Body Mass Index) is a measure of the fat of the body which is the measure based on the height of the body and weight of the body. It is seen that it is calculated when we know the weight of the person and the height of the person as BMI is the body mass divided by the square of the body height. Weight which is actually the mass is measured in kilograms i.e. Kg and height which is measured in metres so the unit of BMI becomes kg/m². The BMI (Body Mass Index) Range calculations are given below –

- Underweight- under 18.5 kg/m²
- Normal weight- 18.5 to 24.9
- Overweight 25 to 29.9
- Obese 30 or more

It is seen that who have BMI in the range of overweight and obese are more likely to getting diabetes or pre-diabetes. Obesity is the becoming the one of the main reason of diabetes or pre-diabetes. Normal range of BMI is 18.5- 24.9 Kg/m². The person who have BMI(Body Mass Index) more than 24.9 are among in the category of overweight and obese and it seen that people who are in this category are more prone for getting diabetes. So, it is very important to maintain the normal range of BMI (Body Mass Index) to live a healthy and better quality of life. It is seen that the diabetes and Body Mass Index (BMI) are associated with each other. The Association of Body Mass Index (BMI) and diabetes tells us that one can prevent diabetes by maintaining proper BMI.

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III. EFFECTS OF HAVING INCORRECT BMI

Incorrect BMI is the main reason of diabetes and the incorrect BMI often leads to many more diseases some are given below-

- High blood pressure
- Diabetes
- Liver diseases
- High Cholesterol
- Improper sleep
- Some types of cancer
- Arthritis

IV. SUGGESTIONS

It is seen that Incorrect BMI leads to diabetes which further leads to many diseases so some suggestions are given below for Proper BMI

- Regular Checking of BMI
- Proper Weight is maintained
- Proper Diet is taken to maintain BMI
- Proper exercise is done to maintain BMI
- Consult the doctor whenever required
- Do work out about 60-90 minutes a day
- By Staying Hydrated
- By Reducing calorie intake
- Cut out foods having hidden sugar like sauce, tinned syrups, cereal bars, and salad dressings.
- Playing games like Football, Rugby and net ball etc
- Cycling is one of the best methods.
- Swimming, Gymnastics and Skipping rope etc.

V. CONCLUSION

It is seen from above discussion that one who are obese or having obesity have more risk of getting diabetes or prediabetes. In another words we can say that one who have incorrect BMI have more risk of getting diabetes or prediabetes than the person who have correct BMI. So the Normal BMI is important to live a healthy life. It draws a relationship between BMI and diabetes which is that who have BMI more than normal range of BMI they are more likely to get diabetes. It is also possible to reverse the prediabetes at the very early stages by losing the extra fat or by maintaining the proper BMI.

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