# **Original Research Paper**



## Nursing

A DESCRIPTIVE STUDY TO ASSESS THE LEVELS OF KNOWLEDGE,
ATTITUDE AND EXPRESSED PRACTICES ON LIFE STYLE
MODIFICATION AMONG PATIENTS WITH TYPE II DIABETES MELLITUS
AT SRI NARAYANI HOSPITAL AND RESEARCH CENTER, VELLORE.

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ABSTRACT This study was aimed to Assess the levels of knowledge, attitude and expressed practice on life style modification among patients with type II diabetes mellitus. The approach of this study was descriptive approach. Non probability purposive sampling technique was adopted to select 75 samples based on inclusion criteria. The major findings of the study revealed that 28(37.33%) of patients with type II diabetes mellitus had inadequate knowledge, 35(46.67%) had moderate knowledge and 12(16%) had adequate knowledge on lifestyle modification. Results of attitude shows that 6(8%) of patients with type II diabetes mellitus had unfavourable attitude, 52(69.33%) had moderately favourable attitude and 17(22.67%) had favourable attitude on lifestyle modification. And also, the finding shows 30(40%) of patients with type II diabetes mellitus had poor practice, 37(49.33%) had fair practice and 8(10.66%) had good practice on lifestyle mellitus. And the study reveals association between levels of knowledge, attitude and expressed practice on lifestyle modification with selected demographic variables.

**KEYWORDS**: Effectiveness, Levels Of Knowledge, Attitude, Expressed Practices, Life Style Modification

#### INTRODUCTION

Diabetes is a chronic, metabolic disease characterized by elevated levels of blood glucose which leads over time to serious damage to the heart, blood vessels, eyes, kidneys, and nerves. The most common is type 2 diabetes, usually in adults, which occurs when the body becomes resistant to insulin or doesn't make enough insulin. In the past three decades the prevalence of type 2 diabetes has risen dramatically in countries of all income levels. Type 1 diabetes, once known as juvenile diabetes or insulin-dependent diabetes, is a chronic condition in which the pancreas produces little or no insulin by itself. For people living with diabetes, access to affordable treatment, including insulin, is critical to their survival. There is a globally agreed target to halt the rise in diabetes and obesity by 2025.

Change in eating habits, increasing weight and decreased physical activity are major factors leading to increased incidence of type 2 diabetes. Obesity is the most important modifiable risk factor. Smoking is an independent risk factor for type 2 diabetes mellitus. Diet and exercise are primary therapeutic options for its management. Dietary management should not only aim to achieve glycaemic control but to normalise dyslipidaemia. Smoking cessation reduces the risk of morbidity and mortality in CAD. Exercise improves the condition of a diabetic patient. Exercise includes yoga practices which have a role to play in the prevention of type 2 diabetes

WHO recommended that adherence to the medications can promote the population's health and minimize long-term complications of the disease. Lifestyle variables include meal habits, exercise state, drinking state and smoking state. And also Modification in these factors would result improved compliance towards hypoglycemic agents.

## STATEMENT OF THE PROBLEM

A descriptive study to assess the levels of knowledge, attitude and expressed practice on lifestyle modification among patients with type II diabetes mellitus at Sri Narayani Hospital and Research centre, Vellore.

## OBJECTIVES OF THE STUDY

- To assess the levels of knowledge, attitude and expressed practice on lifestyle modification among patients with type II diabetes mellitus
- To determine the association between levels of knowledge, attitude and expressed practice on lifestyle modification with selected demographic variables.

## METHODOLOGY

The research approach was quantitative approach. The design selected was descriptive design. Purposive sampling technique was adopted to select 75 samples with type II diabetes mellitus at Sri Narayani

Hospital and Research Center, Vellore. The tool designed for this study consists of four sections in order to achieve the objectives.

**Section A:** Consists of Demographic variables includes sociodemographic characteristics, clinical and anthropometric variables, behavioural variables, diet and nutritional variables.

**Section B:** Consists of 20 questions related to knowledge on lifestyle modification related to type II diabetes mellitus. Each question has four options out of which one is correct answer. For each correct response a score of '1'(one) and for wrong response '0' (zero) score was given. The total score was 20.

**Section C:** Consists of 10 questions related to attitude on lifestyle modification related to type II diabetes mellitus. It consists of five-point Likert scale. Total score was 50.

**Section D:** Expressed practice on lifestyle modification related to type II diabetes mellitus was assessed with check list which consists of 14 questions.

## **DATA COLLECTION PROCEDURE**

After received formal permission from Institutional head, data collection was started. Seventy-five samples were selected using purposive sampling technique. Duration of data collection period was one month. Formal written consent obtained from all the samples. After proper explanation the tool was given to the samples. The data collection was ranged from 45 -50 minutes for each sample. The confidentiality was assured to all the study samples.

## PLAN FOR DATA ANALYSIS

Each item in the tool was scored and result was tabulated by using descriptive and inferential statistics. Frequency and percentage were used to analysis the selected demographic variables. Mean, standard deviation and percentage were used to assess the levels of knowledge, attitude and expressed practice. Chi-square test was used determine the association between levels of knowledge, attitude and expressed practice on lifestyle modification with selected demographic variables

### **MAJOR FINDINGS**

Table 1: Frequency and percentage distribution of levels of knowledge on lifestyle modification among patients with type II diabetes mellitus.

n=75

LEVELS OF KNOWLEDGE	FREQUENCY (n)	PERCENTAGE(%)
Inadequate	28	37.33
Moderate knowledge	35	36.67
Adequate knowledge	12	16

Table 2: Frequency and percentage distribution of levels of attitude on lifestyle modification among patients with type II diabetes mellitus.

n=75

LEVELS OF KNOWLEDGE	FREQUENCY (n)	PERCENTAGE (%)
Unfavourable attitude	6	8
Moderately favourable attitude	52	69.33
Favourable attitude	17	22.66

Table 3: Frequency and percentage distribution of levels of expressed practises on lifestyle modification among patients with type II diabetes mellitus.

n=75

LEVELS OF KNOWLEDGE	FREQUENCY (n)	PERCENTAGE (%)
Poor practice	30	40
Fair practice	37	49.33
Good practice	8	10.66

The major findings of the study revealed that 28(37.33%) had inadequate knowledge, 35(46.67%) had moderate knowledge and 12(16%) had adequate knowledge on lifestyle modification of patients with type II diabetes mellitus. Results of attitude shows that 6(8%) had unfavourable attitude, 52(69.33%) had moderately favourable attitude and 17(22.67%) had favourable attitude on lifestyle modification. And also the finding shows 30(40%) had poor practice, 37(49.33%) had fair practice and 8(10.66%) had good practice on lifestyle modification of patients with type II diabetes mellitus .

There were significant association between levels of knowledge with demographic variables like age in years, type of family, occupation, educational qualification, average family monthly income, residential area, history of co-morbid illness, height, weight, body mass index, random blood sugar level, history of smoking, history of alcoholism, stress relieving measures, type of stress relieving measures, doing regular exercise, type of exercise, dietary habit, number of meals/day, and fast food

This study shows there were statistically significant association between levels of attitude with demographic variables like age in years, type of family, marital status, occupation, educational qualification, average family monthly income, residential area, family history of DM, history of co-morbid illness, height, weight, body mass index, random blood sugar level, common causes for stress, intake of fruits, intake of vegetables, fast food and junk foods.

Statistically significant association were seen between levels of expressed practice with demographic variables like religion, type of family, average family monthly income, family history of DM, history of co-morbid illness, source of knowledge about DM, body mass index, random blood sugar level, history of smoking, history of alcoholism, history of stress, stress relief measures, type of stress relieving measures, exercise, if do exercise, dietary habit, intake of fruits, intake of vegetables and junk foods.

## CONCLUSION

The study findings revealed that majority of people diabetes had moderate knowledge, moderately favourable attitude and fair practice on lifestyle modification. Therefore, improving knowledge regarding lifestyle modification of patients with type II diabetes mellitus is essential to improve the attitude and expressed practice among patients with type II diabetes.

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