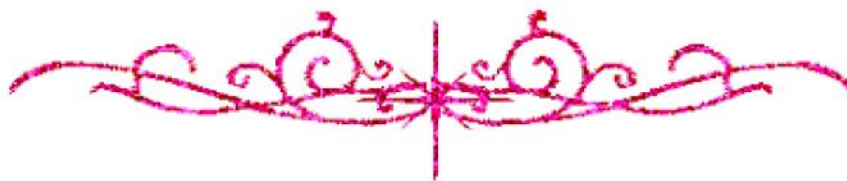


بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ





شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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Early Dementia Questionnaire (EDQ): A New Screening Instrument for Early Dementia in Primary Care in Egypt

Thesis

*Submitted for Partial Fulfillment of Master
Degree in Family Medicine*

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالَ مَوْلانا

سَبَّحَانَكَ يَا مُعَلِّمَ لَنَا
إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
الْعَلِيمُ الْعَظِيمُ

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Early Dementia Questionnaire (EDQ): A New Screening Instrument for Early Dementia in Primary Care in Egypt

ABSTRACT

Background: Early Dementia Questionnaire was developed to detect patients with early dementia in primary care, EDQ had been shown to be a promising alternative for screening of early dementia.

Objectives: To validate Early Dementia Questionnaire (EDQ) and comparing it with standard assessment tool, The Mini Mental State Examination (MMSE).

Design: A cross-sectional study.

Setting and Participants: The study included 220 elder adults (both men and women) recruited from a primary healthcare center (Bassateen Gharb), the outpatient geriatric clinic at Ain Shams University hospitals and Mabarot Talaat Harb elderly club in Cairo Governorate, Egypt.

Methods: A cross-sectional study was conducted on a group of elderly patients using systematic random sampling. Elderly depression was excluded using the Geriatric Depression Scale (GDS). Diagnosed cases of dementia and other mental and psychiatric disorders were excluded from the study. A face-to-face interview was done using Early Dementia Questionnaire (EDQ) with the participants to elicit symptoms of early dementia. The participants were then assessed with the Mini Mental State Examination (MMSE) using variable cut-off points according to age and educational level.

Results: Prevalence of dementia among the study participants was 81.5% by EDQ and 19.5% by MMSE. The EDQ demonstrated a sensitivity of 97.7% with specificity of 22.6%. Positive predictive value of EDQ was 23.5% with the negative predictive value of 97.6%. A significant association was found between possible dementia, hypertension, nutrition and urinary incontinence.

Conclusion: The EDQ is a sensitive tool for screening of early dementia.

Keywords: Dementia, Early dementia questionnaire, Mini mental state examination.

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List of Abbreviations

Abb.	Full term
AACD.....	Age-associated cognitive decline
AAMI	Age associated memory impairment
AD.....	Alzheimer disease
ADL	Activities of Daily Living
ALCOVE.....	Alzheimer Cooperative Valuation in Europe
AMI.....	Age-related memory impairment
AUC	Area under the curve
CAPMAS	Central Agency for Public Mobilization and Statistics
CFs.....	Cognitive fluctuations
DM	Diabetes mellitus
DS	Dementia Scale
DSM-IV.....	Diagnostic and Statistical Manual of Mental Disorders
EDQ.....	Early Dementia Questionnaire
EU.....	European Union
GDS	Geriatric Depression Scale
GPs	General Practitioners
HTN.....	Hypertension
IADL.....	Instrumental Activity of Daily Living
MCI.....	Mild Cognitive Impairment
MMSE.....	Mini Mental State Examination
MNA	Mini Nutritional Assessment
MoCA.....	Montreal Cognitive Assessment
NPV	Negative predictive value
PPV.....	Positive predictive value

List of Abbreviations Cont...

Abb.	Full term
QOL	Quality of life
VD.....	Vascular dementia
WHO	World Health Organization

INTRODUCTION

The world's older population continues to grow at an unprecedented rate. Today, 8.5 percent of people worldwide (617 million) are aged 65 and over. According to a new report, this percentage is projected to jump to nearly 17 percent of the world's population by 2050 (1.6 billion) (*He et al., 2016*). In Egypt, citizens above the age of 60 accounted for 6.9 percent of Egypt's population in 2015. The percentage represents six million citizens, three million men and three million women, according to the Central Agency for Public Mobilization and Statistics (CAPMAS). Based on the 2015 population survey, the percentage is subjected to increase to 11.5 percent by 2030 (*CAPMAS, 2016*).

There are certain health conditions that are expected to be a challenge to the health care system with the increasing aging population and one of the most serious challenges facing the world today is how to plan for a rapidly aging population (*Clegg and Young, 2011*).

Worldwide definition of elderly follows the criteria set at World Assembly on Aging in Vienna in 1982 which defined elderly population as those over 60 years of age (*Arabi et al., 2013*).

Healthcare systems struggle to cope adequately with the common presentations of ill health in older people who have

dementia, as Dementia is a very dangerous disease as it can turn normal able person to totally dependent one (*Brodaty et al., 2006*).

Dementia is an acquired syndrome of decline in memory and at least one other cognitive domain, such as language, visuospatial, or executive function, that is sufficient to interfere with social or occupational function in an alert person. Also Dementia is a syndrome defined by a decline in cognition that is greater than the level expected for an individual's age and education level but that doesn't interfere notably with activities of daily life (*Panegyres et al., 2016*).

Dementia may be preceded by mild cognitive impairment (MCI) which is a syndrome defined as cognitive decline greater than expected for an individual's age and education level but that does not interfere notably with activities of daily life (*Sanford, 2017*).

In Egypt, dementia prevalence ranged from 2.01% to 5.07%. Dementia increased with age, with high burden in those aging ≥ 80 . Also, its prevalence was higher among illiterate groups than among educated groups. Included studies were of low risk of bias (*Elshahidi et al., 2017*).

Dementia causes a high burden of suffering to patients and their families. For the patients, it leads to increased dependency and complicates other co-morbid conditions for the

families, caring for a person with dementia may lead to anxiety, depression and increased time spent caring for a loved one (*Arabi et al., 2013*).

Although primary care is the first point of contact for elderly in the community, more than half of the elderly population who presented with mild and moderate dementia have never recognized as having dementia. The challenge in recognizing dementia in its early stage is that elderly people are often forgetful and thus this symptom is commonly perceived as a normal part of ageing in some local cultures (*Arabi et al., 2013*).

Screening of dementia is the role of family physician who can detect early symptoms of dementia as decline in memory, inability to make day-to-day tasks as paying bills, shopping or managing medications, once these symptoms begin to appear to the patient, the family physician should take a step on treatment or refer to a specialist (*Panegyres et al., 2016*).