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Knowledge and Reported Practices of Self Administration of Insulin Among Diabetic Patients Attending The OPD Of A Government Hospital In Chennai

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Abstract:
Objectives: *To assess the knowledge and reported practices regarding self administration of insulin among diabetes patients.* ***Materials and methods****: A descriptive study was conducted to assess the knowledge and reported practices regarding self administration of insulin among diabetic patients. 50 diabetic patients were recruited in to the study who attended the Medical OPD of a tertiary care hospital by non probability purposive sampling. Data analysis was done using descriptive statistics.* ***Results****: The present study results revealed that maximum i.e. 29 (58%) of population had excellent knowledge, 12(24%) had good knowledge, 6 (12%) had average knowledge and only 03(6%) had poor knowledge of self-administration of insulin injection. However when evaluated the reported practices it was seen that only 16(32%) respondents had excellent practice, 22(44%) had good practice, 12(24%) had average practices and no one had poor practice of self-administration of insulin injection.* ***Conclusion****: Results from this study bring light to the fact that diabetes patients need to be educated and supported regarding self administration of insulin.*
Keywords*: Knowledge, Reported practices, Insulin administration*

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I. Introduction:

International Diabetes Federation estimated worldwide prevalence of diabetes mellitus in the year 2003 is 194 million. World Health Organization (WHO) has projected that this number would increase to 300 million by the year 2025[1]. According to Atlas published by the International Diabetes Federation (IDF) there were an estimated 40 million persons with diabetes in India 2007 and the number predicted to rise to almost 70 million people by 2025[2].

In patients with diabetes, main concern is the increasing functional limitations that may impede a successful self-management. In particular, the correct handling of the insulin injection requires complex self-management abilities. Functional limitations include loss of visual acuity, loss of manual abilities and cognitive decline are of most importance. Studies reveal that the diabetic patients have lesser knowledge regarding its management especially in the aspects such as self-administration of insulin injection[3]. Patients make errors in loading, pushing the dose completely, maintaining proper angle for administration and others which causes for unnecessary changes in blood glucose followed by associated health problem.

II. Review of Literature:

Vijay Kesari et al conducted a descriptive study to assess knowledge, attitude and practice concerning insulin use in adult patients with diabetes mellitus in tertiary care centre in Maharashtra. Nearly 46% of the subjects had satisfactory idea about diabetes its signs and symptoms and complications in present study, while 51% subjects had satisfactory idea in patients of eastern India, whereas 60-77% had good idea regarding self administration of insulin.

A cross sectional study conducted in 2018 by Sukumar Sasidharan et al to assess the level of practice regarding self administration of Insulin among diabetes patients in a tertiary healthcare centre in North India revealed that 37.2% of total population had good practice, 48.2% had average practice and 14.6% had poor practice.

III. Materials & Methods: -

A cross sectional descriptive study was conducted among 50 diabetic patients attending the Medical OPD of a government hospital. Samples were recruited using purposive technique. A self administered questionnaire was prepared which consists of three sections to assess demographic profile, knowledge & reported practices for data collection. Data analysis was done by descriptive statistics.

IV. Results : -

- 16(32%) of the samples were between the age group of 36 - 45 years whereas 11(22%) belong to age group above 55 years
- 27(54%) of the samples were male whereas 23(46%) of the samples were female
- 25(50%) belong to nuclear family , 21(42%) were from joint family & 4(8%) belonged to mixed family
- 45(90%) of the samples were married, 03(6%) were unmarried and 02(4%) were widow.
- 19(38%) of the samples had family history of diabetes
- 54 % of samples had excellent knowledge whereas 24%, 12% & 6% revealed good, average & poor knowledge regarding self administration of insulin
- 72% of samples possessed good knowledge regarding holding of insulin syringes
- 65% were able to answer regarding titrating of insulin dose whereas 42% of the samples were aware of correct angle of administration.
- 24 % of samples followed excellent practices whereas 44% & 12% revealed good & average practices regarding self administration of insulin.
- 68 % of samples reported good practices regarding holding of pen
- 27 % revealed average practices regarding titrating of insulin dose
- 35 % of the samples practiced pushing of desired insulin dose averagely
- Association between Knowledge & practice scores with selected demographic variables by Chi square at df=1 and P<0.05 revealed
- Significant relationship was established between age and self reported practices of insulin self-administration
- Significant relationship between family history of diabetes and reported practices of insulin administration

Fig.1: Distribution of samples as per their Knowledge

n=50

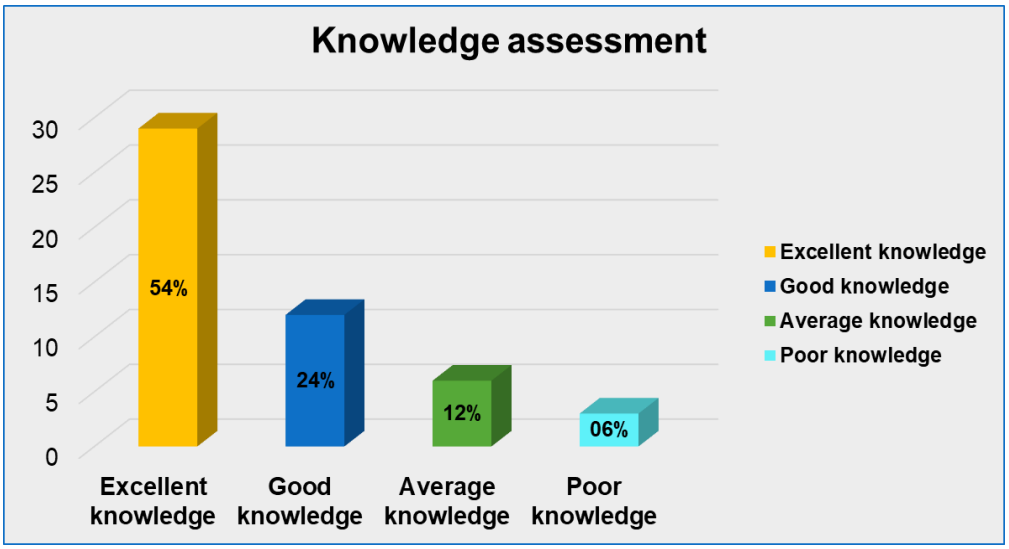

Fig No 1 reveals that majority of the samples i.e. 29 (58%) of posses excellent knowledge regarding self administration of Insulin injection while 03(6%)had poor knowledge of self-administration of insulin injection

Fig.2: Distribution of samples as per their Reported Practices.

n=50

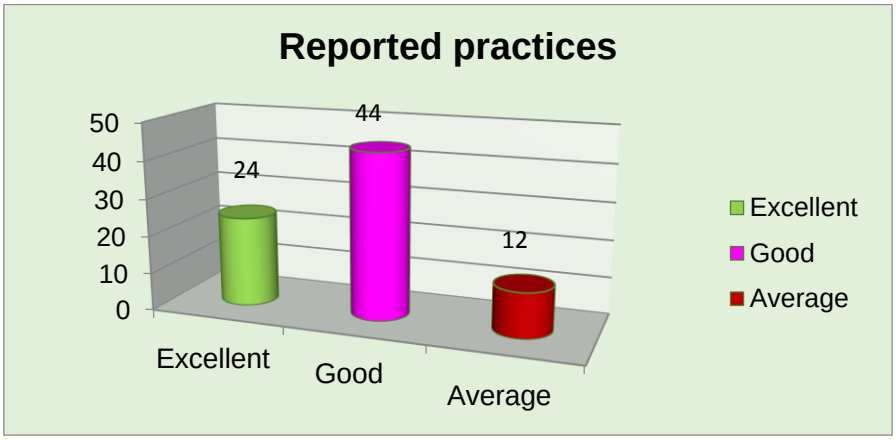

Fig 2 shows that only 16(32%) respondents had excellent practice whereas 12(24%) had average reported practices of self-administration of insulin injection.

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