

Association of lipid levels and BMI in hyperlipidemic males (35-65 years) with and without type II diabetes

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ABSTRACT

This study was carried out on 35-65 years males. Purposive Sampling Technique was used for study. Subjects were divided into two groups according to their pathologic conditions. A booklet "eat healthy – live healthy" was also designed. BMI and low physical activity was positively associated with hyperlipidemia and NIDDM. Hypertension was found to be the common complication in both the groups.

Key words : Hypertension, Diabetes, Obesity, Hyperlipidemia

There is a close association between obesity and diabetes. People with diabetes have metabolic alteration like insulin resistance, blood lipid abnormalities, hyperlipidemia, hypertension and central obesity. Trunkal obesity is associated with high blood insulin levels which also increases the activity of lipoprotein lipase and fat storage and may indirectly cause over eating. Plasma cholesterol level is generally high in obese people. People with diabetes have metabolic alteration like insulin resistance, blood lipid abnormalities, hyperlipidemia, hypertension and central obesity. Increased adiposity is associated with several other risk factors, such as hypertension, sedentary lifestyle, glucose intolerance, low HDL-C concentrations and high triglyceride concentrations. Hyperlipidemia occurs in one-third to the half of diabetes patients. Hypertension is often associated with other risk factors such as obesity, blood lipid abnormalities, insulin resistance and glucose intolerance. The majority of middle-aged diabetics are obese. There is a strong association between diabetes and obesity but it is uncertain whether obesity is the result or the cause of diabetes. Despite the studies conducted on co-relation of obesity, hyperlipidemia and NIDDM over the past few decades, it is unclear whether adults with and without type II diabetes have similar lipid levels and BMI. So, the objectives of this study are- (a) to examine the predictive relation between hyperlipidemia, obesity and type II diabetes. (b) to educate the subject about the prevention and control of the three disorders through dietary modification.

METHODOLOGY

For the present study medical informations like BMI,

lipid levels, blood pressure, hemoglobin level etc. of the respondents were taken. The research design used for the study was the matched-control experimental design. The study was carried out on hyperlipidemic males with and without type II diabetes (NIDDM). The sample size was comprised of 50 males. Subjects were from 35-65 years of age and all socio-economic groups. Subjects were divided into two groups according to their pathologic conditions- (i) group I comprised of 25 hyperlipidemic men with type II diabetes. (ii) group II comprised of 25 hyperlipidemic men without type II diabetes. The study was conducted on respondents who fulfilled the above

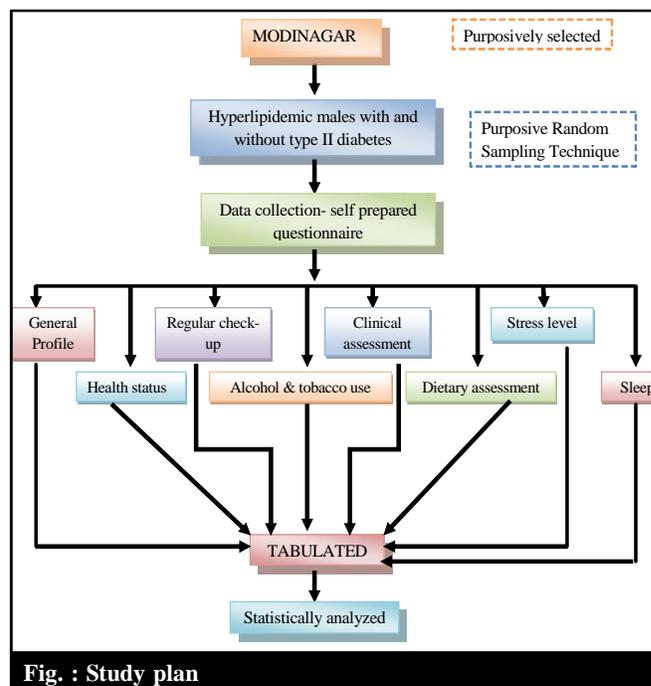


Fig. : Study plan