THE ROLE OF THE FAMILY PHYSICIAN IN PROVIDING COMPRHENSIVE GERIATERIC ASSESSMENT

Thesis

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بسم الله الرحمن الرحيم

« قل إن صلاتى و نسكي ومحياي ومماتي

لله رب العالمين »

آية«١٦٢» سورة الانعام

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ABSTRACT

One of the main features of the Egyptian population over the last few decades is the gradual increase in the numbers of older people as a result of increased life expectancy.

Comprehensive geriatric assessment is a diagnostic process intended to determine an elderly person's medical, psychosocial, functional, and environmental resources and problems, with the objective of developing an overall plan for treatment and long-term follow-up.

This study is a cross sectional descriptive one conducted in family health units on 100 elderly patients (>65years) attending the family out patient clinic.

We found that elderly shared in this research, still have new problems and disabilities by using comprehensive geriatric assessment, on average of 3.4 new problems per patient.

Thus, we conclude that screening, using comprehensive geriatric assessment, is worthwhile & can detect unidentified problems in general practice.

Key words:

Geriatric, elderly, comprehensive geriatric assessment, dementia, depression, urinary incontinence, functional impairment, vision problems, hearing problems, falls and elderly screening.

List of Abbreviation

AADL: Advanced Activities of Daily Living.

AAFP: American Academy of Family Physicians.

AAO PPP: American Academy of Ophthalmology Preferred Practice Patterns.

AChEIs : AcetylCHolinestErase Inhibitors.

ACP: American College of Physicians.

ACS: American Cancer Society

AD: Alzheimer's Disease.

ADL: Activities of Daily Living.

ADLs: Activities of Daily Living .

AGS: American geriatric society.

ALDs: Assistive Listening Devices.

AMA: American Medical Association.

AMD: Age-related Macular Degeneration.

AMDA: The American Medical Director Association’s guidelines

AREDS: National Eye Institute Age-related Eye Disease Study.

BADL: Basic activities of Daily Living.

BMI: Body Mass Index.

BPSD: Behavioral and Psychological Symptoms of Dementia .

CBT : Cognitive-Behavioral Therapy .

CDT : Clock Draw Test.

CVA: CerebroVascular Accident.

CTF: Canadian Task Force on the Periodic Health Examination.

DLB: Lewy Body Dementia.

DR: Diabetic Retinopathy.

ECT: ElectroConvulsive Therapy.

ER: Extended-Release

ETDRS : Early Treatment Diabetic Retinopathy Study Research Group.

FDA: Food & Drug Administration.

FOBT: Fecal Occult Blood Test

FTD: FrontoTemporal Dementia.

HAD: HIV-Associated Dementia .

HTN: Hypertension.

I: Insufficient evidence.

IADL: Instrumental Activities of Daily Living.

IOL: IntraOcular Lens implant.

IOP: Increased Intraocular Pressure.

IPT: Interpersonal PsychoTherapy.

IR: Immediate-Release.

LOC: Loss Of Consciousness.

MCI: Mild Cognitive Impairment.

MMSE: Mini Mental Screening Estimation.

N: no.

NIH : National Institutes of Health

NMDA: N-Methyl-D-aspartate Antagonists.

OAB: Over Active Bladder

PME: Pelvic Muscle Exercises.

PST: Problem-Solving Therapy.

PVR: Post Voidal Residue.

RPE: Retinal Pigment Epithelium.

TIA: transient Ischemic Attack.

UI : Urinary Incontinence

USPSTF: U.S. Preventive Services Task Force.

VaD: Vascular Dementia .

WHO: World Health Organization

Y: Yes

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Introduction

The world is aging with people living longer and fewer children being born. Today, there are some 600 million persons aged 60 and over; this total will double by 2050 when there will be more people aged 60 and over than children under age 15 **(WHO, 2004).**

One of the age main features of the Egyptian population over the last few decades is the gradual increase in the absolute and relative numbers of older people. This trend will continue over the next decades. There are currently 4100000 persons aged 65 and over representing 4.7% of the total population. The expected percentage of older people may reach 10.9% in 2026 **(Demographic and health survey (DHS), 2009).**

Life expectancy increased in Egypt from 1960 to 2008 by 17.9 years for males and 20.2 years for females **(DHS, 2009).**

The aging population is heterogeneous. Researchers group this population by ages, with 65–74–year-olds considered "young-old," 75–84-year-olds considered "old," and those 85 years and older, "old-old." Those with the poorest health are identified as "frail" or "at-risk" elders. **(Bryant et al, 2001)**

Unfortunately, careful functional and social assessments as steps in decision making for long-term care are often neglected, resulting in the provision of inappropriate types of long-term care. Without a careful diagnostic evaluation, frail elderly people may end up in nursing homes when they might be able to live in less confining settings or at home with support services. Conversely, the patient with unassessed needs may not be provided with the type or degree of long-term care that he or she requires, resulting in increased disability. In the rapidly changing fields of health care delivery, services that promote or improve functional abilities,

prevent or delay disease progression, and improve the overall health status of this aging population are needed **(Bryant et al, 2001)**.

Geriatric assessment is a way to obtain information about functional performance in older adults in order to identify elders at risk for increasing frailty. Health care providers by clinical judgment alone can diagnose severe functional impairment but have difficulty identifying moderate impairments, which are more likely to affect a community-dwelling older population. The multitude and complexity of problems that may be experienced by an older adult requires more than just management of their diseases. It is important to identify elders who may be frail or vulnerable in the outpatient clinical practice because they will benefit from a coordinated and comprehensive care plan **(Wegner et al, 2001)**.

In general, geriatric assessment attempts to obtain a "big picture" in order to provide quality care for the elderly. Geriatric assessment is often necessary to accurately define an older person's problems, develop interventions, and serve as a baseline from which to measure outcomes of treatment **(Gallo et al, 2005)**.

The majority of older adults do not need an extensive evaluation; instead, assessment should be oriented toward screening to uncover problems. If screening uncovers a problem or problems, a more extensive evaluation can then be performed and a treatment plan can be implemented **(Saliba et al, 2001).**

Aim of the work:

To determine if the geriatric assessment can detect new unknown problems in general practice.

Physiology of Aging

The aging process affects all organ systems. A multitude of changes occur in each organ. These changes are irrespective of diseases modifying aging. The rate of age-related decline in organ function varies greatly. Aging has been defined as a failure to maintain homeostasis under conditions of physiological stress. Within a normal cell, oxidative stress chronically leads to changes in gene expression. This leads to alteration in the phenotype and aging of tissue. In a different model, “wear and tear” of cells leads to necrosis or apoptosis. This leads to an increase in cell turnover causing an alteration in the phenotype leading to an aged cell. Senescence is defined as the permanent exit from the cell cycle of cells that would normally be able to undertake division. This may also lead to aging because it leads to a decline in the growth potential of cell populations, which have undergone turnover. These cells display biochemical features that are distinct from their growing counterparts **(Baumgartner et al, 1995).**

The hypothalamo–pituitary–adrenal axis acts as the master regulator to adjust to the physiological needs of the organism during stress. The neuroendocrine-immuno theory of aging stresses the relation of the endocrine system as it regulates the immune system to fight off infection. As the immune system wanes, the organism becomes susceptible to death due to higher chance for infection. Aging then would result from a “decreasing ability to survive stress”. Thus, a multitude of factors can lead to aging **(Rafi , 2006).**

Aging is highly complex, involving multiple mechanisms at different levels. Much recent evidence suggests that an important theme linking