Knowledge on foot care among diabetes mellitus clients

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Abstract

Background: Diabetes is an epidemic of non-communicable illness. It is chronic, costly disease with high morbidity and premature mortality. The growth of the disease worldwide is especially alarming the world health organization (WHO) 2015 expect the number of new diabetes to double in the next 25 years from 135 million to nearly, 300 million. Much of this growth will occur in developing countries where aging, unhealthy diet, obesity and sedentary life style will contribute to the onset of the disease.

Objectives: 1. To assess the level of knowledge regarding foot care among diabetes mellitus clients. 2. To find out the association between level of knowledge regarding foot care among diabetes mellitus clients with their selected socio demographic variables.

Materials and Methods: The quantitative research design was used to assess the level of knowledge on foot care. The study was conducted in Saraswathi Nagar at Nellore. The 30 samples were selected by using non probability convenience sampling technique. Data was analyzed by using descriptive and inferential statistics.

Result: The results revealed that with regards to level of knowledge on foot care among diabetes mellitus clients, 2(7%) had A+, 2(7%) had A, 1(3%) had B+, 8(27%) had B, 4(13%) had C, 13(43%) had D.

Keywords: knowledge, foot care, diabetes mellitus clients

Introduction

Diabetes mellitus is a chronic multisystem disease related to abnormal insulin production, or both. Diabetes mellitus is a serious health problem throughout the world and its prevalence is increasing rapidly. Diabetes Mellitus is one of the oldest diseases known to mankind. Type – I and Type -II diabetes was first described by ancient Indian physician Sushrta and Charaka. Type-I diabetes mellitus they stops produces too little insulin to regulate blood glucose level. Type II diabetes is partially or completely unable to use the insulin. The commonest form of diabetes caused by a deficiency of the pancreatic hormone insulin, which results in a failure to metabolize sugars and starch sugars accumulate in blood and urine, and by products of alternative fat metabolism disturb the acid-base balance of the blood, causing a risk of convulsions and coma.

The complications of diabetes mellitus are far less common and less severe in people who have well-controlled blood sugar levels. Wider health problems accelerate the deleterious effects of diabetes. These include smoking, elevated cholesterol level, obesity, high blood pressure and lack of regular exercise.

Diabetic Foot ulcer is a major complication of diabetes mellitus, and probably the major component of the diabetic foot. Foot complications are the most common cause of hospitalization in the person with diabetes. The development of diabetic foot complication is multifactorial process. They result from a complication of macro vascular and micro vascular diseases that place the patients at the risk of injury and serious infection that may lead to amputations.

Objectives

1. To assess the level of knowledge regarding foot care among diabetes mellitus clients.
2. To find out the association between level of knowledge regarding foot care among diabetes mellitus clients with their selected socio demographic variables.
Materials and Methods

Research Approach: The quantitative research approach was adopted to assess the level of knowledge on foot care among diabetes mellitus clients.

Research Design: A descriptive research design was used to assess the knowledge regarding foot care among diabetes mellitus clients.

Settings of the Study: The study was conducted in Saraswathi Nagar, Nellore.

Target Population: The target population for the present study includes all the diabetes mellitus clients.

Sampling Technique: Non probability convenience sampling technique was used for the present study.

Variables of the Study: Variable of the study are the research variables and demographic variables.

Research variables: Knowledge regarding foot care among diabetic mellitus clients.

Demographic variables: Age, sex, education, income, occupation, religion, family income, marital status, family type, habit of smoking, habit of consumption, dietary pattern, duration of diabetes mellitus, frequency of monitoring blood glucose level, co-morbid diseases, medication, and source of information.

Result and Conclusion

Table 1: Frequency and percentage distribution of Knowledge on foot care among diabetes mellitus clients (n=30)

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>A</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>B+</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>D</td>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Table no-1: Shows that with regards to level of knowledge on foot care among diabetes mellitus clients, 2(7%) had A+, 2(7%) had A, 1(3%) had B+, 8(27%) had B, 4(13%) had C, 13(43%) had D.

Table 2: Mean and standard deviation of level of knowledge regarding foot care among diabetes mellitus clients.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Knowledge</td>
<td>14.36</td>
<td>3.75</td>
</tr>
</tbody>
</table>

Table no-2: Shows that the mean value of level of knowledge regarding foot care among with diabetes mellitus clients was 14.36 with the standard deviation of 3.75.

Association between the levels of knowledge on foot care among diabetic mellitus clients with their selected socio demographic variables: There was significant association between the Socio demographic variables such as age, sex, education, occupation, family income, religion, family type, habits, dietary pattern, duration of DM, frequency of monitoring blood glucose level, co-morbid diseases, and medication. There was no significant association between the socio demographic variables such as habit of smoking, habit of alcohol consumption, and source of information at the level of P<0.05.

Implication of the Study

Nursing Service: The best method of improving knowledge regarding foot care among patient with diabetes mellitus and is to be proper health education regarding foot care.

Nursing Education: In the present nursing curriculum emphasis this placed on theory and level of knowledge regarding foot care among patients with diabetes mellitus. The emphasis should focused on the knowledge they should know the management and to improve knowledge.

Nursing Practice: Nurse has been responsibility to educate the importance of foot care

Nursing Administration: The nurse as administration should include foot care among patient with diabetes mellitus and in their curriculum to help them.

Nursing Research: The essential of research is to build up body of knowledge in nursing as an evolving profession. The result of the study can provided a shared knowledge base, and better foot care among diabetic patients

Conclusion

The study conducted that level of knowledge regarding foot care among patients with diabetes mellitus 7% had (A+) knowledge, 7% had (A) knowledge, 3% had (B+) knowledge, 27% had (B) knowledge, 13% had (C) knowledge, 43% had (D) knowledge.

References

8. Dr. Indira S. Diabetic Mellitus at Nellore, Journal of Advance Nursing UK.