

A Study to Assess the Compliance to Medication among Type 2 Diabetic Patients at Selected Rural Community in Kanchipuram District, Tamil Nadu

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Abstract

The Diabetis is one of the most common chronic disorder across the world and the number of diabetic patients is on the rise .Majority of patients with type 2 diabetics fail to control glycaemia with diet and exercises .Lack of adherence to diabetic medication causes glycemic control and causes and can lead to treatment failure, development of complications and increases mortality.

The objectives of the study were to assess the compliance to medications among type 2 diabetic patient and the demographic variables. A non-probability- purposive sampling technique is used to collect data from the samples. The sample size was 60 samples at selected rural community.

The research design used in this study is Non experimental, Descriptive Research Design where Morisky Medication Adherence Scales is to determine the level of compliance of medication . The level was assessed by questionnaires. The result shows 1(2%) of sample had low adherence, 12(20%) of the sample had medium adherence, 47(78%) of sample had high adherence. There was significant association between the age, no significant association between other demographic variables.

Keywords: Assess, Morisky Adherence, Diabetic patient, Compliance, medication.

Introduction

Diabetic is one of the most common chronic diseases across the world and the number of diabetic patient is on the rise. In 2011, there were 366 million people with diabetic globally and this is expected to rise 552 million by 2030. In recent years, newer anti diabetic drugs have been introduced to optimally control diabetic, which have increased the complexity of diabetes treatment

algorithms leading to multiple second-line and third-line options. The management of diabetes mellitus is multi-pronged. Glycemic control in type 2 diabetes is essential to prevent complications. Hence the holistic approach to the control of diabetes is vital.¹¹

Keeping in mind the predictable future of this disease, this study aims to recognize various causative factors which can affect the compliance in the diabetic patients. This will not only equip us to formulate a sustainable and convenient treatment module but also give us insights to improve the quality of life in these patients in general.¹⁴

Studies have shown that there is improvement in compliance to treatment and decrease in the complications associated with the disease with increase in patients knowledge about the disease and its complications. A few studies have been done on assessment of the knowledge of diabetic, its complications and treatment

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adherence among diabetics in Karnataka the present study has been taken up in a rural community with the objectives of a) assessing the knowledge of diabetes and its complications among patients with type 2 diabetes mellitus b) assessing treatment adherence of the above patients and c) to determine any association of their knowledge with treatment adherence.⁶

Non adherence with medication in patients with diabetes resulted in poor glycemic control and hence an increased risk of developing chronic complication, such as diabetic neuropathy. So medications adherence is necessary for the effective management of diabetes and its complications.¹⁰

The present study is one of a number of worldwide studies that show the significant relationship between medication adherence and diabetic peripheral neuropathy.¹²

To our knowledge, no previous study of patients in India has been conducted to understand the relationship between medications adherence and diabetic peripheral neuropathy.¹⁶

Materials and Method

Research methodology deals with the description of the method and different steps in collection and organization data from the investigation. It includes description of the research approach, research design, setting, population, samples and sample size, the sample technique, sampling criteria, development and description of the tool, data collection procedure and the plan or analysis in the study.

The research design used in this study is Non experimental, Descriptive Research Design, A non-probability- purposive sampling technique is used to collect data from the samples. The sample size was 60 samples at selected rural community.

The Morisky Medication Adherence Scales is used to determine the level of compliance of medication. The present study was conducted to assess of compliance to medication among Type 2 diabetic patients at selected rural community in Kanchipuram District, Tamil Nadu.

Sampling Criteria:

- **Inclusion Criteria:**

Patients already diagnosed as type 2 diabetes mellitus for at least 1 year of duration.

Diabetic patients who are under treatment for at least 6 months.

- **Exclusion Criteria:**

Diabetic patient who are having other chronic diseases

Diabetic patient who cannot speak and understand Tamil/English.

By using questionnaires 60 samples were selected the tool used for the study consist of the demographic variables like Age, Gender, Education status, Types of family, Socio economic status, where medication taken, Regular of medication taken. To assess the compliance to medications. Morisky Medication Adherence Scale was used.

Study Findings:

- Maximum no of diabetic patients were in the age group of 51-60 years 28(47%)
- Maximum male 32(53%) are diabetic patients.
- Majority of education status was Non formal education 34(57%)
- Majority of family of diabetic patients are joint family 33(55%)
- Majority of socio economic status of the diabetic patients are Rs 5001-10000 per month 35(58%)
- Majority of person from which they are getting medication for diabetic patients are 54(90%)
- Majority of taking diabetic medication regularly 53(88%)

Regarding assessing patients compliance to medications, the study shows that 47(78%) of diabetic patients are following high compliance to medications and 12(20%) of the patients are having medium compliance to medication and 1(2%) of the patients are having low compliance to medication.

Regarding association with demographic variables factors like age are highly associated with compliance to medication and other factors like gender, education status, types of family, socio economic status, regular medication taken, place of medication taken were non significant with regarding to compliance to medication.

Discussion

Diabetic has been increasing world wide due to

dietary pattern and life style of the people. Thus to reduce the compliance medication plays a vital role in maintaining the important role to the people of different age. Thus to modified the diabetic we should make clear of the medication use and their importance.

Non adherence to therapeutic strategies is a serious concern that posses a great challenge to successful delivery of health care. This is widespread and has been reported from all over the world. Adherence to Diabetes management includes adherence to medication to medication life style modification and dietary changes.

CONCLUSION:

Diabetic is the most prevalent causes for almost most diseases, affecting at least 600 million people worldwide and is an important contribute to mortality. Compliance to anti diabetic medication has been found to be a major concern.

The mean proportion of control diabetic among all diabetic patients being only 13% because of poor medication compliance and is one of the leading causes of failure to achieve diabetic control.Ensure that the government health care facilities have health care infrastructure,service personnel and quality of health care services to the need in education the public on prevention of diabetic patients.

Efforts to be made enhance the capabilities of the doctors, village health nurses and other paramedical through pre-services and in service training programmed a prevention of diabetic in patients.

Conflict of Interest: Nil

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