

Non-compliance on treatment among diabetic students at Sohag University

NCT05286450

14/3/2022

Introduction:

Diabetes mellitus (DM) is a metabolic disorder resulting from a defect in insulin secretion, insulin action, or both, and its prevalence is rapidly rising all over the globe at an alarming rate [1].

Diabetes mellitus is a common and costly chronic medical illness . Individuals with diabetes are at greater risk of long-term complications such as kidney disease, peripheral vascular disease, lower extremity ulcers and amputations, retinopathy, and neuropathy. Diabetes is considered one of the most psychologically and behaviorally demanding of the chronic medical illnesses , and 95% of diabetes management is conducted by the patient [2] .

Diabetes is a chronic disorder and the process of care of patients with diabetes is complex. It requires frequent self-monitoring of blood glucose, exercise, dietary modifications and administration of medications and/ or insulin. Medication adherence refers to the extent to which patients take their medication regimen as prescribed by their health care provider[3].

Adherence to treatment in diabetic patients is one of the key factors in the process of treatment and recovery of these people[4].

Non-adherence to prescribed treatment schedule continues to be a major problem the world over especially for medications in chronic diseases The diabetes control and complication trial (DCCT) and other intervention studies demonstrated that achieving optimal glucose control through adherence to medications, exercise and diet prevents or minimize serious long term complications[5].

Insulin therapy is essential for patients with Type 1 diabetes mellitus if they are to achieve good glycaemic control . Indeed, guidelines issued by the American Diabetes Association and the National Institute for Health and Clinical Excellence (NICE) state that insulin is the most effective glucose-lowering agent and that insulin therapy is a key component of effective diabetes management over the course of the disease . Despite the strong evidence that achieving good glycaemic control helps prevent the development and progression of long-term micro- and macrovascular complications of diabetes, many patients do not achieve such control[6].

Aim of the study:

Studying noncompliance among diabetic students in Sohag University.

Objectives of the study:

- 1-To determine factors affecting non compliance on treatment among diabetic students.
- 2-To detect relation between non compliance on treatment and development of complications.

Methodology:

Study population and localities:

Total coverage of diabetic students aged between 18 and 25 years old in different faculties in Sohag University.

Strategy:

A cross-sectional study on diabetic students in Sohag University will be conducted to collect data about factors affecting compliance and adherence to diabetes treatment and its impact on development of complications.

1-Technical design:

Personal interviews with diabetic students through a standardized questionnaire (Diabetes Self Management Questionnaire (DSMQ))[7].

2-Administrative design:

Personal communications with local health authorities and informed consent will be obtained from all the participants.

Personnel :

The fieldwork of this study will be carried out by the researcher under continuous supervision of the supervisors.

3-Operational design:

a) Preparatory phase : include :

- Review of literature
- Construction of questionnaire
- Personal communications

b) Second phase (data collection):

- Nature and aim of study will be explained to the participants.

-Data collection by the researcher through the questionnaire.

c)Third phase (analysis of data):

Use of SPSS program for data entry and analysis.

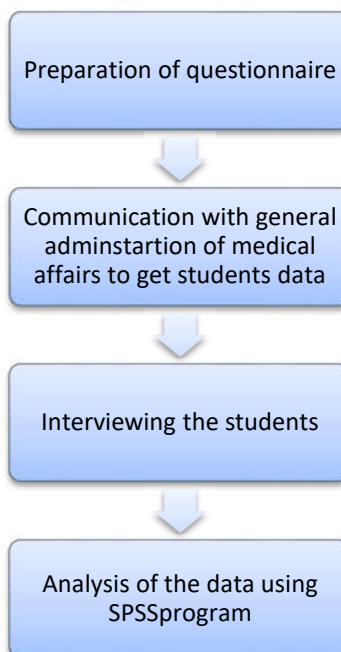
Constraints and limitations of the field work:

- 1- Contact with general administration of medical affairs.
- 2- Collecting data about the diabetic students and their contact information.

Time schedule of the study:

<u>Phases of the study:</u>	<u>Time consumed</u>
<u>Preparatory phase</u>	1 month
<u>Second phase</u>	3 months
<u>Third phase</u>	3 months

Plan of study:



Ethical consideration:

- Ethical consideration will be observed in each step of the study conducted
- Approval of Ethical Committee of Sohag faculty of Medicine will be secured.
- In addition, the objectives and steps of the study will be explained to the participants before taking any information.
- Informed consent will be taken from all the students participating in the study.

References:

- .1 Kassahun, A., E.M. Fanta Gashe, and W.A. Rike, *Nonadherence and factors affecting adherence of diabetic patients to anti-diabetic medication in Assela General Hospital, Oromia Region, Ethiopia*. Journal of pharmacy & bioallied sciences, 2016. **8**(2): p. 1-14
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- .4 Kongkaew, C., et al., *Depression and adherence to treatment in diabetic children and adolescents: a systematic review and meta-analysis of observational studies*. European journal of pediatrics, 2014. **173**(2): p. 203-212.
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