



International Journal of Advance Research in Medical Surgical Nursing

E-ISSN: 2663-2268

P-ISSN: 2663-225X

www.surgicalnursingjournal.com

IJARMSN 2025; 7(1): 311-326

Received: 18-02-2025

Accepted: 20-03-2025

Aaqib Majeed Sheikh

GNM nursing 3rd year, nursing
Rayat Bahra College of Nursing,
Mohali, Punjab, India

Arshdeep Kaur

GNM nursing 3rd year, nursing
Rayat Bahra College of Nursing,
Mohali, Punjab, India

Bhawna Kumari

GNM nursing 3rd year, nursing
Rayat Bahra College of Nursing,
Mohali, Punjab, India

Muskaan

GNM nursing 3rd year, nursing
Rayat Bahra College of Nursing,
Mohali, Punjab, India

Namneet Kaur

GNM nursing 3rd year, nursing
Rayat Bahra College of Nursing,
Mohali, Punjab, India

Navneet Kaur

GNM nursing 3rd year, nursing
Rayat Bahra College of Nursing,
Mohali, Punjab, India

Neha rani

GNM nursing 3rd year, nursing
Rayat Bahra College of Nursing,
Mohali, Punjab, India

Jasvinder Kaur

Associate Professor, Rayat Bahra
College of Nursing, Mohali, Punjab,
India

Navjot Kaur

Associate Professor, Rayat Bahra
College of Nursing, Mohali, Punjab,
India

Sunanda Sharma

Nursing Tutor, Rayat Bahra
College of Nursing, Mohali, Punjab,
India

Ambika F Christopher

Professor-cum-Vice Principal,
Rayat Bahra College of Nursing,
Mohali, Punjab, India

Dr. Deepika R. Kumar

Director Principal, Rayat Bahra
College of Nursing, Mohali, Punjab,
India

Corresponding Author:

Aaqib Majeed Sheikh

GNM nursing 3rd year, nursing
Rayat Bahra College of Nursing,
Mohali, Punjab, India

A descriptive study to assess the awareness and practices regarding foot care among diabetic patients in selected hospitals of district Mohali, Punjab

**Aaqib Majeed Sheikh, Arshdeep Kaur, Bhawna Kumari, Muskaan,
Namneet Kaur, Navneet Kaur, Neha rani, Jasvinder Kaur, Navjot Kaur,
Sunanda Sharma, Ambika F Christopher and Deepika R Kumar**

DOI: <https://www.doi.org/10.33545/surgicalnursing.2025.v7.i1e.255>

Abstract

When a person has diabetes, their blood sugar level is greater than usual. Because high blood sugar destroys the nerves and blood vessels in the feet, diabetics frequently have foot problems. Because diabetes can harm your feet—even a minor cut can have major repercussions—it is imperative that you take good care of your feet. Nerve damage brought on by diabetes may cause you to lose sensation in your feet. It may be more difficult for the feet to heal from an injury or fend off infection if diabetes lowers blood flow to them.

Aim of the study: The main purpose of the study is to assess the awareness and practices regarding foot care among diabetic patients in selected hospitals of District Mohali, Punjab.

Design and Method: A quantitative research approach, descriptive research design was adopted to conduct the study. Purposive sampling technique was used to select 60 sample to assess the awareness and practices regarding foot care among diabetic patients. In this study the population consist of diabetic foot patients. Data was collected by questionnaire and check list. Descriptive and inferential statistical methods were used to analyse the data.

Result: Based on the study, most awareness questions had less than 50% correct responses, particularly regarding critical diabetic foot care practices like proper footwear, hygiene, and warning signs. In practice-related items, participants performed relatively better, especially in daily foot inspection and cleaning practices, yet awareness did not translate into ideal behaviours in many cases.

Conclusion: The study reveals alarming levels of poor awareness regarding diabetic foot care, although practices are somewhat better. This mismatch calls for structured education programs, increased follow-up by healthcare providers, and community-based initiatives. Promoting awareness is essential to reduce the risk of complications, amputations, and improve the quality of life in diabetic patients.

Keywords: Diabetic foot care, Diabetes mellitus, Patient awareness, Foot care practices, Nerve damage, Peripheral neuropathy, Blood circulation, Amputation prevention

Introduction

Diabetes mellitus is a metabolic condition characterized by high blood glucose levels brought on by the body's inability to effectively produce or use insulin. The Indian Council of Medical Research defines diabetes mellitus as a state marked by persistent hyperglycaemia and disruptions in the metabolism of proteins, fats, and carbohydrates due to deficiencies in either insulin secretion, insulin action, or both ^[1]. The hormone insulin, which is secreted by the pancreas, is crucial for regulating blood glucose levels. It appears when your body does not react well to insulin or when your pancreas does not generate any at all. Diabetes affects people of all ages. The majority of diabetes types are chronic, or long-term, diseases that are treated with medicine and/or lifestyle modifications. Carbohydrates are the primary source of glucose, or sugar, and are found in food and beverages. It is the main source of energy for your body. Your blood carries glucose, which is used as fuel by every cell in your body. To get glucose to the right place in the body, our blood needs assistance, much like a key. The hormone produced by the pancreatic gland behind or beneath the stomach is called insulin. Glucose accumulates in the bloodstream and causes

hyperglycaemia, or elevated blood sugar, when the body uses insulin incorrectly or the pancreas does not generate enough of it. Chronically producing hyperglycaemia, or increased blood sugar, over time can result in health issues such kidney damage, heart disease, and visual problems. Diabetes is referred to in medicine as diabetes mellitus. Another condition that is referred to as "diabetes" is diabetes insipidus, but it is distinct. Because they both result in increased thirst and frequent urination, they are referred to as "diabetes." Diabetes insipidus is far less prevalent than diabetes mellitus^[2].

Among the most popular forms are: The period before type 2 diabetes is known as prediabetes. Although your blood glucose level is greater than usual, type 2 diabetes cannot be diagnosed because of it. Normal blood glucose levels are fewer than 140 mg/dl. Diabetes is diagnosed if the value is greater than 200 mg/dl. You are considered to have prediabetes if your reading is between 140 and 199 mg/dl. Diabetes risk can be decreased by reducing body weight by 5 to 10% with diet and exercise. Type 1 diabetes, sometimes referred to as insulin-dependent diabetes mellitus or juvenile-onset diabetes, is another kind of the disease. More than 90% of the insulin-producing cells in your pancreas are permanently killed in this autoimmune disease, which occurs when your immune system attacks and kills them for no apparent reason. Type 1 diabetes affects less than 10% of all diabetics. Type 1 diabetes usually affects a person before the age of thirty, while it can manifest later in life. The immune system destroys the pancreatic cells that produce insulin as a result of certain environmental variables, such as viral infections or dietary deficiencies in childhood or maturity. Type 2 diabetes, commonly known as adult-onset diabetes or non-insulin dependent diabetes mellitus, is brought on by either insufficient insulin production by the body or improper cell response to insulin. The pancreas's capacity to produce insulin declines as type 2 diabetes worsens. One of the most prevalent forms of diabetes is this one. Most often, it begins in people over thirty. Type 2 diabetes mellitus affects about 30% of those over 65^[3].

Any degree of glucose intolerance that develops during pregnancy is referred to as gestational diabetes. It happens when insulin resistance brought on by placental hormones raises blood sugar levels. Pregnant women who have gestational diabetes are more likely to have conditions associated with elevated blood pressure^[4].

Increased thirst, increased urination, increased hunger, dry mouth, hazy vision, tiredness, nausea, poor stamina during exercise, and sluggish wound or sore healing are all signs of diabetes mellitus. The onset of symptoms in patients with type 1 diabetes is sudden and severe. Diabetic ketoacidosis is a dangerous condition. Symptoms of diabetic ketoacidosis include nausea, vomiting, exhaustion, and stomach pain, particularly in children. Before receiving a diagnosis, people with type 2 diabetes may go years or even decades without exhibiting any symptoms. A condition known as hyperosmolar hyperglycaemia state can occur when blood glucose levels get extremely high, causing severe dehydration that can cause mental confusion, drowsiness, and seizures^[5].

Acute Complication of diabetes are hyperosmolar hyperglycaemic state and diabetic ketoacidosis. Chronic complications are retinopathy, foot problems, heart attack and stroke, nephropathy, neuropathy, gum disease and other mouth problems, related conditions like cancer, sexual

problems in women and men^[6]. Many organs can be affected like brain causing stroke, retinopathy cause blindness, kidney nephropathy causing chronic kidney disease, nerve nephropathy causing decreased sensation mainly in feet and legs^[7].

A Diabetic foot disease is a condition that any ailment that arises directly from peripheral artery disease or sensory neuropathy that affects a diabetic foot is referred to as diabetic foot disease. Diabetes-related foot problems can be acute or long-term. Diabetes can cause peripheral artery disease and peripheral nerve dysfunction, which results in inadequate blood flow to the limbs. Nearly half of diabetic foot ulcer patients also have peripheral vascular disease.

Diabetic foot diseases include neuropathic osteoarthropathy, diabetic foot ulcers, and infections. These conditions are often referred to as diabetic foot syndrome. Patient's feel dry skin and diminished sense of pain as a result of advanced peripheral nerve damage linked to diabetes. Hence, little wounds could go unnoticed and eventually develop into a diabetic foot ulcer that is completely thick. Additionally, foot surgery can be performed without anaesthetics and is generally tolerated^[8].

You might not be aware of a cut, blister or ulcer on your foot if you are painless. A wound like that get effected. The infection may not heal properly because of the impaired blood flow in your foot caused by damaged blood vessels. Insufficient infection and blood flow can result to gangrene. In other words, the skin, muscles, and other tissues start to die. If you have gangrene or a foot ulcer that doesn't go away with medicine, you may need to have it amputated. Amputation of the lower limbs may be required in cases when wounds take a long time to heal and become infected, spreading to bones and joints. In individual with diabetes, foot trauma is the most frequent reason for non-traumatic amputation. Your damaged toe, foot, or leg portion will be amputated during this surgery. It could save your life and stop a dangerous infection from spreading. A diabetic foot disease can cause serious foot problems such as a bruise, cut, or blister on your foot that doesn't go better after a few days your feet's skin may be sore, red, or heated. Dried blood inside a callus the foot infection becomes dark, foul-smelling cause gangrene. An infected diabetic foot ulcer may lead to a painful build-up of abscess. The pus accumulated under the surface of the skin. Diabetic foot infection and long-term untreated diabetes can weaken the muscles and bones of the feet, causing deformity and foot amputation. Keeping blood sugar levels under control is the best defence for foot. This will help keep nerve end blood vessel damage from getting worse and keep the skin of the feet healthy, washing feet every day, trimming toe nails straight across with a clipper, protecting feet from heat and cold, keep the blood flow in feet, avoid going barefoot always wearing well fitted shoes to protect feet when walking, maintain a healthy weight, getting feet checked at your health care visits^[9].

A recent meta-analysis found a 6.3% global prevalence of diabetic foot ulcer among adults with diabetes, which equals to approximately 33million people affected by diabetic foot ulcer^[10].

International diabetes federation estimated that in 2019 around 463 million people had diabetes, and by 2045 this longer is expected to raise by 700 million. Additionally, it is predicted that between 2010 and 2030, the prevalence of diabetes will rise by 20% in developing countries and 69%

in underdeveloped ones ^[11].

Diabetic foot ulcers affect 6.2% of individuals with diabetes in India, indicating a significant health burden. Diabetic foot ulcers prevalence was consistent across India: East (9.5%), south (7.4%), and North (5.6%), showing a nationwide distribution ^[12].

In Punjab overall prevalence of diabetic foot ulcer was 16.83%. In rural areas, the prevalence was 13.91% with a female prevalence of 17.52% and a male prevalence of 15.48%, whereas in urban areas, the prevalence was 17.96%. Individuals 75 years and above had the highest prevalence of 66.67%. Therefore, the purpose of the present study is to create awareness and practices regarding foot care among diabetic patient ^[13].

Need of Study

Diabetes is like an iceberg. Non-insulin-dependent diabetes has become more commonplace globally, but it has become especially pronounced in poor and newly industrialized countries. Approximately 150 million people worldwide are thought to have diabetes at this time. By 2025, it is predicted that the number will have doubled. Up to 9% of people could have diabetes by 2030 ^[14].

Diabetic foot disease is the 13th biggest cause of over 350 illnesses worldwide, accounting for almost 2% of the total disease burden in 2024 ^[15].

An estimated 6.2% of people with diabetes in India is thought to have diabetic foot ulcers. About 25% of India's 62 million diabetics get diabetic foot ulcers; of them, 50% get infected and require hospitalization, and 20% need to have their feet amputated ^[16].

The researcher claims that diabetes mellitus is linked to numerous complications. The main cause of those issues is vascular system disruption, which can lead to insufficient circulation to the body's extremities. The foot is more susceptible to infection and ulcers as a result. One of the most dangerous and expensive side effects of diabetes mellitus is foot complications. Foot ulcers are among the symptoms of diabetes mellitus that the majority of patients are not completely aware of. Their inadequate understanding of proper foot care techniques and failure to take prompt action could lead to complicated issues, including potentially lethal outcomes. Whether the patient is in the hospital or at home, chronic complications of diabetes mellitus have significant implications for nursing care planning ^[17].

Diabetic foot disease is among the most dangerous consequences of diabetes mellitus. Infection, ulceration, and osseous deterioration of the diabetic foot are all included. Diabetic foot demands the highest level of care, and managing foot care effectively and efficiently is crucial ^[18].

As a result, diabetic foot ulcers are a very complicated problem that affects patients as well as society. According to a previous study, the incidence of diabetic foot ulcers and lower extremity amputations can be decreased by identifying high-risk individuals and treating risk factors early ^[19].

According to WHO estimates, around 180 million people worldwide suffer with diabetes. By 2030, these figures are probably going to more than double. An estimated 1.1 million deaths were attributed to diabetes in 2005. Nearly 80% of diabetes-related deaths take place in low- and middle-income nations. Nearly half of diabetes-related deaths occur in people under 70. Women account for 55%

of diabetes-related deaths. Most significantly, it is predicted that between 2006 and 2015, the number of deaths from diabetes in upper-middle income nations will rise by more than 80%. Individuals with diabetes have a death rate that is at least twice as high as that of those without the disease. Diabetes and its complications have a major financial impact on people, families, nations, and health systems.

In the primary healthcare sector, there is an urgent need to raise awareness about diabetes management and associated consequences. It is imperative that primary healthcare practitioners get ongoing education on diabetes mellitus and its complications, and that their understanding of the disease be regularly evaluated. Diabetes screening is vital, but patient counselling and education are just as critical. The results of this study clearly show that patients lack the knowledge necessary to fully manage their illness. Therefore, in order to prevent co-morbidities that could affect their lifestyles and raise the burden on public health care, primary healthcare providers and other diabetic patients must be knowledgeable about diabetes ^[20]

Problem Statement

"A descriptive study to assess the awareness and practices regarding foot care among diabetic patients in selected hospitals of District Mohali, Punjab."

Aim of the Study

The aim of the study is to assess the awareness and practices regarding foot care among diabetic patients in selected hospitals of District Mohali, Punjab.

Objectives of the Study

- To assess the awareness regarding foot care among diabetic patients.
- To assess the practices regarding foot care among diabetic patients.
- To find out the association between the level of awareness and practices regarding foot care among diabetic patients with their selected socio-demographic variables.
- To disseminate the findings.

Operational Definition

- **Awareness:** Awareness refers to the level of knowledge and understanding that diabetic patients have about foot care, including the risk of foot complications, preventive measures, and the importance of regular foot hygiene.
- **Practices:** Practices refers to the actual actions and habits undertaken by diabetic patients to care of their feet.
- **Foot care:** Foot care encompasses the preventive and maintenance activities aimed at preserving foot health in diabetic patients.
- **Diabetic patients:** Diabetic patients are individuals suffering from a metabolic disease marked by elevated blood glucose level because of the body's incapacity to manufacture or utilize insulin efficiently.

Assumptions

- The diabetic patients had average or poor awareness regarding diabetic foot care.
- Most of them had limited practice level regarding diabetic foot care.

Delimitations**The study was limited to the**

1. Diabetic foot patients who were present at the time of data collection.
2. Who were willing to participate in the study.

Research approach

A quantitative research approach was used to assess the awareness and practices regarding foot care among diabetic patients in civil hospital phase-6, Mohali.

Research Design

Research design is a functional or blueprint that includes the method and procedure use in collecting and analysing the needed information in research study. Descriptive research design was chosen for present study.

Research Setting

The study was conducted in civil hospital phase-6, Mohali. The reason for selecting this hospital were abundant of samples, investigation convenience and expected cooperation from head of department in getting permission for conducting the study.

Target Population

The target population of the study was comprised of diabetic foot patients of civil hospital phase-6, Mohali.

Sample and Sampling Technique

The sample consists of 60 diabetic foot patients. Convenient sampling technique was used to draw sample from the population.

Inclusion Criteria

1. Only diabetic foot patients of age 20-80 years of present in civil hospital phase-6, Mohali.
2. Willing to participate in the study.

Exclusion Criteria

1. Patient with surgery, cardiology problems and patient with sepsis.
2. Diabetic foot patients below 20 and above 80 years of age.

Dependent Variable

Foot care.

Independent Variable

Awareness and practices.

Selection and Development of Tool

Self-administered structured knowledge questionnaire and check list will be developed to assess the awareness and practice regarding foot care among diabetic patients. Extensive review of literature i.e. books, journals, expert opinion and the investigator's professionals experience provided basis for construction of the structured tool.

Self-administered structured knowledge questionnaire

It is divided into two sections:

Part-A

- Socio-demographic data
- Clinical profile

Part-B

- Self-structured knowledge questionnaire on awareness regarding foot care among diabetic patients.
- Check list on practices regarding foot care among diabetic patients.

Description of Tool**Self-administered structured knowledge questionnaire was divided into two sections:****Part-A****Socio demographic data**

This section consists of variables to collect socio-demographic information such as age, gender, educational status, religion, occupation, socio-economic status, marital status, type of family, dietary habits and personal hygiene.

Clinical profile

This section consists of variables to collect clinical profile information such as diagnosis, type of admission, type of illness, previous illness (medical and surgical), lab reports and vital signs.

Validity of Tool

In order to measure the content validity. Research supervisor was consulted regarding content and language of the tool. The change was made as per guidance of experts after discussion with research supervisor, the tool was finalized.

Reliability of Tool

It is the degree of consistency or dependability with which an instrument measures the attributes. Reliability of tool was calculated by split half method and Kari Pearson method. Reliability of tool ($r=0.79$) for awareness score and ($r=0.81$) for practice score. The tool was found to be reliable and valid.

Pilot Study

The pilot study was conducted at civil hospital, Kharar. It was conducted on 10% of total sample size, self-structured knowledge questionnaire given to the group. The descriptive analysis was done in accordance with the objectives. The finding of the data revealed that study was feasible.

Ethical consideration

- Written permission was taken from the ethical committee of the Rayat Bahra College of Nursing, Mohali.
- Written permission was taken from the Director principal of the Rayat Bahra College of Nursing, Mohali.
- Written permission was taken from Senior Medical Officer of civil hospital phase-6, Mohali.
- Verbal and written consent will be taken from the participants of the study.
- Confidentiality and anonymity will be maintained throughout the study.

Data Collection Procedure

A formal written permission was obtained from the Senior Medical Officer of civil hospital phase-6, Mohali after discussing the purposes and objectives of the study with them. Also take permission from the diabetic patients prior

to the data collection was taken by the explaining the purposes the study and consent was taken from them. They were also assured about their confidentiality.

- Only pre-test will be taken by administering the self-structured knowledge questionnaire. They were instructed to go through the instruction before answering the questions. The instructions were also read out by the investigator.

Plan of Data Analysis

Data was analysed by using descriptive and inferential statistics.

Section-A

Table 1: Demographic Profile of Diabetic Foot Patients

Socio Demographic Performa		Frequency(F)	Percentage (%)
Age (In Years)	20-35 years	5	8%
	36-50 years	12	20%
	51-65 years	26	43%
	66-80 years	17	28%
Gender	Male	27	45%
	Female	33	55%
	Transgender	0	0%
Education	Primary	19	32%
	Secondary	25	42%
	Graduate or above	9	15%
	Illiterate	5	8%
	No formal education	2	3%
Religion	Sikh	21	35%
	Hindu	20	33%
	Muslim	16	27%
	Christian	3	5%
Occupation	Private employee	13	22%
	Government employee	28	47%
	Self-employee	13	22%
	Unemployed	6	10%
Socio-Economic Status (Per Month)	Below 2500	9	15%
	2500-5000	10	17%
	5001-10,000	20	33%
	10,001-20,000	17	28%
	>20,000	4	7%
Marital Status	Married	44	73%
	Unmarried	12	20%
	Widow	4	7%
	Separated	0	0%
Type of Family	Joint family	12	20%
	Nuclear family	37	62%
	Extended family	11	18%
Dietary Habit	Vegetarian	19	32%
	Non-vegetarian	34	57%
	Eggetarian	7	12%
Personal Hygiene	By self	32	53%
	Assisted	20	33%
	Dependent	8	13%

Table 2: Clinical Profile of Diabetic Foot Patients

Clinical Performa		Frequency(F)	Percentage (%)
Diagnosis	Type 1 diabetic mellitus	27	45%
	Type 2 diabetic mellitus	33	55%
Type of Admission	Emergency	27	45%
	OPD	33	55%
Type of Illness	Acute	32	53%
	Chronic	28	47%
Previous History	Yes	13	22%
	No	47	78%
CBC	Normal	49	82%
	Abnormal	11	18%
Blood Glucose (Fasting)	Normal	29	48%
	Abnormal	31	52%
Blood Glucose (Postprandial)	Normal	25	42%
	Abnormal	35	58%
Glycated Haemoglobin (HbA1C)	Normal	30	50%
	Abnormal	30	50%
C-Reactive Protein	Normal	53	88%
	Abnormal	7	12%
Wound Swap Culture	Normal	50	83%
	Abnormal	10	17%
Blood Culture	Normal	50	83%
	Abnormal	10	17%
X-Ray of Foot	Normal	53	88%
	Abnormal	7	12%
BP	Normal	8	13%
	Abnormal	52	87%
Temperature	Normal	55	92%
	Abnormal	5	8%
Respiration	Normal	58	97%
	Abnormal	2	3%
Pulse	Normal	57	95%
	Abnormal	3	5%
Spo2	Normal	59	98%
	Abnormal	1	2%

Section - B

Table 3: Frequency & Percentage distribution of Awareness Scores. N=60

Criteria Measure of Awareness Score		
Category Score	Frequency	Percentage
Good (14-20)	0	0.0%
Average (7-13)	15	25.0%
Poor (0-6)	45	75.0%

Maximum Score=20

Minimum Score=0

The awareness scores are grouped into three levels:

- Good (14-20)
- Average (7-13)
- Poor (0-6)

None of the participant scored in the “good” range- nobody got more than 15 points. 25% of people scored in the “average” range, means they had a fair level of awareness. Most people, 75%, scored in the “poor” range, which means they had low awareness.

Table 4: Descriptive statistics of pre-test level of Awareness Scores. N=60

Descriptive Statistics	Mean	SD	Median	Maximum	Minimum	Range	Mean %
Awareness Score	5.85	2.43	5.00	13	0	13	29.3

Maximum Score=14

Minimum Score=0

The awareness score mean of 5.85, indicating the average score across all participants. The standard deviation (SD) is 2.43, suggesting moderate variability in the scores. The middle score (median) was 5.00, when the scores are

arranged in order. The highest score achieved was 13, while the lowest score was 0, so the scores ranged from 0 to 13. The mean percentage is 29.3%, reflecting the average score of full score.

Table 5: Table Showing Association of Demographic Variables with awareness score regarding foot care among diabetic patients

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Age (In Years)	20-35 years	0	3	2	5.013	0.171	3	7.815	Not Significant
	36-50 years	0	4	8					
	51-65 years	0	4	22					
	66-80 years	0	4	13					

Table 5.1: According to age, most diabetic patients were 51-65 years old. The obtained Chi-square value was 5.013, P value was 0.171 with df 3.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Gender	Male	0	3	24	5.051	0.025	1	3.841	Significant
	Female	0	12	21					
	Transgender	0	0	0					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 5.2: According to gender, the majority of the diabetic patients were females. The obtained Chi-square value was 5.051, P value was 0.025 with df 1.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Education	Primary	0	2	17	4.376	0.357	4	9.488	Not Significant
	Secondary	0	8	17					
	Graduate or above	0	3	6					
	Illiterate	0	2	3					
	No formal education	0	0	2					

Hence it is concluded that mean score was statistically significant at <0.05.

Table 5.3: According to education, the majority of the diabetic patients had the secondary level of education. The obtained Chi-square value was 4.376, P value was 0.357 with df 4.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Religion	Sikh	0	9	12	7.571	0.056	3	7.815	Not Significant
	Hindu	0	5	15					
	Muslim	0	1	15					
	Christian	0	0	3					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 5.4: According to religion, the majority of the diabetic patients were Sikh. The obtained Chi-square value was 7.571, P value was 0.056 with df 3.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Occupation	Private employee	0	4	9	4.308	0.230	3	7.815	Not Significant
	Government employee	0	7	21					
	Self-employee	0	1	12					
	Unemployed	0	3	3					

Hence it is concluded that mean score was statistically not significant at <0.05

Table 5.5: According to occupation, the majority of the diabetic patients were government employee. The obtained Chi-square value was 4.308, P value was 0.230 with df 3.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Socio-Economic Status (Per Month)	Below 2500	0	3	6	2.886	0.577	4	9.488	Not Significant
	2500-5000	0	3	7					
	5001-10,000	0	3	17					
	10,001-20,000	0	4	13					
	>20,000	0	2	2					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 5.6: According to socio-economic status (per month), the majority of the diabetic patients had their income level between 5001-10,000. The obtained Chi-square value was 2.886, P value was 0.577 with df 4.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Marital Status	Married	0	9	35	2.263	0.323	2	5.991	Not Significant
	Unmarried	0	4	8					
	Widow	0	2	2					
	Separated	0	0	0					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 5.7: According to marital status, the majority of the diabetic patients were married. The obtained Chi-square value was 2.263, P value was 0.323 with df 2.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Type of Family	Joint family	0	5	7	3.272	0.195	2	5.991	Not Significant
	Female	0	12	21					
	Transgender	0	0	0					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 5.8: According to type of family, the majority of the diabetic patients were nuclear family. The obtained Chi-square value was 3.272, P value was 0.195 with df 2.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Dietary Habit	Vegetarian	0	6	13	0.906	0.636	2	5.991	Not Significant
	Non-vegetarian	0	8	26					
	Eggetarian	0	1	6					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 5.9: According to type of dietary habit, the majority of the diabetic patients were non-vegetarian. The obtained Chi-square value was 0.906, P value was 0.636 with df 2.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Personal Hygiene	By self	0	8	24	0.933	0.627	2	5.991	Not Significant
	Assisted	0	6	14					
	Dependent	0	1	7					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table: According to personal hygiene, the majority of the diabetic patients were by self. The obtained Chi-square value was 0.933, P value was 0.627 with df 2.

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 6: Table Showing Association of Clinical Variables with awareness scores regarding foot care among diabetic patients

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Diagnosis	Type 1 diabetic mellitus	0	6	21	0.202	0.653	1	3.841	Not Significant
	Type 2 diabetic mellitus	0	9	24					

Table 6.1: According to diagnosis, the majority of the diabetic patients having type 2 diabetic mellitus. The obtained Chi-square value was 0.202, P value was 0.653 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Type of Admission	Emergency	0	5	22	1.100	0.294	1	3.841	Not Significant
	OPD	0	10	23					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 6.2: According to type of admission, the majority of the diabetic patients were coming in OPD. The obtained Chi-square value was 1.100, P value was 0.294 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Type of Illness	Acute	0	7	25	0.357	0.550	1	3.841	Not Significant
	Chronic	0	8	20					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 6.3: According to type of illness, the majority of the diabetic patients were acute. The obtained Chi-square value was 0.357, P value was 0.550 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Previous History	Yes	0	4	9	0.295	0.587	1	3.841	Not Significant
	No	0	11	36					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 6.4: According to previous history, the majority of the diabetic patients were no. The obtained Chi-square value was 0.295, P value was 0.587 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
CBC	Normal	0	11	38	0.928	0.335	1	3.841	Not Significant
	Abnormal	0	4	7					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 6.5: According to CBC, the majority of the diabetic patients were normal. The obtained Chi-square value was 0.928, P value was 0.335 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Blood Glucose (Fasting)	Normal	0	5	24	1.802	0.179	1	3.841	Not Significant
	Abnormal	0	10	21					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 6.6: According to Blood Glucose (Fasting), the majority of the diabetic patients were abnormal. The obtained Chi-square value was 1.802, P value was 0.179 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Blood Glucose (Postprandial)	Normal	0	3	22	3.863	0.049	1	3.841	Significant
	Abnormal	0	12	23					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 6.7: According to Blood Glucose (postprandial), the majority of the diabetic patients were abnormal. The obtained Chi-square value was 3.863, P value was 0.049 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Glycated Haemoglobin (HbA1C)	Normal	0	6	24	0.800	0.371	1	3.841	Not Significant
	Abnormal	0	9	21					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 6.8: According to Glycated Haemoglobin (HbA1C), the majority of the diabetic patients were equal. The obtained Chi-square value was 0.800, P value was 0.371 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
C-Reactive Protein	Normal	0	14	39	0.485	0.486	1	3.841	Not Significant
	Abnormal	0	1	6					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 6.9: According to C-reactive Protein, the majority of the diabetic patients were normal. The obtained Chi-square value was 0.485, P value was 0.486 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Wound Swap Culture	Normal	0	11	39	1.440	0.230	1	3.841	Not Significant
	Abnormal	0	4	6					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 6.10: According to wound swap culture, the majority of the diabetic patients were normal. The obtained Chi-square value was 1.440, P value was 0.230 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Blood Culture	Normal	0	12	38	0.160	0.689	1	3.841	Not Significant
	Abnormal	0	3	7					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 6.11: According to blood culture, the majority of the diabetic patients were normal. The obtained Chi-square value was 0.160, P value was 0.689 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
X-Ray of Foot	Normal	0	11	42	4.367	0.037	1	3.841	Significant
	Abnormal	0	4	3					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 6.12: According to X-ray of foot, the majority of the diabetic patients were normal. The obtained Chi-square value was 4.367, P value was 0.037 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
BP	Normal	0	2	6	0.000	1.000	1	3.841	Not Significant
	Abnormal	0	13	39					

Hence it is concluded that mean score was statistically significant at <0.05.

Table 6.13: According to BP, the majority of the diabetic patients were abnormal. The obtained Chi-square value was 0.000, P value was 1.000 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Temperature	Normal	0	13	42	0.655	0.418	1	3.841	Not Significant
	Abnormal	0	2	3					

Hence it is concluded that mean score was statistically significant at <0.05.

Table 6.14: According to temperature, the majority of the diabetic patients were normal. The obtained Chi-square value was 0.655, P value was 0.418 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Respiration	Normal	0	14	44	0.690	0.406	1	3.841	Not Significant
	Abnormal	0	1	1					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 6.15: According to respiration, the majority of the diabetic patients were normal. The obtained Chi-square value was 0.690, P value was 0.406 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Pulse	Normal	0	14	43	0.117	0.732	1	3.841	Not Significant
	Abnormal	0	1	2					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 6.16: According to pulse, the majority of the diabetic patients were normal. The obtained Chi-square value was 0.117, P value was 0.732 with df 1.

Clinical Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Spo2	Normal	0	14	45	3.051	0.081	1	3.841	Not Significant
	Abnormal	0	1	0					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table: According to spo2, the majority of the diabetic patients were normal. The obtained Chi-square value was 3.051, P value was 0.081 with df 1.

Hence it is concluded that mean score was statistically not significant at <0.05.

Section - C

Table 7: Frequency & Percentage distribution of Practice Scores N=60

Criteria Measure of Practice Score		
Category Score	Frequency	Percentage
GOOD (10-14)	9	15.0%
AVERAGE (5-9)	28	46.7%
POOR (0-4)	23	38.3%

Maximum Score=14

Minimum Score=0

The practice scores are grouped into three levels:

- Good (10-14)
- Average (5-9)
- Poor (0-4)

The 15% participant scored in the “good” range means they practice a lot. Most people, 46.7% scored in the “average” range, means they practiced a fair amount. 38.3% scored in the “poor” range, which means they practiced very little.

Table 8: Descriptive statistics of pre-test level of Practice Scores. N=60

Descriptive Statistics	Mean	SD	Median	Maximum	Minimum	Range	Mean %
Practice Score	6.47	3.22	6.00	14	0	14	46.2

Maximum Score=14

Minimum Score=0

The practice score had an average mean of 6.47, meaning that's what most people scored on average. The standard deviation was 3.22, which means the scores varied a lot. The

middle score (or median) was 6.00. The highest score was 14, and the lowest was 0, so the scores ranged from 0 to 14. On average, people got 46.2% of the total possible points.

Table 9: Table Showing Association of Demographic Variables with practice scores regarding foot care among diabetic patients

Demographic Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Age (In Years)	20-35 years	1	3	1	1.468	0.962	6	12.592	Not Significant
	36-50 years	1	6	5					
	51-65 years	4	11	11					
	66-80 years	3	8	6					

Table 9.1: According to age, most diabetic patients were 51-65 years old. The obtained Chi-square value was 1.468, P value was 0.962 with df 6.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Gender	Male	3	11	13	2.098	0.350	2	5.991	Not Significant
	Female	6	17	10					
	Transgender	0	0	0					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 9.2: According to gender, the majority of the diabetic patients were females. The obtained Chi-square value was 2.098, P value was 0.350 with df 2.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Education	Primary	3	6	10	5.988	0.649	8	15.507	Not Significant
	Secondary	4	14	7					
	Graduate or above	2	5	2					
	Illiterate	0	2	3					
	No formal education	0	1	1					

Hence it is concluded that mean score was statistically significant at <0.05.

Table 9.3: According to education, the majority of the diabetic patients had the secondary level of education. The obtained Chi-square value was 5.988, P value was 0.649 with df 8.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Religion	Sikh	4	10	7	5.474	0.485	6	12.592	Not Significant
	Hindu	3	12	5					
	Muslim	2	5	9					
	Christian	0	1	2					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 9.4: According to religion, the majority of the diabetic patients were Sikh. The obtained Chi-square value was 5.474, P value was 0.485 with df 6.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Occupation	Private employee	2	5	6	3.346	0.764	6	12.592	Not Significant
	Government employee	4	16	8					
	Self-employee	2	4	7					
	Unemployed	1	3	2					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 9.5: According to occupation, the majority of the diabetic patients were government employee. The obtained Chi-square value was 3.346, P value was 0.764 with df 6.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Socio-Economic Status (Per Month)	Below 2500	1	4	4	3.742	0.880	8	15.507	Not Significant
	2500-5000	2	4	4					
	5001-10,000	2	8	10					
	10,001-20,000	3	10	4					
	>20,000	1	2	1					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 9.6: According to socio-economic status (per month), the majority of the diabetic patients had their income level between 5001-10,000. The obtained Chi-square value was 3.742, P value was 0.880 with df 8.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Marital Status	Married	6	19	19	6.032	0.197	4	9.488	Not Significant
	Unmarried	1	7	4					
	Widow	2	2	0					
	Separated	0	0	0					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 9.7: According to marital status, the majority of the diabetic patients were married. The obtained Chi-square value was 6.032, P value was 0.197 with df 4.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Type of Family	Joint family	2	9	1	8.060	0.089	4	9.488	Not Significant
	Nuclear family	6	16	15					
	Extended family	1	3	7					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 9.8: According to type of family, the majority of the diabetic patients were nuclear family. The obtained Chi-square value was 8.060, P value was 0.089 with df 4.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Dietary Habit	Vegetarian	4	8	7	2.825	0.588	4	9.488	Not Significant
	Non-vegetarian	5	15	14					
	Eggetarian	0	5	2					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 9.9: According to type of dietary habit, the majority of the diabetic patients were non-vegetarian. The obtained Chi-square value was 2.825, P value was 0.588 with df 4.

Demographic Variables		N= 60			Association with Awareness Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Personal Hygiene	By self	5	16	11	0.692	0.952	4	9.488	Not Significant
	Assisted	3	8	9					
	Dependent	1	4	3					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table: According to personal hygiene, the majority of the diabetic patients were by self. The obtained Chi-square value was 0.692, P value was 0.952 with df 4.

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 10: Table Showing Association of Clinical Variables with practice scores regarding foot care among diabetic patients.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Diagnosis	Type 1 diabetic mellitus	6	12	9	2.079	0.354	2	5.991	Not Significant
	Type 2 diabetic mellitus	3	16	14					

Table 10.1: According to diagnosis, the majority of the diabetic patients having type 2 diabetic mellitus. The obtained Chi-square value was 2.079, P value was 0.354 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	df	Table Value	Result
Type of Admission	Emergency	3	15	9	1.646	0.439	2	5.991	Not Significant
	OPD	6	13	14					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 10.2: According to type of admission, the majority of the diabetic patients were coming in OPD. The obtained Chi-square value was 1.646, P value was 0.439 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Type Of Illness	Acute	5	18	9	3.231	0.199	2	5.991	Not Significant
	Chronic	4	10	14					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 10.3: According to type of illness, the majority of the diabetic patients were acute. The obtained Chi-square value was 3.231, P value was 0.199 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	df	Table Value	Result
Previous History	Yes	1	7	5	0.774	0.679	2	5.991	Not Significant
	No	8	21	18					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 10.4: According to previous history, the majority of the diabetic patients were no. The obtained Chi-square value was 0.774, P value was 0.679 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	df	Table Value	Result
CBC	Normal	7	22	20	0.700	0.705	2	5.991	Not Significant
	Abnormal	2	6	3					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 10.5: According to CBC, the majority of the diabetic patients were normal. The obtained Chi-square value was 0.700, P value was 0.705 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Blood Glucose (Fasting)	Normal	5	15	9	1.276	0.528	2	5.991	Not Significant
	Abnormal	4	13	14					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 10.6: According to Blood Glucose (Fasting), the majority of the diabetic patients were abnormal. The obtained Chi-square value was 1.276, P value was 0.528 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Blood Glucose (Postprandial)	Normal	5	12	8	1.179	0.555	2	5.991	Not Significant
	Abnormal	4	16	15					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 10.7: According to Blood Glucose (postprandial), the majority of the diabetic patients were abnormal. The obtained Chi-square value was 1.179, P value was 0.555 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Glycated Haemoglobin (HbA1C)	Normal	6	11	13	2.677	0.262	2	5.991	Not Significant
	Abnormal	3	17	10					

Hence it is concluded that mean score was statistically significant at <0.05 .

Table 10.8: According to Glycated Haemoglobin (HbA1C), the majority of the diabetic patients were equal. The obtained Chi-square value was 2.677, P value was 0.262 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
C-Reactive Protein	Normal	8	26	19	1.290	0.525	2	5.991	Not Significant
	Abnormal	1	2	4					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 10.9: According to C-reactive Protein, the majority of the diabetic patients were normal. The obtained Chi-square value was 1.290, P value was 0.525 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Wound Swap Culture	Normal	7	23	20	0.446	0.800	2	5.991	Not Significant
	Abnormal	2	5	3					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 10.10: According to wound swap culture, the majority of the diabetic patients were normal. The obtained Chi-square value was 0.446, P value was 0.800 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Blood Culture	Normal	7	21	22	4.113	0.128	2	5.991	Not Significant
	Abnormal	2	7	1					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 10.11: According to blood culture, the majority of the diabetic patients were normal. The obtained Chi-square value was 4.113, P value was 0.128 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
X-Ray of Foot	Normal	7	25	21	1.195	0.550	2	5.991	Not Significant
	Abnormal	2	3	2					

Hence it is concluded that mean score was statistically not significant at <0.05 .

Table 10.12: According to X-ray of foot, the majority of the diabetic patients were normal. The obtained Chi-square value was 1.195, P value was 0.550 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
BP	Normal	0	5	3	1.882	0.390	2	5.991	Not Significant
	Abnormal	9	23	20					

Hence it is concluded that mean score was statistically significant at <0.05 .

Table 10.13: According to BP, the majority of the diabetic patients were abnormal. The obtained Chi-square value was 1.882, P value was 0.390 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Temperature	Normal	9	25	21	1.030	0.598	2	5.991	Not Significant
	Abnormal	0	3	2					

Hence it is concluded that mean score was statistically significant at <0.05 .

Table 10.14: According to temperature, the majority of the diabetic patients were normal. The obtained Chi-square value was 1.030, P value was 0.598 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Respiration	Normal	9	26	23	2.365	0.307	2	5.991	Not Significant
	Abnormal	0	2	0					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 10.15: According to respiration, the majority of the diabetic patients were normal. The obtained Chi-square value was 2.365, P value was 0.307 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Pulse	Normal	9	26	22	0.765	0.682	2	5.991	Not Significant
	Abnormal	0	2	1					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table 6.16: According to pulse, the majority of the diabetic patients were normal. The obtained Chi-square value was 0.765, P value was 0.682 with df 2.

Clinical Variables		N= 60			Association with Practice Score				
Variable	Options	Good	Average	Poor	Chi Test	P Value	DF	Table Value	Result
Spo2	Normal	9	27	23	1.162	0.559	2	5.991	Not Significant
	Abnormal	0	1	0					

Hence it is concluded that mean score was statistically not significant at <0.05.

Table: According to spo2, the majority of the diabetic patients were normal. The obtained Chi-square value was 1.162, P value was 0.559 with df 2.

Hence it is concluded that mean score was statistically not significant at <0.05.

Discussion

This chapter deals with the analysis and interpretation of data collected to assess the awareness and practices regarding foot care among diabetic patients in selected hospitals of district Mohali, Punjab.

This chapter relates the findings of the present study in accordance with the studies done earlier. The findings of the present study have been discussed under the objectives of this study.

Organization of the data

The data collected were entered in master sheet. It was analysed and interpreted by using descriptive and inferential statistics. The data was organized and presented under the following section:

The first objective was to assess the awareness regarding foot care among diabetic patients.

None of the participant scored in the good range. 25% of people scored in the average range, means they had a fair level of awareness. Most people, 75%, scored in the poor range, which means they had low awareness.

The second objective was to assess the practice regarding foot care among diabetic patients.

The 15% participant scored in the good range means they practice a lot. Most people, 46.7% scored in the average range, means they practiced a fair amount. 38.3% scored in the poor range, which means they practiced very little.

The third objective was to find out the association between the level of awareness and practices regarding foot care among diabetic patients with their selected socio-demographic variables.

Mean awareness score was 5.85 (out of 20), indicating poor awareness overall. 75% of participants had poor awareness, and none achieved a good score. Significant association was

observed between gender and awareness: females showed better awareness than males. Postprandial glucose level and foot X-ray results also showed a significant association with awareness — those with abnormal results surprisingly had higher awareness, possibly due to prior exposure to complications. Mean practice score was 6.47 (out of 14), falling in the average category. 46.7% showed average practice, while only 15% practiced good foot care. No demographic or clinical variable showed statistically significant associations with practice scores. However, trends showed higher practice scores among females, graduates, those with better income, and participants from joint families.

Summary

A descriptive study was conducted to assess the awareness and practices regarding foot care among diabetic patients in selected hospitals of District Mohali, Punjab.

The main objectives of the study were to assess the awareness regarding foot care among diabetic patients, to assess the practices regarding foot care among diabetic patients, to find out the association between the level of awareness and practices regarding foot care among diabetic patients with their selected socio-demographic variables, to disseminate the findings.

For the present study we followed purposive Sampling Technique and the sample size was of 60 diabetic foot patients from civil hospital phase-6, Mohali. Self-structured knowledge questionnaire was used to assess the awareness and practices regarding foot care among diabetic patients. A substantial majority (75%) of diabetic patients had poor awareness regarding foot care, with only 25% displaying average awareness. Notably, no participant scored in the 'good' category. The practice scores were comparatively better, with 46.7% scoring average, 38.3% showing poor practices, and 15.0% exhibiting good practices.

The data was analysed by using statistical and inferential test i.e., percentage, frequency, Mean, Median, Standard Deviation, Maximum Score, Minimum Score and Range. The data has been presented in the form of figures and

tables which helps to depict the findings.

Conclusion

The study reveals alarming levels of poor awareness regarding diabetic foot care, although practices are somewhat better. This mismatch calls for structured education programs, increased follow-up by healthcare providers, and community-based initiatives. Promoting awareness is essential to reduce the risk of complications, amputations, and improve the quality of life in diabetic patients.

Implications

The findings of the study can be implicated in different areas such as healthcare facilities (hospitals), primary health centres and community clinics, community health settings, non-governmental organizations and nursing homes or elder care centres.

Nursing education

Nursing education plays a vital role in enhancing patients' knowledge and promoting effective self-care practices. Nurses serve as frontline educators, guiding diabetic patients on the importance of proper foot care to prevent complications such as ulcers, infections, and amputations. Through health education sessions, counselling, and practical demonstrations, nurses help patients understand the significance of daily foot inspection, proper hygiene, suitable footwear, and timely reporting of any abnormalities. By assessing the existing awareness and practices among diabetic individuals, the study highlights the need for targeted nursing interventions to address knowledge gaps and encourage healthier behaviours. Ultimately, nursing education not only empowers patients to take charge of their foot health but also contributes to reducing the burden of diabetic complications on the healthcare system.

Nursing research

Nursing research plays a vital role in improving patient care by generating evidence-based practices. nursing research is used to explore and understand the level of knowledge and self-care behaviours of diabetic patients related to foot care. Since diabetic foot complications are a leading cause of hospitalization and amputation, this research highlights the importance of early education and preventive measures. Through systematic data collection and analysis, the study aims to identify gaps in awareness and current practices, providing valuable insights for nurses to develop targeted interventions, educational programs, and policies that promote better foot care and reduce complications in diabetic patients. This type of research strengthens nursing practice by ensuring that care is tailored to patient needs and grounded in empirical evidence.

Nursing service

Nursing service plays a crucial role in promoting health and preventing complications among diabetic patients. Nursing service involves providing direct care, education, and support to individuals with diabetes to improve their awareness and practices regarding foot care. Nurses are responsible for assessing patients' knowledge, identifying those at risk for foot problems, and delivering personalized health education focused on daily foot inspection, hygiene, proper footwear, and early recognition of warning signs.

Through regular follow-up, counselling, and community outreach, nursing services contribute to reducing the incidence of diabetic foot ulcers and amputations. This study emphasizes how effective nursing services can empower patients to take charge of their foot health, ultimately enhancing their quality of life and preventing serious complications.

Recommendations

Based on the results of study, the following recommendations are made:

1. The study can be conducted on large sample to generalize the findings
2. The study can be done in different settings.
3. Apply a mixed method combine surveys (quantitative) with interviews (qualitative) for deeper study.
4. An experimental study can be done to determine the awareness and practices regarding diabetic foot care.

Acknowledgement

First and foremost, we would like to thank lord almighty for their blessings that they showed on us for accomplishing this task.

The research project has never been successful without the coordinated efforts of all the members involved. The satisfaction and pleasure that accompanies the successful completion of any task would be incomplete without the mention of the people who made it possible.

We express our sincere heartiest gratitude to Prof. (Dr.) Deepika R Kumar, Director Principal, Rayat Bahra College of Nursing, Mohali for giving me opportunity to undertake GNM Nursing course and for granting me permission to conduct study at civil hospital, Kharar and civil hospital, phase-6, Mohali.

We would like to thank our guide Mrs. Jasvinder Kaur (Associate Professor), Ms. Navjot Kaur (Associate Professor), Ms. Sunanda Sharma (Nursing Tutor), Rayat Bahra College of Nursing Mohali, for her guidance, critical suggestions and support from the beginning till end for completion of this work.

We would like to thank our teachers who have contributed their valuable suggestions; and grateful acknowledgement is extended to all experts in validating the tool.

Last but not the least we thank our friends for helping me out through all the jumbled puzzle of research without their help we would have never ever completed our thesis.

We thank all who directly and indirectly helped me in my whole completion of this thesis.

References

1. Indian Council of Medical Research. Evidence based guidelines for management of type 2 diabetes. 2018 https://www.icmr.gov.in/icmrobject/custom_data/pdf/resource-guidelines/ICMR_GuidelinesType2diabetes2018_0.pdf
2. Cleveland Clinic. Diabetes: Types, symptoms, causes, treatment, prevention <https://my.clevelandclinic.org/health/disease/7104-diabetes>
3. MSD Manuals. Diabetes mellitus (DM) <https://www.msmanuals.com/en-in/home/hormonal-and-metabolic-disorders/diabetes-mellitus-dm-and-disorder-of-blood-sugar-metabolism/diabetes-mellitus-dm>

4. Hinkle JL, Cheever KH. Brunner & Suddarth's textbook of medical-surgical nursing. 13th ed. Philadelphia: Wolters Kluwer; 2014. p. 1419.
5. MSD Manuals. Diabetes mellitus (DM) [Internet]. Available from: <https://www.msdmanuals.com/en-in/home/hormonal-and-metabolic-disorders/diabetes-mellitus-dm-and-disorder-of-blood-sugar-metabolism/diabetes-mellitus-dm>
6. Diabetes UK. Diabetes complications [Internet]. Available from: <https://www.diabetes.org.uk/guide-to-diabetes/complication>
7. MSD Manuals. Diabetes mellitus (DM) [Internet]. Available from: <https://www.msdmanuals.com/en-in/home/hormonal-and-metabolic-disorders/diabetes-mellitus-dm-and-disorder-of-blood-sugar-metabolism/diabetes-mellitus-dm>
8. Wikipedia. Diabetic foot [Internet]. Available from: https://en.m.wikipedia.org/wiki/diabetic_foot
9. MedlinePlus. Diabetic foot [Internet]. Available from: <https://medlineplus.gov/diabeticfoot.html>
10. Narres M, Claessen H, Droste S, Schuster B, Morbach S, Kvitkina T, *et al.* Etiology, epidemiology and disparities in the burden of diabetic foot ulcers. *Diabetes Care*. 2023;46(1):209-221.
11. Basnet S, Chhetri A, Kafle N, Rawal LB, Yadav UN. Prevalence and associated factors of diabetic foot ulcers among diabetes patients attending a tertiary care hospital in Nepal. *Front Public Health*. 2022;10:967733.
12. Rajalakshmi R, Viswanathan V. Diabetic foot ulcers in India: A meta-analysis and systematic review. *J Community Health*. 2024;14:1-12.
13. Basnet S, Chhetri A, Kafle N, Rawal LB, Yadav UN. Prevalence and associated factors of diabetic foot ulcers among diabetes patients attending a tertiary care hospital in Nepal. *Front Public Health*. 2022;10:967733.
14. Kaur S, Kaur H. A descriptive study to assess the knowledge regarding diabetes mellitus among the residents of selected rural community, Gurdaspur, Punjab. *Int J Nurs Educ Res*. 2017;5(1):19-26. doi:10.5958/2454-2660.2017.00005.9
15. International Working Group on the Diabetic Foot. A new declaration: For feet's sake. *DiabeticFootOnline* [Internet]. 2023 Nov 26. Available from: <https://diabeticfootonline.com/2023/11/26/a-new-declaration-for-feets-sake-halving-the-global-diabetic-foot-disease-burden-from-2-to-1-with-next-generation-care>
16. Thomas J, George R, Sebastian J, Joseph B. Prevalence and risk factors associated with diabetic foot ulcer in India: A systematic review and meta-analysis [Internet]. ResearchGate; 2024. <https://www.researchgate.net/publication/383936211>
17. Gupta A, Sharma R. Prevalence of diabetic foot ulcer in type 2 diabetics: A cross-sectional study. *Int J Sci Res*. 2024;14(4):1-5. <https://www.ijsr.net/archive/v14i4/SR25415180557.pdf>
18. Sharma V, Kumar R. A study to assess the knowledge and practice on foot care among the diabetic patients. ResearchGate; 2024. <https://www.researchgate.net/publication/377471047>
19. Abbas ZG, Lutale JK, Archibald LK. Diabetic foot ulcers and associated factors. *Int J Nurs Educ Res*.

2019;5(1):24-30.

<https://ijneronline.com/HTMLPaper.aspx?Journal=International%20Journal%20of%20Nursing%20Education%20and%20Research;PID=2017-5-1-5>

How to Cite This Article

Sheikh AM, Kaur A, Kumari B, Muskaan, Kaur N, Kaur N, *et al.* A descriptive study to assess the awareness and practices regarding foot care among diabetic patients in selected hospitals of district Mohali, Punjab. *International Journal of Advance Research in Medical Surgical Nursing*. 2025;7(1):311-326.

Creative Commons (CC) License

This is an open-access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 International (CC BY-NC-SA 4.0) License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.