A STUDY TO ASSESS THE KNOWLEDGE ON CLINICAL FEATURES AND COMPLICATIONS OF DIABETES MELLITUS AMONG ADULTS IN KAMAKSHI NAGAR, NELLORE."



Asso. Prof., **Mrs. A. Viji,** Dept. of OBG, Narayana College of Nursing, Chinthareddypalem, Nellore.

Prof., **Dr. Indira. S,** Principal,

Narayana College of Nursing, Chinthareddypalem, Nellore.

Ms. Tirana Treesa Tom B.Sc Nursing

Abstract : Diabetes is a metabolic disorder that affects the way the body used food for energy and physical growth. It develops due to poor eating habits and bad lifestyle choices. **Objectives:** To assess the level of knowledge regarding the clinical features and complications of diabetes mellitus among adults. To associate the level of knowledge regarding clinical features and complications of diabetes mellitus among adults with their selected demographic variables. **Metrials and methods** - A quantitative research approach and descriptive research design was adopted. 50 adults in the age group of 21-60 years who fulfill the inclusion criteria were selected by non probability convenient sampling technique. 20 structured questionnaire were used to collect data. The data was analyzed in terms of objectives of the study using descriptive and inferential statistics. **Results:** 29(58%) adults had D grade and 21(42%) adults had B grade knowledge **Key words: Clinical Features, Complications, Diabetes Mellitus.**

24

Introduction: Diabetes mellitus is a group of metabolic disease characterized by chronic elevation of glucose in the blood. It arises because the body is unable to produce enough insulin for its own needs, either because of impaired insulin secretion, impaired insulin action or both. Diabetes mellitus sometimes referred to as "high sugars" by both clients and health care providers.

This conditions affects mostly the cells of muscles and fat tissues and results in a condition known as insulin resistance. Type -I diabetes mellitus results from the pancreas failure to produce enough insulin. This form was previously referred to as "insulin depended diabetes mellitus" (IDDM). Type -II diabetes mellitus begins with insulin resistance, a condition in which cells fail to respond to insulin

properly. As the disease progress a lack of insulin may also develop. This form was previously referred to as "non insulin dependent diabetes mellitus" (NIDDM) or adult onset diabetes. Gestational diabetes is any degree of glucose intolerance with its onset during pregnancy. Hyperglycemia develops during pregnancy because of the secretion of hormones, which causes insulin resistance.

Need for Study: WHO, estimates that 347 million people worldwide suffer from diabetes. The world prevalence of diabetes among adult (aged 20-79 years) will be 6.4%, affecting 285 million adults in 2014and will increase to 7.7% and 439 million adults by 2030. Between 2010 and 2030, there will be a 69% increase in numbers of adults with diabetes in developing countries and a 20% increase in developed countries

Narayana Nursing Journal (Vol-8; Issue-1)

ISSN 2278 - 5361

Love For Care

in 2015. The number of people with diabetes increased from 153 (127-182) million 1980, to 347 (314-382) million in 2016.

Recently, India has more diabetes than any other country in the world, according to the international diabetes foundation, although country has now been surpassed in the top spot by China. Diabetes country affect more than 62 million India, which is more than of the adults population the average of onset in 42.5 years nearly, 1 million Indian die due to diabetes per year.

Recently according to Andhra Pradesh, data was collected from 345 adults aged 20-90 years. Prevalence of current smoking was 19.9% (15.4-24.4%) hypertension 20.2% (16.2-24.4%), diabetes 3.7% (1.8-5.5%) that may leads to the death of the peoples. Both diabetes and cardiovascular disease reported in Nellore district of the 1,72,482 people screened 11.7% turned out to be diabetes.

A Stusy to Assess the knowledge on clinical features and complications of diabetes mellitus among adults in kamakshi nagar, Nellore.

Objectives:

✤ To assess the level of knowledge regarding the clinical features and complications of diabetes mellitus among adults.

✤ To associate the level of knowledge regarding clinical features and complications of diabetes mellitus among adults with their selected demographic variables.

Operational Definitions:

Knowledge: Information that a person has stored in memory about the clinical features and complications of diabetes. It will be assessed by using structural questionnaires.

Clinical features: A medical sign or an objective indication of diabetes mellitus that is exhibited the patient.

Complications: It is unfavorable evaluation or consequences of diabetes mellitus.

Diabetes mellitus: Diabetic mellitus is a chronic disease associated with abnormally high levels of the glucose in the blood.

Adult: Biologically an adult is a human being in the age group of 20-60 years.

Assumptions:

The adult may have some knowledge regarding the clinical features and complications of diabetes mellitus.

Delimitations:

The study is delimited to:

1.2 weeks of data collection only

2. Adults in 21 - 60 years of age with residing Kamakshi Nagar only.

3. The sample size of 50 only

Research approach:

A quantitative research approach was adopted for the study to assess the knowledge on clinical features and complication of diabetes mellitus among adult and also the document describe the real situation of the present study.

Research design:

The present study was conducted by using the descriptive research design.

Setting of the study:

Setting of the study in Kamakshinagar is a small village in Thotapalligudur. Mandal in Nellore district, A.P. It is located 3 kilometers towards north district head quarters Nellore and 13 kilometers from Thotapalligudur. The total population is 1295, males are 660 and females are 635 living in 365 houses. The total area in detail of Kamakshinagar in 299 hectors.

Population: All Adults.

Target Population:

25

The population for the present study is adult in the age group of 21-60 years who are living in Kamakshi

Nagar, Nellore.

Accessible population: The accessible population included adults who were residence at Kamakshinagar at Nellore.

Sample: The sample for the study were adult who fulfill the inclusion criteria.

Sampling Technique: Non probability convenient sampling technique was used for this study.

Sample Size: The sample size for the present study is 50 adults in the age group of 21-60 years.

Criteria for Sample Selection:

Inclusion criteria:

✤ Adult with diabetes mellitus who were living in Kamakshi Nagar.

✤ Adult with diabetes mellitus who were willing to participate in the study.

Exclusion criteria:

Adult with diabetes mellitus who were not willing to participate in this study.

☆ Adult with diabetes mellitus who were not available at the time of data collection period.

Variables of the study: Variables of the study are research variables and demographic variables Demographic variables includes age, education, occupation, income, religion, marital status, family history, co morbid disease, source of information.

Research variables include clinical features and complications.

Description of tool:

PART - A: It deals with the socio demographic variables consist of age, gender, educational qualification, occupation, family income, religion, marital status, family history of diabetes mellitus, comorbid disease, and source of information.

PART - B: It consist of 20 structured questionnaire, that helps to assess the knowledge regarding the clinical features and complication of diabetes mellitus among adult.

The scoring system was developed by 1 mark was

given to each correct answer and 0 mark was given to wrong answer. Maximum score <85% and minimum score >50%.

Scoring key:

- Correct answer is given a score of '1'
- Wrong answer is given a score of '0'

Score Interpretation:

GI	RADE	SCORE	
	A+	More than 85%	
	А	More than 75%	
	B+	More than 65%	
	В	More than 55%	
	С	More than 50%	
	D	Less than 50%	

Data collection procedure: The data collection procedure was carried out in Kamakshi Nagar Nellore.From 21/3/18to 3/4/18. The structured questionnaire was adopted to collect the data.. The sample were seated comfortably and a brief introduction about the investigator and study were given. Consent was taken from the sample. Confidentiality of the responses were assured.

The data was collected by using structured questionnaire to assess the knowledge on clinical features and complication of diabetes mellitus. Time spent for data collection in each sample was 30-45 minutes. At the end , the investigator thanked the adults who participated in the study.

Plan for data analysis: The data was analyzed in terms of objectives of the study using descriptive and inferential statistics.

Results and discussion: Demographic variables among adults. Pertaining to age of adults was observed that, majority of 19(38%) were between 31 - 40 years of age group. Context to gender of adults was observed that, majority of 27(54%) were males. Distribution of education qualification of adults was observed that, majority of 27(54%) were primary education. In refers to occupation of adults was

Narayana Nursing Journal (Vol-8; Issue-1)

ISSN 2278 - 5361

(26)

observed that, majority of 23(46%) were house wife. In concern to family income per month of adults was observed that, majority of 27(54%) were RS. 5000-7000/- month. In refers to religion of adults was observed that, majority of 35(70%) were hindu. In concern to marital status of adults was observed that, majority of 43(86%) were married.

Table No-1: The level of knowledge regardingclinical features and complication of diabetesmellitus among adults.(n=50)

Level of knowledge	Fre (f)	Per (%)
D GRADE	29	58
B GRADE	21	42
Total	50	100

Table No.1: Dispict that the with level of knowledge, 29(58%) have D grade and 21(42%) have B grade.

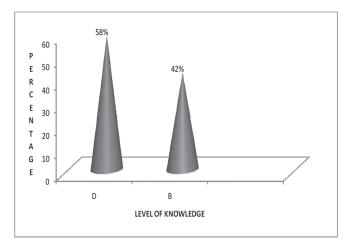


Figure No:-1: Percentage distribution of adults based on level of knowledge

Conclusion: The present study findings presents that 29(58%) have D grade and 21(42%) have B grade knowledge on clinical features and complications of diabetes mellitus. So the study concluded that there was an emerging need to health education to the adults regarding diabetes mellitus.

Book References:

1. Burnner and Suddarth, "Medical and surgical Nursing", 10th Edition, Lippincott company, Philadelphia (2004), pg. 530 to 550.

2. Black.M.Joyee, "Medical and Surgical Nursing", 7th Edition, WB Saunders company, Missouri, (2005), pg.1347 to 1348.

3. Braunwald.E, etal, "A Text book of cardio vascular medicine" 4th Edition, WB.Saunders company, Philadelphia (1992) pg.1282 to 1290.

6.Lewis M Sharon, etal, "Medical Surgical and Nursing"and Assessment and Management of Clinical Problems, 6th Edition, Mosby company, Philadelphia (2004), pg.554 to 562.

Journals:

1. Saraj.S.Anish.etal, (2010) "Socio economic position and causes diabetes mellitus", Volume 33, Issue-2, pg.332-334.

2. Wenying yang, M.D etal (2010) "Prevalence of diabetes among men and women", American journal of diabetes", Volume-21, Issue-5, pg.232-234.

3. Colas Kashyap (2009) "Diabetes in India" Indian journal of Diabetes", Volume - 18, Issue-7, pg.237 – 240.

4. Ramamurthy (2009) "Prevalence of diabetes in India, Indian journals of nursing", Volume-9, Issue-2, pg.98 to 102.

5. P.R.Kokiwar.etal, (2009) "causes and complication of diabetes in rural area of central India", Indian journals of Diabetes", Volume-12, Issue-6, pg.121 to 122.

Net References:

1. http://www.med.nagoyau. ac. jp/medlib/nagoya_j_ med_sci /784/23_Hilawe.pdf

2. http://journals.plos.org/plosone/article? id=10. 1371/journal.pone.0145781

3. https://aparc.fsi.stanford.edu/events/prevalenceand-risk-factors-diabetesand- prediabetes-amongadults-vietnam.

4. http://bmcpublichealth.biomedcentral.com/articles/ 10.1186/1471-2458-13-7

5. http://bmcpublichealth.biomedcentral.com/articles/ 10.1186/s12889-015-2413-y

Narayana Nursing Journal (Vol-8; Issue-1)

27