



# Assessment Of Self-Care Practices Among Patients With Type II Diabetes Mellitus In Selected Hospitals At Gujarat.

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## ABSTRACT

### Background

Type II Diabetes Mellitus is one of the most common chronic metabolic disorders affecting millions of people worldwide. Proper self-care practices such as dietary management, regular exercise, medication adherence, blood glucose monitoring, and foot care play a vital role in preventing complications and improving the quality of life among diabetic patients. Assessment of self-care practices helps healthcare professionals identify gaps in patient management and plan appropriate interventions.

### Objectives

1. To assess the self-care practices among patients with Type II Diabetes Mellitus.
2. To determine the association between self-care practice scores and selected demographic variables among patients with Type II Diabetes Mellitus.

### Methodology

A quantitative research approach with a descriptive cross-sectional research design was adopted for the study. The study was conducted among 100 patients diagnosed with Type II Diabetes Mellitus in selected hospitals of Gujarat. Non-probability convenient sampling technique was used for selecting the samples. Data were collected using a structured self-care practice assessment questionnaire. Descriptive statistics such as frequency, percentage, mean, and standard deviation and inferential statistics such as chi-square test were used for data analysis.

## Results

The study findings revealed that the majority of participants (38%) belonged to the age group of 51–60 years and 58% were male. Regarding educational status, 38% had secondary education, while 42% of patients had diabetes for 5–10 years. Assessment of self-care practices showed that 48% of patients had average self-care practices, 30% had good self-care practices, and 22% had poor self-care practices. The mean self-care practice score was 18.62 with a standard deviation of 4.24. Significant association was found between self-care practice scores and selected demographic variables such as age, educational status, and duration of diabetes at 0.05 level of significance.

## Conclusion

The study concluded that most patients with Type II Diabetes Mellitus had average self-care practices. Continuous health education, counseling, and regular follow-up are essential to improve self-care practices and prevent complications among diabetic patients.

## Keywords

Type II Diabetes Mellitus, Self-Care Practices, Diabetic Patients, Quantitative Research, Gujarat.

## INTRODUCTION

Diabetes Mellitus is one of the most prevalent chronic diseases worldwide and has become a major public health challenge. It is characterized by elevated blood glucose levels resulting from defects in insulin secretion, insulin action, or both. According to the World Health Organization, the prevalence of diabetes has increased rapidly over the past few decades due to urbanization, unhealthy eating habits, physical inactivity, and obesity.

Type II Diabetes Mellitus accounts for nearly 90–95% of all diabetes cases. It commonly affects adults but is increasingly seen among younger individuals due to lifestyle modifications and increased obesity rates. The disease not only affects physical health but also imposes psychological, social, and financial burdens on individuals and families.

Self-care practices play an essential role in diabetes management. Patients are expected to actively participate in their own care by following healthy dietary habits, engaging in regular physical activity, monitoring blood glucose levels, adhering to medications, and maintaining foot hygiene. Appropriate self-care practices help in maintaining glycemic control and reducing the risk of long-term complications.

Despite advances in treatment and healthcare services, many diabetic patients fail to maintain adequate self-care behaviors due to lack of knowledge, low educational status, financial constraints, and poor motivation. Therefore, assessment of self-care practices among diabetic patients is essential for planning educational programmes and improving patient outcomes.

## NEED FOR THE STUDY

Diabetes Mellitus is rapidly increasing in India and has become a serious healthcare concern. India is often referred to as the “Diabetes Capital of the World” due to the high number of diabetic patients. Poor self-care practices among diabetic patients contribute significantly to uncontrolled blood sugar levels and increased risk of complications.

Many patients lack awareness regarding dietary modifications, exercise, medication adherence, and foot care. Improper management of diabetes leads to hospitalization, disability, reduced quality of life, and

increased healthcare costs. Therefore, there is a need to assess self-care practices among patients with Type II Diabetes Mellitus and identify areas requiring improvement.

The findings of the study may help healthcare professionals and nurses plan effective educational interventions to improve self-care practices and prevent complications among diabetic patients.

## OBJECTIVES OF THE STUDY

1. To assess the self-care practices among patients with Type II Diabetes Mellitus in selected hospitals at Gujarat.
2. To determine the level of self-care practices related to diet, exercise, medication adherence, blood glucose monitoring, and foot care.
3. To find the association between self-care practices and selected demographic variables.

## HYPOTHESES

- **H1:** There will be a significant association between self-care practices and selected demographic variables among diabetic patients.
- **H0:** There will be no significant association between self-care practices and selected demographic variables among diabetic patients.

## METHODOLOGY

### Research Approach

A quantitative research approach was adopted for the present study to assess the self-care practices among patients with Type II Diabetes Mellitus. This approach was considered appropriate as it enables the researcher to collect numerical data systematically and analyze the level of self-care practices among diabetic patients objectively.

### Research Design

A descriptive cross-sectional research design was used in this study. The design helped in assessing the existing self-care practices of patients with Type II Diabetes Mellitus at a particular point in time without manipulating any variables.

### Setting of the Study

The study was conducted in selected hospitals of Gujarat. These hospitals were selected because a sufficient number of diabetic patients attended the outpatient and inpatient departments regularly, making it feasible for data collection.

### Population

The target population for the study comprised patients diagnosed with Type II Diabetes Mellitus attending selected hospitals in Gujarat.

### Sample Size

The sample size for the present study consisted of 100 patients diagnosed with Type II Diabetes Mellitus.

## Sampling Technique

A non-probability convenient sampling technique was adopted to select the samples for the study. Patients who fulfilled the inclusion criteria and were available during the period of data collection were included in the study.

## Inclusion Criteria

The study included:

- Patients diagnosed with Type II Diabetes Mellitus.
- Patients who were willing to participate in the study.
- Patients who were available during the period of data collection.

## Exclusion Criteria

The study excluded:

- Seriously ill patients.
- Patients with cognitive impairment.
- Patients who were unwilling to participate in the study.

## Data Collection Tool

Data were collected using a structured self-care practice assessment questionnaire prepared by the researcher. The tool consisted of two sections:

### Section A: Demographic Variables

This section included demographic information such as age, gender, educational status, occupation, duration of diabetes, dietary habits, and other related variables.

### Section B: Self-Care Practice Assessment Questionnaire

This section consisted of structured questions related to self-care practices of diabetic patients, including dietary management, medication adherence, blood glucose monitoring, exercise, foot care, and follow-up practices.

## Method of Data Collection

Prior permission was obtained from the concerned hospital authorities before conducting the study. The purpose of the study was explained to the participants, and informed consent was obtained. The researcher collected data from diabetic patients using the structured questionnaire. Confidentiality and anonymity of the participants were maintained throughout the study.

## Data Analysis

The collected data were organized, tabulated, and analyzed using descriptive and inferential statistics.

## Descriptive Statistics

- Frequency and percentage distribution were used to describe demographic variables.

- Mean and standard deviation were used to assess the level of self-care practices among diabetic patients.

### Inferential Statistics

- Chi-square test was used to determine the association between self-care practice scores and selected demographic variables.
- The level of significance was set at 0.05 level.

## RESULTS

The analysis and interpretation of data collected from 100 patients with Type II Diabetes Mellitus are presented in this chapter. The findings are organized according to the objectives of the study and presented in the form of tables and descriptions.

### Section A: Distribution of Demographic Variables

**Table 4.1**

#### Frequency and Percentage Distribution of Demographic Variables of Patients with Type II Diabetes Mellitus

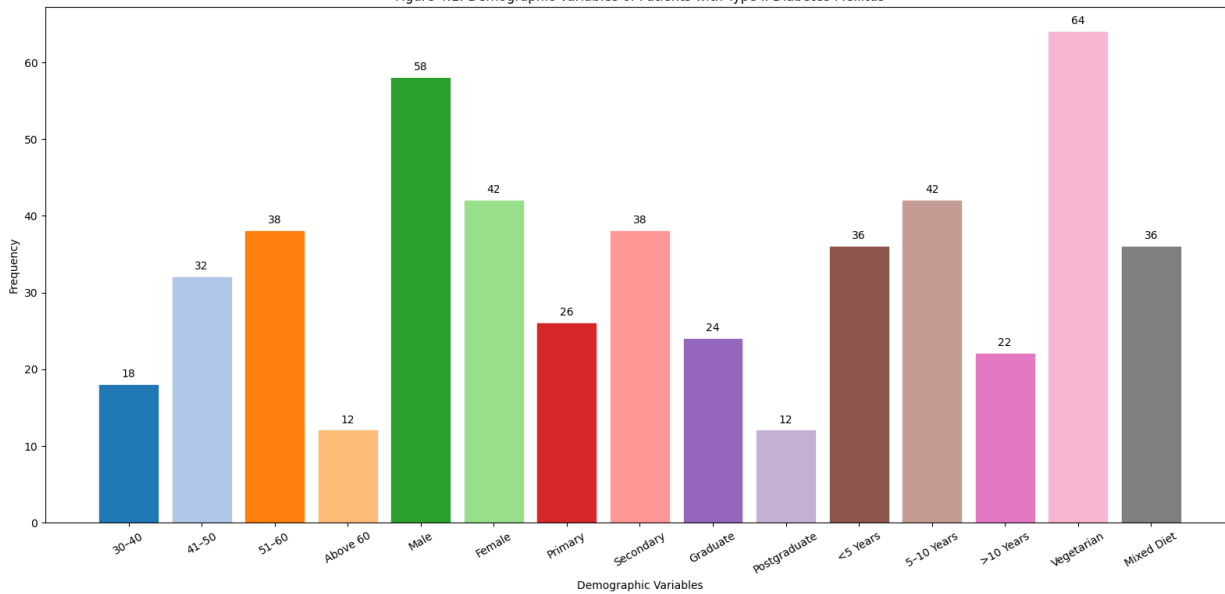
(*N* = 100)

S. No.	Demographic Variables	Frequency (f)	Percentage (%)
1	<b>Age (Years)</b>		
	30–40 Years	18	18%
	41–50 Years	32	32%
	51–60 Years	38	38%
	Above 60 Years	12	12%
2	<b>Gender</b>		
	Male	58	58%
	Female	42	42%
3	<b>Educational Status</b>		
	Primary Education	26	26%
	Secondary Education	38	38%
	Graduate	24	24%
	Postgraduate	12	12%
4	<b>Duration of Diabetes</b>		
	Less than 5 Years	36	36%
	5–10 Years	42	42%
	More than 10 Years	22	22%
5	<b>Dietary Habits</b>		
	Vegetarian	64	64%
	Mixed Diet	36	36%

### Interpretation

The above table shows that the majority of patients (38%) belonged to the age group of 51–60 years. Most participants were male (58%). Regarding educational status, 38% had secondary education. Majority of the patients (42%) had diabetes for 5–10 years, and 64% of the participants followed a vegetarian diet.

Figure 4.1: Demographic Variables of Patients with Type II Diabetes Mellitus



### Section B: Assessment of Self-Care Practices

Table 4.2

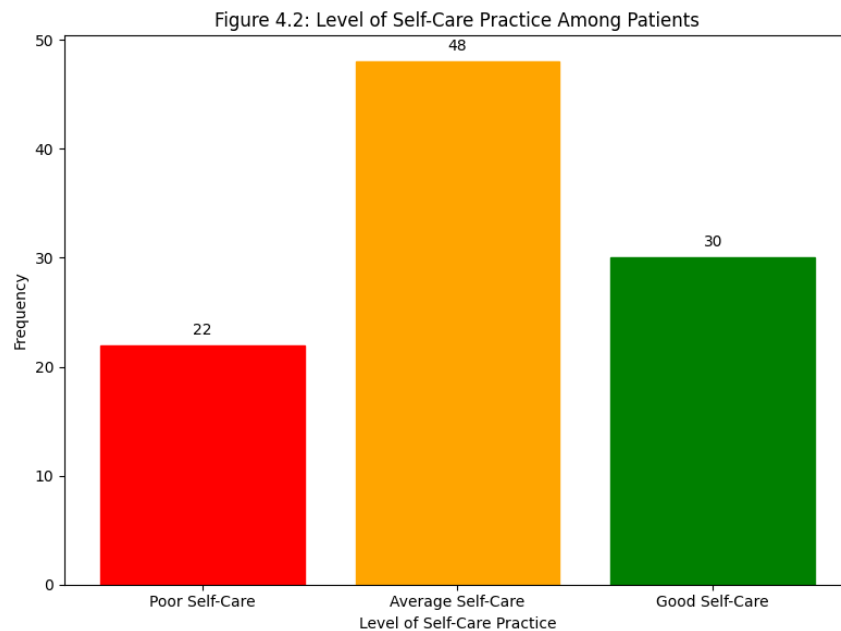
#### Distribution of Patients According to Level of Self-Care Practices

(N = 100)

Level of Self-Care Practice	Frequency (f)	Percentage (%)
Poor Self-Care Practice	22	22%
Average Self-Care Practice	48	48%
Good Self-Care Practice	30	30%

#### Interpretation

The table reveals that the majority of diabetic patients (48%) had average self-care practices, whereas 30% had good self-care practices and 22% had poor self-care practices.



### Section C: Mean and Standard Deviation of Self-Care Practice Scores

Table 4.3

#### Mean and Standard Deviation of Self-Care Practice Scores

( $N = 100$ )

Variable	Mean	Standard Deviation
Self-Care Practice Score	18.62	4.24

#### Interpretation

The mean self-care practice score among patients with Type II Diabetes Mellitus was 18.62 with a standard deviation of 4.24, indicating a moderate level of self-care practices among the participants.

### Section D: Association Between Self-Care Practice Scores and Selected Demographic Variables

Table 4.4

#### Association Between Self-Care Practice Scores and Selected Demographic Variables

( $N = 100$ )

Demographic Variable	$\chi^2$ Value	Table Value	Significance
Age	8.12	7.81	Significant
Gender	2.46	3.84	Not Significant
Educational Status	9.84	7.81	Significant
Duration of Diabetes	6.94	5.99	Significant
Dietary Habits	1.88	3.84	Not Significant

## Interpretation

The findings indicate that there was a statistically significant association between self-care practice scores and variables such as age, educational status, and duration of diabetes at the 0.05 level of significance. However, gender and dietary habits did not show any significant association with self-care practice scores.

## Summary of Findings

- Majority of the patients belonged to the age group of 51–60 years.
- Most participants had average self-care practices.
- The mean self-care practice score was moderate.
- Significant associations were found between self-care practices and selected demographic variables such as age, educational status, and duration of diabetes.

## DISCUSSION

The present study findings indicated that many diabetic patients lacked adequate self-care practices. Similar findings were observed in other studies where poor adherence to exercise and dietary management contributed to poor glycemic control.

Patients with higher educational levels demonstrated better self-care behaviors compared to less educated participants. Proper counseling and educational interventions can significantly improve self-care practices and reduce complications associated with diabetes.

Nurses play a crucial role in educating diabetic patients regarding lifestyle modifications, medication adherence, and prevention of complications. Continuous follow-up and motivation are necessary to ensure adherence to self-care activities.

## CONCLUSION

The study concluded that self-care practices among patients with Type II Diabetes Mellitus were inadequate in several areas, especially exercise, dietary control, and foot care. Appropriate educational programmes, regular counseling, and continuous monitoring are essential to improve self-care behaviors among diabetic patients. Effective self-management can help reduce complications, improve glycemic control, and enhance quality of life.

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