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ASSESSMENT OF COPING ABILITY, SELF-EFFICACY, AND SELF-CARE ACTIVITIES AMONG PATIENTS WITH TYPE 2 DIABETES MELLITUS RESIDING IN A SELECTED URBAN COMMUNITY AREA.

Ms. Namrata Subhash Chopdekar[1], Dr Heera Jayasheela[2]
[1]Professor, SMES, SSPG College of Nursing PIMS (DV) Mumbai 400019.
[2]Dean, Faculty of Nursing pravara Institute of Medical Science (DU), Loni(BK) Pune
***Corresponding author: Ms. Namrata Subhash Chopdekar**

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ABSTRACT

Introduction: Globally, prevalence of diabetes is 10.5%, and in 2019, approximately 463 million adults were living with diabetes by 2045; this will increase to 700 million (10.9%). India is a diabetic capital of world, prevalence of diabetes in India is 8.3%. A condition results from insufficient production of insulin, causing high blood sugar. It is a chronic disease affecting the pancreas. Patient's pancreas doesn't produce enough insulin. This results in abnormal levels of blood sugar.[1] Most common symptom is abnormally high level of blood sugar. **Aim of the study:** is to assess the coping ability, self-efficacy and self-care activities among type 2 diabetes mellitus patients residing in selected urban community area. **Research Methodology:** The present study adopted a descriptive research Objectives of the Study are: To assess the coping ability among patients with Type 2 Diabetes Mellitus, To assess the self-efficacy among patients with Type 2 Diabetes Mellitus, To assess the self-care activities among patients with Type 2 Diabetes Mellitus. The study was conducted in an urban community area (Chota Sion Dharavi) of a metropolitan city. The target population comprised patients diagnosed with Type 2 Diabetes Mellitus residing in the selected urban community. A total of 7 patients diagnosed with Type 2 Diabetes. Participants were selected using a purposive sampling technique based on specific inclusion and exclusion criteria. **Result**: During the assessment, the majority of patients with Type 2 Diabetes Mellitus in the experimental group exhibited **ineffective coping (71.43%)** and **low self-efficacy (100%)**, indicating initial difficulties in managing stress and maintaining confidence in diabetes self-care. In terms of self-care activities, only **42.86%** demonstrated *effective self-care* in Part I and a small proportion (**14.29%**) in Part II. Most participants followed *adaptive* or *ineffective* self-care practices. **Conclusion**: Overall, these findings reveal that at the beginning of the study, patients had **poor coping ability, low self-efficacy, and inadequate self-care behaviors**, highlighting the need for structured nursing interventions to enhance their coping strategies, confidence, and daily diabetes management practices.

Keywords: Assess, Coping ability, Self-efficacy, Self-care activities, Type 2 diabetes mellitus patients, Urban community.

INTRODUCTION

Type 2 Diabetes Mellitus (T2DM) is one of the most prevalent chronic metabolic disorders, characterized by elevated blood glucose levels resulting from insulin resistance or insufficient

insulin production. It develops gradually and is influenced by a combination of genetic predisposition, sedentary lifestyle, poor dietary habits, obesity, and stress-related factors. Globally, diabetes has emerged as a major public health concern due to its increasing prevalence and long-term complications.[2] According to the International Diabetes Federation (IDF), the global diabetic population is projected to rise significantly, reaching nearly 642 million by 2040. India ranks among the top countries affected, with an estimated 69.2 million adults living with diabetes in 2015, and the number is expected to reach 87 million by 2030. The rapid urbanization, industrial growth, and lifestyle modifications have contributed to the rising incidence of diabetes in the country. Type 2 Diabetes Mellitus not only affects physical health but also imposes psychological and social burdens on individuals.[3] Effective management of diabetes requires more than medical treatment—it demands continuous self-care practices and strong psychological adaptability. Self-care activities such as maintaining a balanced diet, regular physical exercise, proper medication adherence, routine blood glucose monitoring, and stress management are vital for glycemic control and prevention of complications.[4] However, despite awareness, many patients in urban communities face challenges in adhering to recommended self-care practices due to factors like inadequate knowledge, low motivation, financial constraints, and competing life demands. Coping ability and self-efficacy play crucial roles in influencing an individual's capacity to manage diabetes effectively. Coping refers to the strategies and psychological efforts used to handle the stress associated with chronic illness, while self-efficacy reflects one's confidence in their ability to perform specific health-related behaviors.[5] Higher levels of coping and self-efficacy are associated with better self-care adherence and improved health outcomes. Conversely, poor coping mechanisms and low self-efficacy often lead to neglect of self-care, increased distress, and progression of complications.

NEED FOR STUDY

Type 2 Diabetes Mellitus (T2DM) has become one of the most challenging public health problems worldwide, particularly in developing countries like India. The growing urban population, sedentary lifestyle, unhealthy dietary habits, and stress have significantly increased the risk of diabetes in urban communities. Although various medical treatments are available, effective management of T2DM largely depends on an individual's self-care practices, coping ability, and self-efficacy. Many patients struggle to maintain proper self-care routines such as regular medication intake, dietary control, physical activity, and blood glucose monitoring. This often leads to poor glycemic control and complications such as cardiovascular disease, kidney failure, and neuropathy. Coping ability and self-efficacy are psychological factors that directly influence how patients manage their illness. Individuals with higher self-efficacy and better coping strategies tend to adhere more effectively to self-care activities, resulting in improved health outcomes. However, studies indicate that many diabetic patients in urban communities lack confidence and awareness to manage their condition effectively. Therefore, assessing the coping ability, self-efficacy, and self-care activities among Type 2 Diabetes Mellitus patients residing in urban community areas is essential. The findings will help healthcare professionals plan appropriate nursing interventions to enhance self-management skills and improve the quality of life among diabetic patients.

AIM OF THE STUDY

Aim of the study is to assess the coping ability, self-efficacy and self-care activities among type 2 diabetes mellitus patients residing in selected urban community area.

RESEARCH METHODOLOGY

Research Design

The present study adopted a descriptive cross-sectional research design to assess the coping ability, self-efficacy, and self-care activities among patients with Type 2 Diabetes Mellitus residing in a selected urban community area.

Objectives of the Study

1. To assess the coping ability among patients with Type 2 Diabetes Mellitus.
2. To assess the self-efficacy among patients with Type 2 Diabetes Mellitus.
3. To assess the self-care activities among patients with Type 2 Diabetes Mellitus.

Research Setting

The study was conducted in an urban community area, Chota Sion Dharavi, located within a metropolitan city.

Population and Sample

The target population comprised patients diagnosed with Type 2 Diabetes Mellitus residing in the selected urban community area. A total of seven (7) patients diagnosed with Type 2 Diabetes Mellitus were included in the study. The purposive sampling technique was employed to select participants based on predefined inclusion and exclusion criteria.

Inclusion Criteria

- Patients diagnosed with Type 2 Diabetes Mellitus.
- Age above 35 years.
- Duration of diagnosis less than two years.
- Patients who were willing to participate in the study.

Exclusion Criteria

- Patients with comorbid illnesses such as cardiovascular diseases, renal failure, etc.
- Critically ill patients.
- Patients with irreversible complications of diabetes.

Data Collection Procedure

Data were collected by the investigator through a semi-structured interview schedule using standardized and validated tools to assess coping ability, self-efficacy, and self-care activities. The purpose of the study was clearly explained to each participant, and written informed consent was obtained prior to data collection. Ethical principles such as confidentiality, anonymity, and voluntary participation were strictly maintained throughout the research process.

Data Collection Tools

- **Socio-Demographic and Clinical Data Sheet:** This tool was used to collect information related to age, gender, education, occupation, duration of illness, and other relevant clinical details.
- **Coping Ability Scale:** This standardized scale assessed the patients' coping mechanisms in managing diabetes-related stress and day-to-day challenges.
- **Modified Diabetes Mellitus Self-Efficacy Scale:** This scale measured the patients' confidence level in performing diabetes-related self-management tasks such as diet control, physical activity, and medication adherence.
- **Modified Summary of Diabetes Self-Care Activities (SDSCA) Scale:** This tool evaluated different aspects of self-care practices including dietary management, physical exercise, medication adherence, and blood glucose monitoring.

Data Analysis

The collected data were systematically organized, tabulated, and analyzed using descriptive statistical methods such as frequency, percentage, mean, and standard deviation to summarize and interpret the findings. The results were presented in the form of tables and figures to facilitate better understanding and interpretation.

RESULT

Demographic Data

The demographic data show that most participants (57.14%) were between 41–50 years of age, and the majority were females (71.43%). Regarding education, more than half (57.14%) had primary education, while 42.86% had completed higher secondary education. In terms of family income, equal proportions (28.57%) earned less than ₹90,000, between ₹1–2 lakhs, and ₹2–5 lakhs annually, while 14.29% earned more than ₹5 lakhs. Most participants (85.71%) were taking oral hypoglycemic agents for diabetes, and 14.29% were not on any treatment. A large number (71.43%) reported no family history of diabetes. Interestingly, 71.43% had cancer as a comorbidity, while 28.57% had hypertension. None used insulin therapy, but all participants (100%) had visited a health professional within the last year. Overall, the data indicate that the

partcipants mainly consisted of middle-aged, female, low-to-moderate-income individuals with primary education, receiving oral treatment for diabetes and maintaining medical follow-up.

Assessment of Coping Ability, Self-Efficacy, and Self-Care Activities among Patients with Type 2 Diabetes Mellitus in descriptive study

Assessment of Coping Ability among Patients with Type 2 Diabetes Mellitus

Table 1: Level of Coping Ability

Level of Coping Scale	**Frequency (f)**	**Percentage (%)**
Effective Coping	1	14.29
Maladaptive Coping	1	14.29
Ineffective Coping	5	71.43
Mean	**45.43**	
SD	**13.09**	

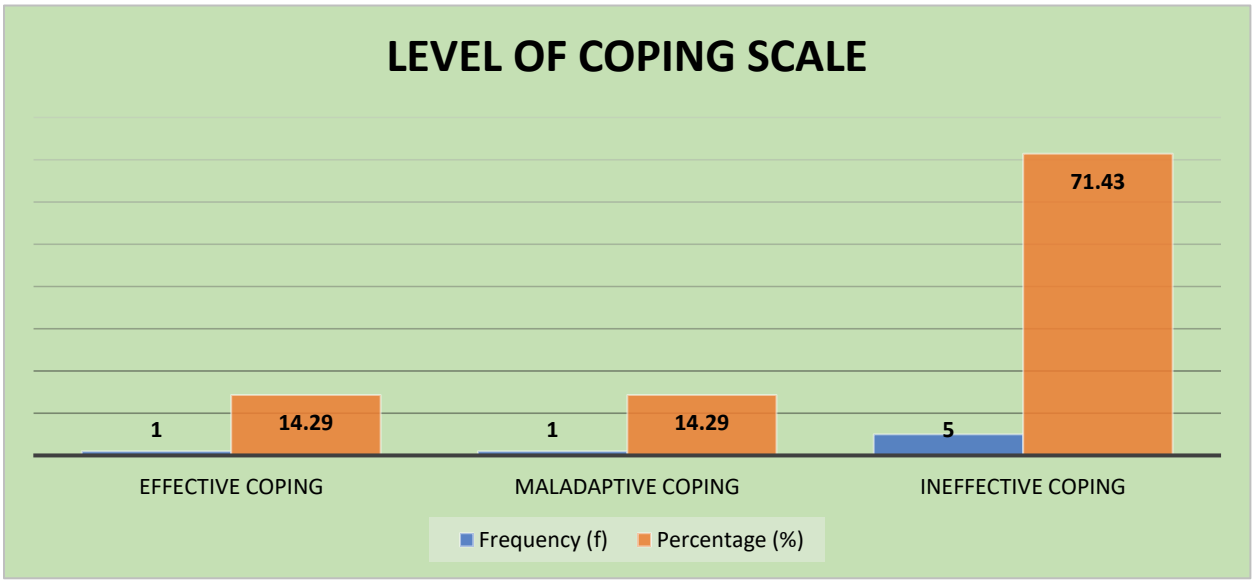

Figure 1: Level of Coping Ability – 1st Month

Figure number 1 represents during the assessment , the majority of participants (71.43%) exhibited ineffective coping, indicating poor adjustment and difficulty in managing diabetes-related challenges. Only a small portion (14.29%) demonstrated *effective coping* strategies, while another

14.29% used *maladaptive coping* mechanisms. The mean coping score was **45.43 (SD = 13.09)**, suggesting the need for early supportive interventions to strengthen adaptive coping behaviors.

Assessment of Self-Efficacy among Patients with Type 2 Diabetes Mellitus

Table 2: Level of Self-Efficacy

Level of Self-Efficacy Scale	**Frequency (f)**	**Percentage (%)**
Low Self-Efficacy	7	100.00
Moderate Self-Efficacy	0	0.00
High Self-Efficacy	0	0.00
Mean	**15.71**	
SD	**7.52**	

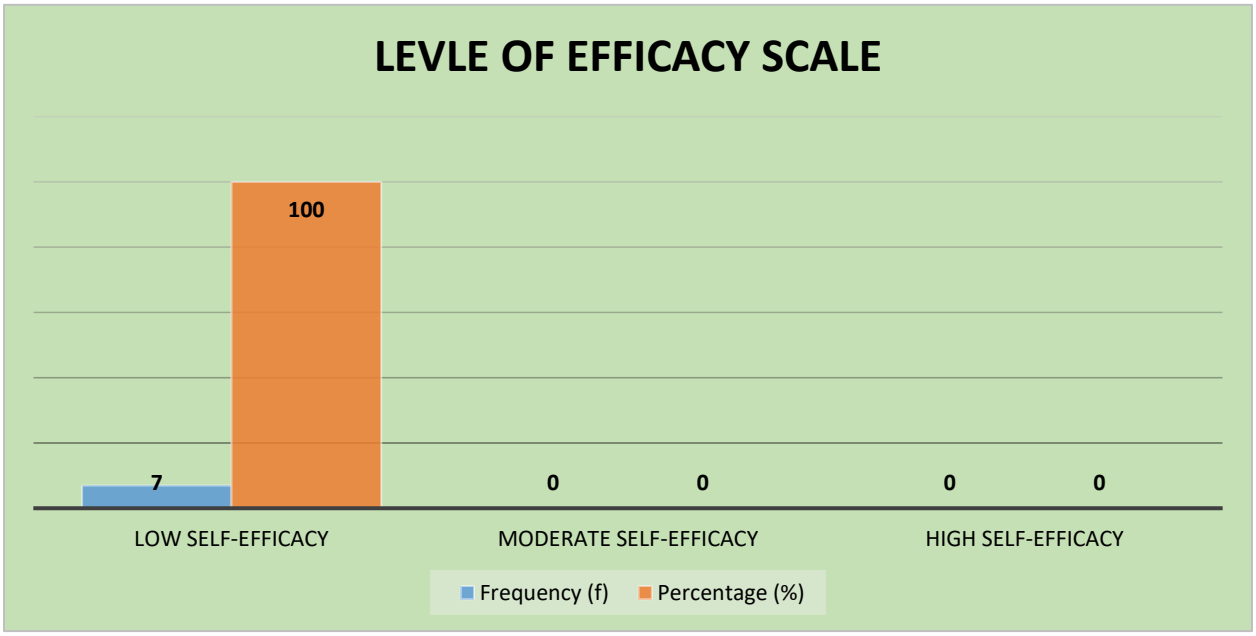

Figure 2: Level of Self-Efficacy

Figure number 2 represents All participants (100%) demonstrated *low* self-efficacy during the assessment. This reflects a lack of confidence and perceived ability to manage diabetes effectively. The mean score was **15.71 (SD = 7.52)**, indicating limited self-belief and highlighting the importance of structured education and motivation programs to enhance self-efficacy.

Assessment of Self-Care Activities (Part I) among Patients with Type 2 Diabetes Mellitus

Table 3: Level of Self-Care Activities (Part I)

Level of Diabetes Self-Care Activities	**Frequency (f)**	**Percentage (%)**
Effective Diabetes Self-Care	3	42.86
Adaptive Diabetes Self-Care	2	28.57
Ineffective Diabetes Self-Care	2	28.57
Mean	**15.14**	
SD	**6.31**	

Table 3 represents during the assessment, 42.86% of participants practiced *effective self-care* related to diet, exercise, and medication adherence. However, 28.57% each displayed *adaptive* or *ineffective* self-care behaviors. The mean score of **15.14 (SD = 6.31)** suggests that although some participants were capable of managing diabetes effectively, others still required improvement in routine self-management activities.

Assessment of Self-Care Activities (Part II) among Patients with Type 2 Diabetes Mellitus

Table 4: Level of Self-Care Activities (Part II)

Level of Diabetes Self-Care Activities	**Frequency (f)**	**Percentage (%)**
Effective Diabetes Self-Care	1	14.29
Adaptive Diabetes Self-Care	4	57.14
Ineffective Diabetes Self-Care	2	28.57
Mean	**13.43**	
SD	**4.50**	

In this section Table 4 represents during the assessment, more than half of the participants (57.14%) showed *adaptive self-care* patterns, while only 14.29% demonstrated *effective* self-care. Around 28.57% had *ineffective* behaviors. The mean score was **13.43 (SD = 4.50)**. These findings indicate moderate awareness and practice of diabetes management, with potential for enhancement through continuous education and behavioral counseling.

DISCUSSION

The present study assessed the coping ability, self-efficacy, and self-care activities among patients with Type 2 Diabetes Mellitus (T2DM) during the first month of observation in the experimental group. The findings revealed that a majority of participants (71.43%) exhibited ineffective coping, while only 14.29% demonstrated effective coping mechanisms. These findings indicate that most patients initially struggle to adapt to lifestyle changes and the psychological demands of diabetes management.[6] This result supports the study conducted by Surwit et al. (2002), who reported that individuals with T2DM often experience emotional distress, anxiety, and poor coping responses during the early stages of treatment. Similarly, Fisher et al. (2010) identified that ineffective coping is a strong predictor of poor glycemic control, low motivation, and non-adherence to prescribed self-care behaviors.[7] In the present study, all participants (100%) showed low self-efficacy during the first month, reflecting a lack of confidence in independently managing their condition. This finding is in line with King et al. (2010), who reported that patients with low self-efficacy are less likely to perform essential self-management activities such as diet regulation, exercise, and medication adherence. Wu et al. (2011) further emphasized that structured nursing interventions and continuous diabetes education can significantly enhance self-efficacy, leading to better disease control and improved patient outcomes.[8] Regarding self-care activities, only 42.86% of participants demonstrated effective self-care in Part I, and 14.29% in Part II. This suggests that most participants were not consistent in maintaining effective self-care behaviors. Similar findings were reported by Sarkar et al. (2006), who attributed low self-care adherence to poor diabetes knowledge, emotional stress, and limited social support. Schulman-Green et al. (2012) also highlighted that structured education, behavioral guidance, and motivational support can markedly improve patients' self-care practices and overall quality of life.[9]

CONCLUSION

In conclusion, the findings of this study highlight significant challenges faced by patients with Type 2 Diabetes Mellitus (T2DM) in managing their condition, particularly in urban community settings. The majority of participants exhibited ineffective coping strategies, indicating a high level of emotional distress and difficulty in adapting to the psychological and physical demands of diabetes. This was coupled with a complete lack of self-efficacy, where participants demonstrated low confidence in their ability to perform essential self-care tasks such as medication adherence, diet control, and physical activity. Additionally, self-care practices were suboptimal, with only a minority of participants engaging in effective diabetes management behaviors.

These findings emphasize the urgent need for structured interventions aimed at improving both psychological and behavioral aspects of diabetes management. Healthcare providers should focus on enhancing coping mechanisms, boosting self-efficacy, and promoting consistent self-care through tailored education and support programs. By addressing these psychological factors, it is possible to improve diabetes self-management and, ultimately, the long-term health outcomes for individuals living with Type 2 Diabetes Mellitus. Future studies should focus on the impact of targeted interventions to further improve the coping abilities, self-efficacy, and self-care behaviors of patients with T2DM.

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