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Quality of Life for Older Adults with Neuropathy

A Thesis

Submitted for partial fulfillment of the Requirement for
the Master Degree in Community Health Nursing

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List of Abbreviations

<i>Abbr.</i>	<i>Full-term</i>
C.H.T	Cognitive health therapy
C.H.N	Community health nurse
CNS	Central nervous system
DNA	Deoxyribonucleic acid
DM	Diabetes mellitus
EMG	Electrodiagnostic tests
E U	European Union
FDA	Food and Drug Administration
HRQOL	Health-related QOL
HIV	Human immunodeficiency virus
NCVs	Nerve conduction velocities
DORs	Opioid receptors
PN	Peripheral neuropathy
QOL	Quality of life
SNRI	Serotonin–norepinephrine reuptake inhibitor
SPECT	Single-photon emission computed tomography
T1DM	Type 1 diabetes mellitus
T2DM	Type 2 diabetes mellitus
WHO	World Health Organization.

Quality of Life for Older Adults with Neuropathy

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Abstract

Background: Neuropathy is a chronic condition among older adults where neuropathic pain has an effect on function and quality of life. Neuropathic pain underlies an estimated 30-65% of the activity seen at hospital pain clinics. In severe cases of chronic pain, the health-related quality of life is ranked as worse than other pain conditions, heart failure, or even cancer. **Aim of study:** The study is aimed to assess quality of life for older adults with neuropathy. **Study design:** Descriptive exploratory design was utilized to assess the quality of life for older adults with neuropathy. **Setting:** The study was conducted at Internal Medicine in El Demerdash hospital affiliated to Ain Shams University Hospitals. **Sample:** A purposive sample was used to the conducted study and was estimated 218 older adults with neuropathy. **Tools:** Three tools were used: interviewing questionnaire, medical records and neurological examination scale. **Result:** There was 38% of older adult had satisfactory knowledge about the neuropathy diseases, 77.5 % of them had poor level of practices, 34.9 % of older adults suffer from poor quality of life and 69.3% of them had not achieved their health needs. 77.1 % of older adults their quality of life was highly affected negatively according to physical health aspects, 40.4% of them affected psychologically, 53.2% of them had highly negative effect by spiritual aspects, and socioeconomically effect on 40.8% of them, also, the older adults suffered from complication of neuropathy as skin ulcer for 61.9%, falling to the ground for 36.7%, addiction to painkillers for 32.1%, insomnia for 23.4%. **Conclusion:** There were no significant differences between total knowledge and sociodemographic characteristics. There was insignificant relation between total older adults 'knowledge about neuropathy and Quality-of- life. The majority of older adults were poor level of practices. Finally, most of older adult's unachieved health needs. **Recommendations:** further studies to provide nursing intervention about raising patients' awareness toward prevention of neuropathy and improving QOL.

Keywords; quality of life, neuropathy, physical activity, psychological factors.

Introduction

Neuropathy is a term that refers to problems with nerve cells and fibers that can occur as a result of different diseases. Cranial nerves, spinal nerve roots& ganglia, nerve trunks& division, and nerves of the autonomic nervous system are among these nerves. Neuropathy is a term that refers to a general disease or abnormal nerve function, and it is more common in older adults because abnormal nerve function is one of the characteristics of this age group. Nerves can be damaged in any part of the body as a result of injury or disease, and neuropathy is often classified based on the types and locations of affected nerves. Neuropathy can also be classified according to the disease that causes it (*Bacquet et al., 2018*).

The International Association for the Study of Pain defines neuropathic pain as pain caused by a lesion or disease of the somatosensory nervous system. Older adults are at an increased risk of neuropathic pain because many diseases that cause neuropathy increase in incidence with age. These include diabetes (diabetic neuropathy), herpes zoster (postherpetic neuralgia), spinal degenerative disease, radiculopathies, many cancers and associated chemotherapy use, stroke (central neuropathic pain), and limb amputations (phantom limb pain) (*Pedowitz et al, 2021*).

Neuropathy is classified to peripheral neuropathy, cranial neuropathy (optic neuropathy and auditory neuropathy), autonomic neuropathy and focal neuropathy. Peripheral neuropathy has been classified depending on the type of nerves—motor, sensory, or autonomic—that is damaged. Neuropathy is caused by different causes such as, injuries, infections as (HIV-AIDS) and even vitamin deficiency as (vitamin B12), diabetes, auto immune as (rheumatoid arthritis, systemic lupus, amyloidosis, uremia, alcoholism and idiopathic (*Abdu, 2017*).

Neuropathy along with its fatal complications which is the leading cause of mortality and morbidity. The Chronic complication of neuropathy include foot ulcers, heart rhythm changes, blood circulation problems, strokes, peripheral neuropathy, Alzheimer's disease, Parkinson's disease and these complications vary depending on the underlying cause of the condition. All causes and complications of neuropathy are more common health problems for older adult with bad quality of life so this target of population is high risk for neuropathy (*Hinkle and Cheever, 2016*)

Health-related quality of life is substantially impaired among older adults with neuropathy. They are suffering from (lack of concentration, drowsiness, dryness of eyes and mouth, constipation, sexual disturbance, general weakness and numbness) the described pain related interference in multiple

health related quality of life and functional domains, as well as reduced ability to work, reduced mobility, social problems, lack of confidence, vision disturbance, inability to work, and feel with depression. The Interventions are considered successful by the older adults if Quality of life improved. Simple pain scores, although providing important information which includes the effect on quality of life (*Abdu, 2017*).

Significance of the study:

Neuropathy is a fast-growing health problem in Egypt with a significant serious impact on morbidity, mortality and health care resources. The prevalence of neuropathy in older adults in Egypt is around 56% of all adults aged over 60 years and the number of older adults as the last statistic is about (1,937,119 males/ and (2,013,459 females (*Hegazi, et al., 2016*).

The number of elderly people (60 years and over) in Egypt reached 6.8 million, representing 6.7% of the total population. This percentage is expected to rise to 17.9% in 2052, it added. Marking the International Day of Older Persons, CAPMAS pointed out that the number of elderly men hit 3.6 million, or 6.9% of the total male population, while the number of elderly women stood at 3.2 million, or 6.4% of the total female population (*Central Agency for Public Mobilization and Statistics, 2021*).

In Egypt, all the older adults more than 65 of age, had neuropathies' percentage is 81.4%. Neuropathies exist with