

Original Research Paper

Physical Education

RELATIONSHIP OF PSYCHOLOGICAL WELL-BEING WITH BLOOD GLUCOSE LEVELS OF DIABETIC TYPE II PATIENTS

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The study was analysed to find out the relationship of psychological well being with blood glucose levels of diabetic type II subjects. Only aged male patients (N=30) were selected as subjects for this study and age ranged from 45 to 55 years. The fasting blood glucose level was measured for the measurement of these glucose levels to the nearest mg/dl. Carol Ryff psychological well-being questionnaire was used for measuring the psychological well-being. Coefficient correlation method was applied to investigate the relationship of depression with blood glucose levels. The results of this study suggest that there is a negative relationship between blood glucose level and the psychological well-being at 0.05 level of confidence.

KEYWORDS: NIDDM, Fasting blood glucose level, psychological well-being.

INTRODUCTION

Diabetes is a chronic disease which affects virtually every organ in the human system. The World Health Organization projected that 300 million people will suffer from diabetes by 2025. India has the largest number of diabetic population in the world and it is expected that there will be 69.9 million diabetic populations in India by 2025.

There are several personality characteristics, the presence and absence of which indicates psychological well being. Psychological wellbeing is a multi-dimensional concept. The feeling of happiness and satisfaction subjectively experienced by individuals has been termed as psychological wellbeing (Okun & Stock, 1987; Diener & Suh, 1997).

According to Diener and Suh (1997), psychological wellbeing consists of three interrelated components: life satisfaction, pleasant affect, and unpleasant affect. Affect refers to pleasant and unpleasant moods and emotions, whereas life satisfaction refers to a cognitive sense of satisfaction with life (Diener & Suh, 1997). The practice of yoga reduces psychophysiological signs of stress. Yoga has sound scientific basis and an ideal tool for improving positive physical and mental health and wellbeing of people regardless of their age. In the age of anxiety and stress, there is increasing interest in the study of psychological wellbeing as people wish to live in harmony and peace. Yogic science believes in a holistic approach to health and wellbeing of which the body, mind and spirit are integral and interdependent parts. Yoga claims to endow perfect physical, mental and social wellbeing even under stressful conditions (Tripathi & Singh, 2013). The yogic exercises enhance resilience and improve mind-body awareness, which can help people adjust their behaviours based on the feelings they are experiencing in their bodies.

Psychological wellbeing is not just a moderator variable to our performance as reported by Sultana (1996), rather it makes life meaningful and purposeful. Rightly therefore, efforts are being made by psychologists to investigate the sociopsychological correlates of PWB (Sinha and Verma, 1992).

Most patients with diabetes will require self-medication education life counselling. There is also increasing recognition that the implementation of coping/psychoeducational interventions is beneficial in many patients and that this should form part of the spectrum of psychological care. Psychotherapy should be implemented in patients with severe psychological problems.

Considering this view, the present researcher was in opinion that there is a relationship exist between psychological well-being with blood glucose levels of diabetic type II subjects. Hence researcher undertaken this study entitled,

"Relationship Of Psychological Well-being With Blood Glucose Levels Of Diabetic Type II Patients".

Diabetes patients basically suffering from various kinds of psychological problem. Hence it is the need of an hour for all the people to know the relation between psychological wellbeing with blood glucose levels of diabetic type ii patients". Thus, the present investigation seems to be important and has its relevance in the society.

Statement Of The Problem

The purpose of the study was to find out the relationship of psychological well-being with blood glucose levels in diabetic type II subjects.

DEFINATION OF TERMS

Psychological well-being

Psychological well-being refers to how people evaluate their lives. According to Diener (1997), these evaluations may be in the form of cognitions or in the form of affect. The cognitive part is an information based appraisal of one's life that is when a person gives conscious evaluative judgments about one's satisfaction with life as a whole. The affective part is a hedonic evaluation guided by emotions and feelings such as frequency with which people experience pleasant/unpleasant moods in reaction to their lives.

Diabetes Type 2

Diabetes mellitus type 2 (also known as type 2 diabetes) is a long term metabolic disorder that is characterized by high blood sugar, insulin resistance, and relative lack of insulin. Common symptoms include increased thirst, frequent urination, and unexplained weight loss.

Symptoms may also include increased hunger, feeling tired, and sores that do not heal. Long-term complications from high blood sugar include heart disease, strokes, diabetic retinopathy which can result in blindness, kidney failure, and poor blood flow in the limbs which may lead to amputations.

Type 2 diabetes primarily occurs as a result of obesity and not enough exercise. Some people are more genetically at risk than others. Type 2 diabetes makes up about 90% of cases of diabetes, with the other 10% due primarily to diabetes mellitus type 1 and gestational diabetes.

Subject

Twenty Diabetes type II male patients were selected randomly for this study, whose age range from 45 to 55 years. To measure the level of blood glucose, One test was conducted, that was fasting blood glucose test. On the other hand to measure psychological well-being, Carol Ryff psychological well-being questionnaire was used.

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Test/Tools

Psychological Well-being Questionnaire

Carol Ryff has developed psychological well-being questionnaire which consisting of 6 dimensions: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, self-acceptance. Individuals respond to various statements and indicate on a 6-point Likert scale how true each statement is of them. Higher scores on each on scale indicate greater well-being on that dimension.

Fasting Blood Glucose Test

Standard and calibrated Blood glucometer instrument prepared by Contour Company was used for measuring the level of blood glucose present in the blood of an individual to the nearest mg/dl. For collecting the data most common blood sugar test was used i.e. simple finger prick test. The finger prick test measures glucose in milligrams (of glucose) per decilitre of blood (mg/dl). For diagnostic purposes, this was done when the individual has not eaten anything for 10 hours (fasting). (www.ehow.com/about_5104313_ideal-blood-glucose-level.html.)

STATISTICAL PROCEDURE

The data gathered were duly analysed through statistical procedure. Coefficient correlation method was used to find out if any significance relationship exists between blood glucose level and psychological well-being of male subjects.

Table -1 MEAN, S.D., And Coefficient Corelation Of Fasting Blood Glucose Level And Psychological Well-being Of Diabetes Type Ii Patients.

| Variables | Subject | Mean | S.D. | R | Remarks |
|-----------------------------|---------|--------|------|-------|-------------|
| Fasting glucose | 30 | 128.73 | 3.43 | -0.24 | Not |
| Level | | | | | significant |
| Psychological Well-being | 30 | 84.83 | 2.94 | | |

Not Significant at 0.05 level

*'P' value required to be significant at 0.05 level of confidence with 28 degree of freedom was 0.361

DISCUSSION OF FINDINGS

The proposed study was conducted to measure the correlation between psychological wellbeing and fasting flood glucose level of male diabetes patients. The obtained result revealed negative correlation between psychological wellbeing and fasting flood glucose male diabetes patients.

From Table-1, it was clear that negative correlation ship was observed between fasting flood glucose level and psychological well-being of Diabetes type II patients.

This finding is also supported by other relevant studies, Naess, Midtjhell, Moum, Sorensen, and Tambs (1995) showed that the psychological well being of diabetic patients was found to be significantly poorer than that of those without diabetes.

The findings of study show a glimpse of the correlation between psychological well-being fasting flood glucose levels of male diabetes patients. However, more researches are needed to study the impact of psychological well-being among other people related to diabetes in order to better understanding of diabetes and psychological well-being. It is also necessary to understand the gender differences of these variables.

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