

A Descriptive Study to Assess the Knowledge and Practice Regarding Insulin Self-Administration among Diabetic Patients at Elected Tertiary Care Hospital of Bangalore

R Padma Hepsiba ^{1*}, Hemalatha R ², Pallavi Yada ³, Aditi Solanki ⁴, Bhawna Gangwar ⁵, Iqbalpreetkaur ⁶, Manasa M M ⁷, Megha Madhu ⁸, Vaishali Saini ⁹

¹ Principal, College of Nursing, Command Hospital Airforce, Bangalore, Karnataka, India.

^{2, 3, 4, 5, 6, 7, 8, 9} Students, College of Nursing, Command Hospital Airforce, Bangalore, Karnataka, India.

Abstract –

Objective: To assess the knowledge and practice regarding self-administration of insulin in diabetic patients.

Methodology: A cross sectional study was conducted among 100 diabetic patients, on insulin therapy, attending medical and endocrine OPD's of tertiary hospital at Bangalore.

Result: The result of the study showed that majority of the patients (56.67%) had average knowledge and 55% had average practices regarding insulin administration.

Conclusion: There is a need to educate the patients diagnosed with diabetes about insulin self-administration and monitor their practice regarding same in hospital setup. This will improve their compliance and practices related to the self-administration of insulin and also prevent complications related to insulin therapy.

Keywords — knowledge and practice, self-administration of insulin, diabetic patients.

1. Introduction

Diabetes Mellitus is a metabolic-cum-vascular syndrome of multiple etiologies, characterized by chronic hyperglycemia with disturbances of carbohydrates, fat and protein metabolism resulting from defects in insulin secretion, insulin action or both. Diabetes has emerged as a major health care problem everywhere. Currently the number of cases of diabetes worldwide is estimated to be around 150 million. India has dubious distinction of having the highest prevalence of diabetes worldwide. The number of individuals with diabetes will reach 79.4 million by 2030. This disorder is frequently associated with long term damage, which can lead to failure of organs like eyes, kidneys, nerves heart and blood vessels.

Intensive insulin therapy is essential in maintenance of strict glycemic control among insulin requiring patients with diabetes. The insulin therapy requires coordination and understanding of both the individual with diabetes and those responsible for diabetic care.

Objectives:

The objectives of the study were

- To assess the knowledge regarding self-administration of insulin in diabetic patients.
- To assess the practice regarding self-administration of insulin in diabetic patients.

2. Materials And Methods

A quantitative non-experimental approach with Cross -sectional design was used.

Patients on insulin therapy were selected by purposive sampling. **Sample size was** 100 diabetic patients **Sample Technique was** Non-Probability Purposive sampling technique used.

3. Research Variables:

Variables are qualities, properties or characteristic of person, thing or situation that change or vary.

In this study the research variables were knowledge and practice regarding self-administration of insulin among diabetic patients.

Inclusion criteria:

- Age group 31-80 years
- Patients on Insulin or combined therapy
- Patients available during data collection & willing to participate
- Able to understand Hindi or English

Exclusion criteria:

- Patients only on oral Hypoglycemic agents

Description of Tool:

The tool consists of three sections:

Section I- Performa for collecting Socio demographic data

Section II- Self structured questionnaire for assessing knowledge regarding self-administration of insulin among diabetic patients

Section III- Self structured questionnaire for assessing practice regarding self-administration of insulin among diabetic patients.

Pilot study done among 06 patients admitted in ward before the main study to check the validity of the tool.

Data Analysis:

Frequency distribution, percentage, standard deviation for assessing socio-demographic data, level of knowledge and practice.

4. Knowledge

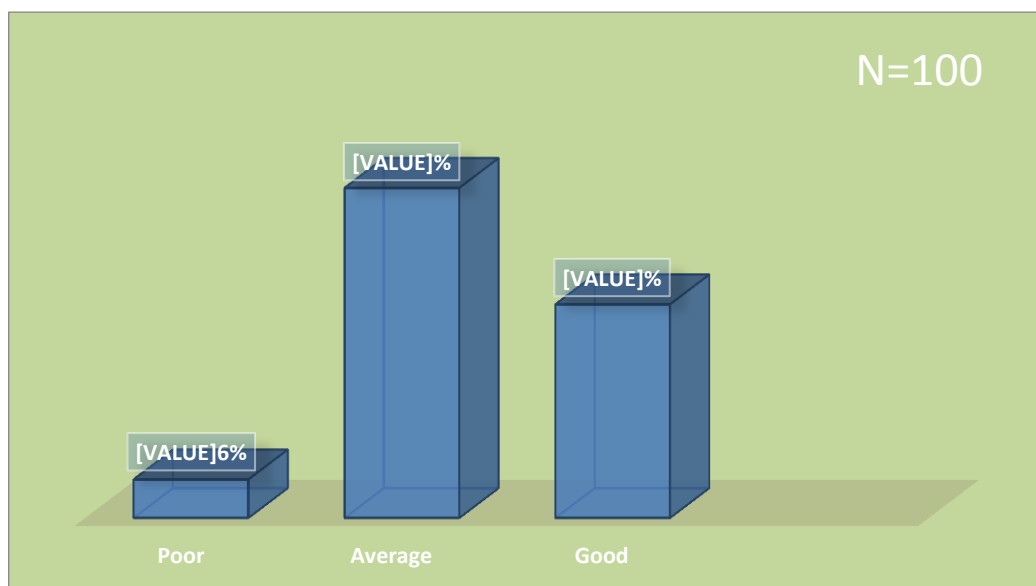


Fig.1: Level of Knowledge among diabetes patients regarding self-administration of Insulin

Fig 1 shows level of knowledge among diabetes patients regarding self-administration of Insulin more than half of patients had average knowledge of (56.67%), 36.67% had good knowledge and 6.66% had poor knowledge.

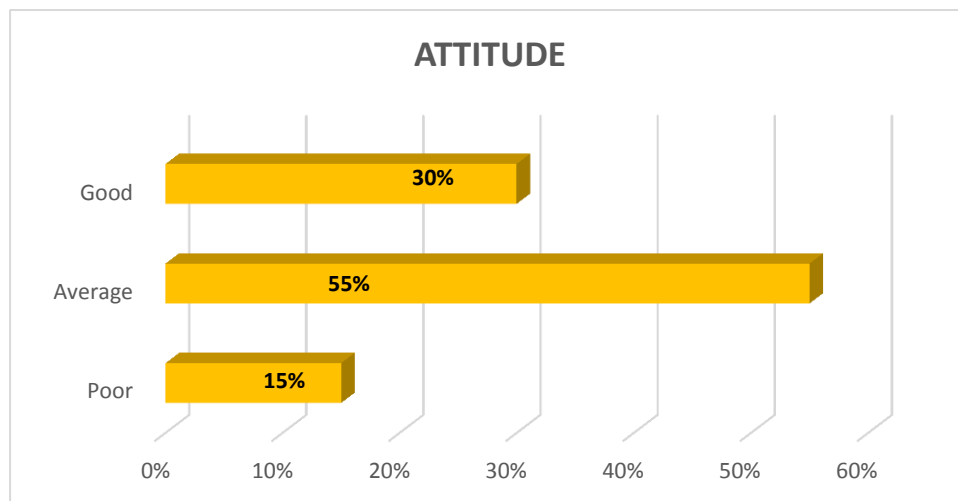


Fig.2: Practice among diabetes patients regarding self-administration of Insulin

Fig 2 shows Practice among diabetes patients regarding self-administration of Insulin, It was found that more than half of patients had average practice of 55%, 30% had good Practice and 15% had poor Practice.

5. Results

In the present study out of 100 patients who were practicing self-administration of insulin, most of the people (71.67%) belonged to the age group of more than 60 years, 56.67% were males and remaining were females. Majority 81.67% belonged to Hindu religion and majority 36.67% belonged to upper middle class. Most of the patients (30%) were having diabetes since 11-20 years and 46.67% people were using insulin since 1-5 years. Maximum (88.34%) were using pen. Majority of the patients (56.67%) had average knowledge and had average practices of 55% regarding insulin administration. Thus, there is a need of educating the patients regarding safe practices of insulin administration.

6. Conclusion

The Descriptive study reveals Level of Knowledge among diabetes patients regarding self-administration of Insulin is average level only majority. Practice among diabetes patients regarding self-administration of Insulin will majority of average level only. Therefore for the group people had average knowledge and practice only. It concluded that the investigator can do the structured teaching program to increase the knowledge and practice level.

REFERENCE

- [1] ShettyBhujangaSurekha; A study to assess the knowledge, attitude and practice of patients with diabetes on insulin therapy; Karnataka Institute of Endocrinology and Research; Bangalore, Karnataka; 2017.
- [2] BhosaleAnkita; A study to assess the knowledge and practice of self-administration of insulin; Pune, Maharashtra; 2018.
- [3] Tandon N, Kalra S, Balhara YS, Baruah MP, Chadha M, Chandalia HB, et al. 'Forum for Injection Technique (FIT), India: The Indian recommendations 2.0, for best practice in Insulin Injection Technique, 2015.' Indian J EndocrMetab, 2015; 19:317-31. Available from:
- [4] M Naveethv. A study to assess knowledge, attitude and practice in diabetic patients attending endocrinology OPD. Ramaiah Hospitals, Bengaluru, Karnataka, 2018.
- [5] Kurian Beteena. A study to assess knowledge of diabetes mellitus among the adult residents of Dakdhina Kannada district. Dakdhina district, Karnataka, 2010.