



AN EXPLORATORY STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE REGARDING SELF-ADMINISTRATION OF INSULIN AMONG OPD PATIENTS IN SELECTED HOSPITAL OF PUNJAB.

Ms Sonika Dwivedi¹, Dr Payal Sharma².

¹Ms. Sonika Dwivedi, PhD Scholar.

²Dr. Payal Sharma, Professor.

Abstract

In the present study, Exploratory Research Design was adopted for the present study was conducted in a Civil hospital in Fatehgarh Sahib, Punjab. The population in the present study included 60 OPD Patients present at the time of data collection, the sample was drawn by Non-Probable Convenient sampling technique. The data were collected by a structured demographic sheet and self-structured questionnaire. The frequency and percentage of the level of knowledge among OPD patients about self-insulin administration depict that most (55%) of OPD patients had good knowledge followed by (43.66%) and few (1%). Thus, it is concluded that diabetic patients had good knowledge regarding self-administration of insulin.

Frequency and percentage distribution level of practice regarding self-administration of insulin among the OPD patients depicts that (100%) OPD patients had desirable practice regarding self-administration of insulin. Hence, it was inferred that OPD patients had practice regarding self-administration of insulin. The Co- relationship between the knowledge and practice regarding self-administration of insulin among OPD patients of civil hospitals shows a relationship value between the knowledge score and practice score of 9.581. It depicts that there was a positive relationship between knowledge and practice regarding self-administration of insulin among OPD patients. Thus, it was concluded that knowledge of OPD patients increases regarding self-administration of insulin among OPD patients. There is no association between knowledge and practice concerning selected variables such as age, gender, qualification, duration of insulin, type of injection, and source of information. It was concluded that the majority of the adults know i.e.: 55% regarding self-administration of insulin.

Introduction

Diabetes mellitus refers to a group of diseases that affect how your body uses blood sugar (glucose). Glucose is vital to your health because it's an important source of energy for the cells that make up your muscles and tissues. It's also your brain's main source of fuel. The underlying cause of diabetes varies by type. Diabetes symptoms vary depending on how much your blood sugar is elevated. Some people, especially those with prediabetes or type 2 diabetes, may sometimes not experience symptoms. In type 1 diabetes, symptoms tend to come on quickly and be more severe. Type 1 diabetes can develop at any age, though it often appears during childhood or adolescence. Type 2 diabetes, the more common type, can develop at any age, though it's more common in people older than 40. Although the exact cause of type 1 diabetes is unknown, factors that may signal an increased risk, your risk increases if a parent or sibling has type 1 diabetes. Circumstances such as exposure to a viral illness likely play some role in type 1 diabetes. The presence of damaging immune system cells (autoantibodies). Sometimes family members of people with type 1 diabetes are tested for the presence of diabetes autoantibodies. If you have these autoantibodies, you have an increased risk of developing type 1 diabetes. But not everyone who has these autoantibodies develops diabetes. Certain countries, such as Finland and Sweden, have higher rates of type 1 diabetes.

Diabetes Mellitus is classified into Type I, type II and gestational Diabetes mellitus. Type I is characterized by deficient insulin production and requires daily administration of insulin. Type II Diabetes mellitus results from the body's ineffective use of insulin while gestational diabetes is hyperglycemia with onset or first recognition during pregnancy. Insulin therapy is an important part of diabetes treatment often and is a cornerstone of treatment in type I diabetes and also critical in many cases, to the management of type II diabetes. Despite this at least one-third of the patient fail to take their insulin as prescribed, and 20% of the adults intentionally skip their doses.

Objectives of the study:

- To assess the knowledge regarding self-administration of insulin among opd patients.
- To assess the practice regarding self-administration of insulin among opd patients.
- To find the correlation between knowledge and practice regarding self-administration of insulin among opd patients.
- To determine the relationship of knowledge regarding self-administration of insulin among opd patients with demographic variables i.e., age, gender, marital status, occupational status, types of insulin injection used, duration of insulin, source of information.
- To determine the relationship of practice regarding self-administration of insulin among OPD patients with demographic variables i.e., age, gender, educational status, occupational status, types of injection, and source of information.

Methodology:

In the present study, Exploratory Research Design was used. This study is conducted in Civil Hospital Fatehgarh Sahib, Punjab. The population in the present study included 60 OPD Patients present at the time of data collection, the sample was drawn by Non-Probable Convenient sampling technique. The data were collected by a structured demographic sheet and self-structured questionnaire.

Data has been collected through forms within 10 days.

Findings of the Study: Major Findings are:

Related to demographic characteristics of adults

- Maximum Adults were in the age group 20-39 years i.e., 45%.
- There was the distribution of adults i.e., 65% females and 16.6% males.
- Maximum educational status 11th -12th i.e., 51%.
- The most of adults who belongs to Occupational status are businessman i.e., 60%.
- Maximum no. of adults prescribed by doctor i.e., 40%.
- The most source of information collected by 50%.
- The maximum No. of adults are unmarried i.e., 50% but 33% are married.

Finding related to criteria measure the knowledge regarding self-administration of insulin among OPD patients of the civil hospital

Most (55%) of OPD patients had good knowledge followed by (a 43.66%) average and a few (1%) with a knowledge score regarding self-administration of insulin. depict that all of the (100%) OPD patients had desirable practices regarding self-administration of insulin.

Findings related to finding out the co-relationship between the knowledge and practice of self-administration of insulin among OPD patients of the civil hospital

The relationship value between knowledge score and practice score is 9.581. It depicts that there was a positive relationship between knowledge and practice regarding self-administration of insulin among OPD patients.

Findings related to determining the knowledge with selected variables such as age, gender, qualification, type of insulin, methods of injection used, duration of insulin, type of injection, and Source of information.

The age shoes maximum mean knowledge score (15.60) of OPD patients was obtained by the age group of 40-59 followed by the age group of <19 with minimum mean knowledge score (13.35). The difference was founded statistically non-significant at ($p < 0.05$).

The Gender illustrates that the maximum mean knowledge score (14.82) of staff nurses was obtained by males followed by the minimum mean knowledge score (13.83) obtained by females. The relationship between gender and knowledge was calculated as non-significant.

The Qualification reveals that the maximum mean knowledge score (15.20) was obtained by the OPD patients and the minimum mean knowledge score (12.28) was obtained by the OPD patients. The difference was founded statistically significant at ($p < 0.05$).

The Occupation revealed that the maximum mean knowledge score (22.43) was obtained by the staff nurses with 6-10year experience, < 1-year score is (18.69) and the minimum mean knowledge score (18.02) was obtained by the staff nurses with 1-5year experience. The difference was founded statistically non-significant at $p < 0.05$ level.

The Marital Status revealed that the maximum mean knowledge score (10.31) was obtained by the, (9.72) minimum mean knowledge score was obtained by the OPD patients. The difference was founded by 10.05.

The Source of information revealed that the maximum mean knowledge score (15.36) was obtained by the printed media who gained knowledge from health personnel followed by (14.28) who got information from electronic media, (13.16) through family and friends (14.61). The difference was founded statistically Significant at $p < 0.05$ as calculated by ANOVA.

Type of diabetic mellitus reveals that the maximum mean knowledge score (15.27) was obtained by the knowledge regarding gestational diabetes score (13.15) was obtained by type-1. The difference was founded statistically non-significant at $p < 0.05$ level.

Type of Treatment delineated that the mean score (of 14.71) of type of treatment is only tablets and only insulin (13.88) and both had (15.77) mean score and the last one is (13.00) had mean score. The relationship was non-significant among the knowledge score of OPD patients. Thus, it showed that type of treatment had no impact on the knowledge of OPD patients regarding self-administration of insulin.

Fast blood sugar level illustrates that the maximum mean knowledge score (16.11) was obtained by the knowledge regarding fast blood sugar, followed by the minimum mean knowledge score (12.00) was obtained by the knowledge regarding fast blood sugar level. The difference was founded statistically non-significant at $p < 0.05$ level.

Random blood sugar reveals that the maximum mean practice score (15.50) was obtained by the <80mgdl and the minimum mean knowledge score (14.11) was obtained by the more than 250mgdl knowledge of patients. The difference was founded statistically significant at $p < 0.05$ level.

Findings related to determining the practice with selected variables such as age, gender, qualification, duration of insulin, type of injection, and source of information.

The age reveals that the maximum (10.70) practice score was obtained by < 19 years age of year, followed by the minimum practice score (8.9). it indicates that the practice of self-administration of insulin impact on the age of OPD patients.

The Gender illustrates that the maximum mean practice score (10.66) was obtained by males. followed by the minimum mean practice score (9.583) obtained by transgender. The relationship between gender and knowledge was calculated as non-significant.

The Qualification reveals that the maximum mean practice score (10.81) was obtained by the 6th to 10th and above and the minimum mean practice score (10.00) was obtained by the 1st to 5th. The difference was founded statistically significant at ($p < 0.05$).

The Occupation reveals that the maximum mean practice score (10.61) was obtained by the businessman/women, the unemployed score was (10.00) and the minimum mean practice score (9.83) was obtained by the government job. And the average score was obtained by the private job. The difference was founded statistically non-significant at $p < 0.05$ level.

The Marital Status reveals that the maximum mean score (10.31) was obtained by the unmarried, the minimum score was obtained by (9.27) widows separated or divorced and the average mean was obtained by the married.

LIMITATION OF STUDY

- The study is limited to the OPD patients of selected hospitals of the Fatehgarh Sahib Punjab.
- The study is limited to the diabetic patients of selected hospitals of Fatehgarh Sahib Punjab.
- The study is limited to those who are present at data collection.

CONCLUSION

It was concluded that the majority of the adults know i.e.: 55% regarding self-administration of insulin.

REFERENCE

- Apoorva, S., M. 201). Prevalence and severity of periodontal disease in type 2 diabetes mellitus (non-insulin-dependent diabetes mellitus) patients in Bangalore city: An epidemiological study. *Journal of Indian Society of Periodontology*. 17 (1):25-30
- Roglic G 2005. The burden of mortality attributable to diabetes: realistic estimates for the year 2000. *Diabetes care*. 28 (9): 2130-5. 98. Rs Vesna Sudha Seshadri, (1998), Text Book of Medicine, Orient Longmont publishers, Ed-1st, Pp. 1194-1209
- Maghnie M 2000. Central diabetes insipidus in children and young adults. *The New England Journal of Medicine*. 343(14): 998-1007
- Topolski R. 2009. The prevalence of vitamin B(12) deficiency in patients with type 2 diabetes: a cross-sectional study. *Journal of the American Board of Family Medicine*. 22(5): 528-34
- Dixon T 2000. Hypoglycemia in Type 2 diabetes. *Diabetes Med*. 25 (3):245.
- Paterson B 2000. Developmental evolution of expertise in diabetes self-management. *Clinical Nursing Research*. 9 (4):402-19
- Katulanda P 2008. Prevalence and projections of diabetes and pre-diabetes in adults in Sri Lanka-- Sri Lanka Diabetes, Cardiovascular Study (SLDCS). 25 (9):1062-9.
- Apoorva SM 2013. Prevalence and severity of periodontal disease in type 2 diabetes mellitus (non-insulin-dependent diabetes mellitus) patients in Bangalore city: An epidemiological study. *Journal of Indian Society of Periodontology*. 17 (1):25-29.
- Maghnie M 2000. Central diabetes insipidus in children and young adults. *The New England Journal of Medicine*. 343 (14): 998-1007.
- Dixon T 2008. Hypoglycemia in Type 2 diabetes. *Diabet Med*. 25(3):245. Murad MH et al (2008). Clinical review: Drug-induced hypoglycemia: a systematic review. *Journal of Clinical Endocrinology and Metabolism*. 94 (3):741.
- Paterson B 2000. Developmental evolution of expertise in diabetes self-management. *Clinical Nursing Research*. 9 (4):402-19.
- <https://www.bjd-abcd.com/index.php/bjd/article/view/255/467>
- <https://www.woundsinternational.com>
- https://www.researchgate.net/publication/327976518_Knowledge_Regarding_SelfAdministration_of_Insulin_Among_the_Diabetic_Patient_Attending_the_Diabetic_Clinic_of_Tertiary_Care_Center_of_Eastern_Nepal
- <https://www.nepjol.info/index.php/jdean>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5493868/>
- <https://www.hindawi.com/journals/jdr/2019/7801367/>
- https://care.diabetesjournals.org/content/27/suppl_1/s106
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5493868/>