

## A Study to assess the prevalence of Diabetes Mellitus among people attending OPD in Narayana Medical College & Hospital, Chinthareddypalem, Nellore.



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**ABSTRACT:** AIM :To assess the random blood glucose level and to associate with socio demographic variables.

**Methodology:** Descriptive study was conducted in Narayana Medical College Hospital, Nellore .100 people with age group of 32 to 50 years those who are attending OPD were selected by convenience sampling and random blood glucose level were screened by using glucometer. Results: Out of 100 people 15% were above border line[>140],15%are borderline[120-140]and remaining 70% had normal random blood sugar Level. Conclusion :The study findings helped to identify and diagnose fresh diabetic people and those who are at high risk to develop diabetes.

**Introduction:** Morbidity level of developing countries are increasing by diabetes. India today leads the world with its, largest number of diabetic people. WHO estimates that there are 32 million people are living with diabetes in India on 2000,Which is projected to rise to 80 million by the year 2015.

**Need for Study:** Diabetes affects 246 million people world wide and is expected to affect some 380 million by 2025. Each year another 7 million people develop diabetes.

Rammurthy (2009) reported that according to world diabetic congress federation eight million cases would be added to existing diabetic cases by 2010 in India which works to 7% of the countries adult population. In India the prevalence of diabetes mellitus in six cites like delhi 11.6, Mumbai 9.3,Calcutta 11.7, Hyderabad 16.6, Bangalore 12.4, Chennai 13.5, in which Hyderabad in the top in the prevalence of the diabetes in south India.

**Review of literature:** Davis M.F (2008) conducted community screening for non insulin dependent diabetes mellitus in UK among 13,000 subjects aged 45-70 years above. It was found that glycosuria was detected in 343(75%) subjects, 330 (95.9%) attended for oral glucose tolerance among them 99 (30%) had newly diagnosed

diabetes. A further 65 subjects were identified as diabetes but were not on a register of cases.

**Statement of the problem:-** A study to assess the prevalence of diabetes mellitus among people attending OPD in Narayana Medical College Hospital, Chinthareddy palem, Nellore.

**Objectives:-** 1. To assess random blood glucose level among people attending OPD in Narayana Medical college hospital.

2. To associate the level of random blood glucose level with selected socio demographic variables.

**Methodology:** It is a descriptive design, conducted at OPD Narayana Medical College Hospital, Nellore which is 1210 bedded hospital. 100 people with age group of 30 and above were screened.

**Sampling criteria:-**

**Inclusion criteria:-**

- People above 30 years of age
- People willing to participate.
- All Patients attender coming to Narayana Medical Hospital.

**Exclusion criteria:-**

- People with known diabetes.
- People unwilling to participate.

**Description of tool:-**

**Tool for data collection:-** The tool consist of two parts

**Part I:-** It consist of socio Demographic data which includes age, sex, education, occupation, family history of diabetes, Body mass index, exercise, personal habits and history of co morbid disease

**Part II:-** Data regarding random blood glucose level assessed by using glucometer.

**Data collection procedure:-**

Before starting the study, the researcher obtained permission for conducting the study. The nature and purpose of the study were explained to patients attender and general public. Based on inclusion criteria the people were taken as sample for assessing the random blood sugar using by glucometer.100 samples were taken by administering socio demographic data sheet.

**Analysis and findings:** Frequency and percentage distribution of demographic variables

Sno	Demographic variables	Frequency	percentage
1	Age		
	30 -40 years	41	41%
	41-50 years	32	32%
	51-60 years	16	16%
	>61years	11	11%

2	Sex		
	Male	60	60%
	Female	40	40%
3	Religion		
	Hindu	81	81%
	Muslim	11	11%
	Christian	8	8%
4	Family		
	H/O yes	34	34%
	Diabetes no	66	66%
5	Occupation		
	Farmer	10	10%
	Coolie	30	30%
	Business	10	10%
	House wives	40	40%
	Others	10	10%
6	Diet pattern		
	Vegetarian	13	13%
	Non vegetarian	87	87%
7	Family type		
	Joint family	48	48%
	Nuclear family	52	52%
8	Exercise		
	Meditation	3	3%
	Walking	57	57%
	Yoga	-	-
	None	40	40%
9	BMI		
	Underweight	38	38%
	Normal weight	50	50%
	Obesity	12	12%
	Overweight	-	-
10	Habits		
	Smoking	9	9%
	Alcohol	10	10%
	Smoking & Alcohol	35	35%
	None	46	46%
11	H/O co morbid disease		
	1.Hyper tension	9	9%
	2.CAD	-	-
	3.Renal disease	-	-
	4.None	91	91%

**TABLE II:-**

Frequency and percentage distribution of the random blood glucose level.

**N=100**

S.No	Random blood Glucose level	Frequency	Percentage
1.	80-120[normal]	70	70%
2.	121-140[border line]	15	15%
3.	>140[above border line]	15	15%

**Table2:** Out of 100 sample 15% of them are found to have random blood glucose level >140 and other 15% >120 who are at risk of developing diabetes.

**Table 3:** Percentage and frequency distribution of awareness regarding practices among diabetic patients: **N=30**

Sl.No	Practices	Diabetic (n=30)	
		No	%
1	Regular Medications	30	100
2	Consult Doctor regularly	3	10
3	Blood glucose monitoring	12	40
4	Regular Exercise	17	56.67
5	Efforts to reduce weight	11	36.67
6	Cessation of smoking or alcohol habits	21	70
7	Using regular footwear	27	90

**Table 3:** 30 out of 30 diabetic patients were taking regular medications and very minimal about 3(10%) were consulting doctors regularly.

**Table: 4** percentage and frequency distribution of awareness regarding complications among non diabetics and diabetics **N=100**

Sl.No	Complications	Non diabetic(n=70)		Diabetic(n=30)	
		No	%	No	%
1	Eye	5	7.14	17	56.67
2	Heart	4	5.71	14	46.67
3	Kidney	5	7.14	13	43.33
4	Joint deformity	4	5.71	11	36.67
5	Stroke	3	4.29	9	30
6	Diabetic foot	4	5.71	23	76.67
7	Don't Know	51	72.86	8	26.67

**Table 4** out of 30 diabetic patients 56.67% were having awareness regarding eye whereas 26.67% of diabetics don't know about the complications

#### **FINDINGS:**

It was found through the screening programme out of 100 people 15% had random blood glucose level >140[border line],remaining 15% percentage had >120 and 70%had normal blood glucose level. There was no significant association with demographic variables.

#### **Recommendations :**

1.The Study should be replicated on a large sample of people

2. Protocols can be developed to prevent / postment of diabetes in public

#### **Reference :**

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