

# **Health Needs and Problems for Diabetic Neuropathy**

*Thesis*

*Submitted in Partial Fulfillment of the Requirement  
of the Master Degree*

*In  
Nursing Science  
Community Health Nursing*

*By*

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*Community Health Nursing  
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**2015**

**بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ**

قَالُوا سُبْحٰنَكَ لَا عِلْمَ لَنَا بِاِلٰهٍ مَّا

عَلَّمْتَنَا اِنَّكَ اَنْتَ الْعَلِیْمُ الْحَكِیْمُ

**صَدَقَ اللّٰهُ الْعَظِیْمُ**

سورة البقرة آية (32)



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## *List of Contents*

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<i>Subject</i>	<i>Page No.</i>
List of Tables .....	i
List of Figures.....	iv
List of Abbreviations .....	v
Abstract .....	vi
Introduction.....	1
Part I:            diabetes mellitus.....	4
Part II:           Diabetic neuropathy .....	18
Part III: Health need and problems for Diabetic Neuropathy.....	44
Part IV:Community Health Nursing Role through Nursing Process .....	59
Subjects and Methods.....	73
Results .....	81
Discussion.....	102
ConclusionandRecommendations.....	114
Summary.....	117
References .....	
Appendices.....	
Protocol.....	—
Arabic Summary .....	—

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## *List of Tables*

<i>Table No.</i>	<i>Title</i>	<i>Page No.</i>
<b>Table (1):</b>	Distribution of clients with diabetic neuropathy according to their Socio Demographic Characteristics .....	82
<b>Table (2):</b>	Distribution of clients with diabetic neuropathy according to their Past and Present Medical History.....	84
<b>Table (3):</b>	Distribution of clients with diabetic neuropathy according to their present signs and symptoms of peripheral diabetic neuropathy.....	86
<b>Table (4):</b>	Distribution of Clients with Diabetic Neuropathy According To Their Present Signs and Symptoms of Autonomic Diabetic Neuropathy .....	87
<b>Table (5):</b>	Distribution of clients with diabetic neuropathy according to their Correct and Incorrect knowledge about diabetes mellitus .....	88
<b>Table (6):</b>	Distribution of clients with diabetic neuropathy according to their Correct and Incorrect knowledge about diabetic neuropathy .....	89
<b>Table (7):</b>	Distribution of clients with diabetic neuropathy according to their Correct and Incorrect knowledge about types of diabetic neuropathy.....	90
<b>Table (8):</b>	): Distribution of clients with diabetic neuropathy according to their physical assessment.....	94

*List of Tables (Cont...)*

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<i>Table No.</i>	<i>Title</i>	<i>Page No.</i>
<b>Table (9):</b>	Distribution of Clients with Diabetic Neuropathy according to their Abnormal Foot Physical Assessment .....	95
<b>Table (10):</b>	Distribution of Clients with Diabetic Neuropathy According To Their Neurological Assessment.....	96
<b>Table (11):</b>	Relation between socio-demographic characteristics of the studied sample and there life style related to diabetic neropathy .....	98
<b>Table (12):</b>	Relation between clients with diabetic neropathyknowldge related to diabetic neuropathy and their life style .....	99
<b>Table (13):</b>	Relation between clients with diabetic neropathyknowldge related to diabetic neuropathy and their foot care practice ....	100
<b>Table (14):</b>	Relation between clients with diabetic neuropathy related to diabetic neuropathy life style and their Foot care practice .....	101

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## *List of Figures*

<i>Figure No.</i>	<i>Title</i>	<i>Page No.</i>
<u><i>Review of Literature</i></u>		
<b>Figure (1):</b>	long term complications of diabetes.....	14
<b>Figure (2):</b>	Normal and damaged nerves of diabetic neuropathy .....	19
<b>Figure (3):</b>	Nerve components of diabetic neuropathy.....	22
<b>Figure (4):</b>	Neuropathy ulceration .....	25
<b>Figure (5):</b>	Peripheral neuropathy.....	26
<b>Figure (6):</b>	Autonomic neuropathy .....	28
<b>Figure (7):</b>	Clinical and subclinical features of diabetic autonomic neuropathy.....	29
<b>Figure (8):</b>	proximal neuropathy.....	31
<b>Figure (9):</b>	Focal neuropathy.....	37
<b>Figure (10):</b>	Etiologies of diffuse diabetic neuropath.....	38
<b>Figure (11):</b>	Diabetes Food Pyramid.....	53
<b>Figure (12):</b>	Steps of nursing process as Applied by Community Nurse.....	61

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## Results

- Figure (13):** Distribution of client with diabetic neuropathy according to their Total score level of knowledge related to diabetic neuropathy .....91
- Figure (14):** Distribution of clients with Diabetic Neuropathy related to their Positive and Negative Life Style Score level .....92
- Figure (15):** Distribution of Clients with Diabetic Neuropathy according to their Foot Care Assessment Score Level.....93
- Figure (16):** Distribution of clients with diabetic neuropathy according to total scores level neurological examination scales.....97
-

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## *List of Abbreviations*

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<b>DN</b>	: Diabetic Neuropathy
<b>HHS</b>	: Hyperosmolar hyperglycemic syndrome
<b>T1DM</b>	: Type 1 diabetes mellitus
<b>T2DM</b>	: Type 2 diabetes mellitus
<b>IDF</b>	: International Diabetes Federation
<b>PVD</b>	: Peripheral vascular disease
<b>WHO</b>	: World Health Organization
<b>ED</b>	: Erectile Dysfunction
<b>DPN</b>	: Diabetic Poly neuropathy
<b>BMI</b>	: Body Mass Index
<b>CTS</b>	: Carpal tunnel syndrome
<b>CAN</b>	: Cardiovascular Autonomic Neuropathy

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## Abstract

Diabetic Neuropathy (DN) is a common neurological complication in patients with diabetes mellitus (DM) which affects their quality of life. **Research Design:** a descriptive analytic study. **The aim** of the study is to assess Health Needs and Problems for Diabetic Neuropathy **Setting** This study was conducted at diabetic clinic outpatient Ain Shams University hospital. **Sampling** A purposive sample includes (162) client suffering from diabetic neuropathy were chosen randomly **Tools** three tools were used for data collection, **first:** An interview Questionnaire including three parts; socio demographic, Medical history, and knowledge related to diabetes and diabetic neuropathy. **Second** Healthy practices assessment sheet for client's' with diabetic neuropathy. **Third** A neurological examination scale s. **Results** Describes that 93.2% respectively had unsatisfactory knowledge related diabetes mellitus and health need and problems for diabetic neuropathy. Reveals that 82.7% of the studied sample had duration of diabetes of more than 10 years period Illustrates that 87.7%, 75.9%, 50.6 %, 73.5%, respectively reported negative life style regarding practicing exercise, rest and sleep pattern, medication compliance and follow up. With a total score level of (67.9%) representing negative life style. Positive Nutritional habits had (54.9). Shows that the study sample had normal blood pressure were (58.6%) while 66.7% had abnormal random blood sugar .as for BMI (87.6 %) were abnormal weight and 52% had normal foot appearances **Conclusion** There was highly statistically significant between client with diabetic neuropathy knowledge and their life style. Diabetic DN is a considerable complication of DM. The related risk factors were old age, prolonged and poorly controlled DM and associated medical disorders. **Recommendations:** Screening programs for early detection, diagnosis ,treatment and prevention of diabetic complication

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**Key words:** Diabetes mellitus, Diabetic Neuropathy, Health needs and problems

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# Introduction

Diabetes is a group of metabolic diseases characterized by hyperglycemia resulting from defects in insulin secretion, insulin action, or both. The chronic hyperglycemia of diabetes is associated with long-term damage, dysfunction, and failure of different organs, especially the eyes, kidneys, nerves, heart, and blood vessels. (*American Diabetes Association, 2014*).

Diabetic neuropathy is a heterogeneous group of disorders with extremely complex path physiology and affects both somatic and autonomic components of the nervous system. Neuropathy is the most common chronic complication of diabetes mellitus. Metabolic disruptions in the peripheral nervous system, including altered protein kinase C activity, and increased polyol pathway activity in neurons and Schwann cells resulting from hyperglycemia plays a key role in the development of diabetic neuropathy. (*Singh ,etal,2014*)

Diabetic neuropathy is a common complication of diabetes. It usually progresses gradually and involves small and large sensory fibers. The symptoms, such as loss of ability to sense pain, loss of temperature sensation, and developing neuropathic pain, follow a “glove and stocking” distribution, beginning in the lower limbs, first affecting the toes, and then

Progressing upward. The primary cause of diabetic neuropathy is thought to be hyperglycemia. (*Wan, etal,2014*)

Community health nurses' roles include meeting the chronic needs of patients with diabetic neuropathy, as well as engaging in healthcare which helps reduce the risks associated with their condition. This means they will engage with diabetic neuropathy patients to manage emergencies, help them control and manage symptoms, prevent longer-term effects, reduce the risk factors in their lives such as obesity and smoking, and educate them in a way that will encourage independence and self-management (*Judith,etal ,2014*).

**Justification of the problem:**

Egypt is in the world's top 10 in terms of the highest number of people with diabetes (7.5million) in 2013 and this number is expected to increase to 13.1million by 2035. It is estimated for Egypt to spend between 486 and 892 million dollars on diabetes care ((*International Diabetes Federation report, 2013*).Prevalence of diabetic peripheral neuropathy in the United Arab Emirates( UAE) is about 35%, Saudi Arabia (38%), Bahrain (37%), Egypt (20%), and United Kingdom (29%).(*AlKaabi,etal,2014*)

## **Aim of the study**

The aim of the study is to assess health needs and problems for diabetic neuropathy through the following:

1. Identify knowledge of the diabetic neuropathy patients related to diabetes.
2. Recognize practices of diabetic neuropathy.
3. Assessing client health status related to nervous system status of diabetic of diabetic neuropathy.
4. Assessing client health need and health problem according to Diabetic neuropathy.

### **Research questions:**

1. What is the knowledge of diabetic patients about diabetic neuropathy?
2. What are the factors that affect diabetic patients with neuropathy nervous system?
3. How does the diabetic patients' practice affect diabetic neuropathy?
4. is there relation between health need and health problem for Diabetic neuropathy knowledge and practices