

Home Health Care for Older Adults with Impaired Physical Mobility

Thesis

*Submitted in Partial Fulfilment of the requirement
of the Doctorate Degree*

in

Nursing Sciences

Community Health Nursing

By

Mervat Mohamed Hassan Ali

Assistant lecturer in community health department

(B.Sc. Nursing, 2003), (Master, 2010)

Faculty of Nursing - Ain Shams University

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Supervised BY

Prof. Dr./Suheir Abd Elhalim Mekhemar	Prof. Dr. /Nawal Mahmoud Soliman
Prof. of Community Health Nursing	Prof. of Community Health Nursing
Faculty of Nursing - Ain Shams University	Faculty of Nursing - Ain Shams University

Assist. Prof. / Magda Abd-Elsattar Ahmad

Assist. Prof. of Community Health Nursing
Faculty of Nursing - Ain Shams University

Ain Shams University
Faculty of Nursing
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الرعاية الصحية المنزلية لكبار السن الذين لديهم ضعف في الحركة الجسمانية

رسالة للحصول على درجة الدكتوراه في علوم التمريض
(تمريض صحة المجتمع)

مقدمة من

ميرفت محمد حسن على

مدرس مساعد بقسم تمريض صحة مجتمع

(بكالوريوس تمريض 2003) (ماجستير 2010)

كلية التمريض – جامعة عين شمس

جامعة عين شمس

كلية التمريض

قسم تمريض صحة المجتمع

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تحت إشراف

أ.د./سهير عبد الحليم مخيمر	أ.د./نوال محمود سليمان
أستاذ تمريض صحة المجتمع	أستاذ تمريض صحة المجتمع
كلية التمريض – جامعة عين شمس	كلية التمريض – جامعة عين شمس

أ.م.د./ماجدة عبدالستار أحمد
أستاذ مساعد بقسم تمريض صحة المجتمع
كلية التمريض – جامعة عين شمس

جامعة عين شمس

كلية التمريض

قسم تمريض صحة المجتمع

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List of Abbreviations

AADLs	Advanced Activities of Daily Living
ADLs	Activities of Daily Living
BMI	Body Mass Index
BADLs	Basic of Activities of Daily Living
CBC	Complete Blood Count
CGA	Comprehensive Geriatric Assessment
GH	Growth Hormone
HB	Hemoglobin
HHCP	Home Health Care Program
IADLs	Intermediate or instrumental activities of daily living
ICIDH	International Classification of Impairments, Disability and Handicaps
OA	Osteoarthritis
RA	Rheumatoid Arthritis
TENS	Transcutaneous Nerve Stimulation
WBC	White Blood Cells

"شكر"

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أ.د./ سهير عبد الحليم مخيمر

أستاذ بقسم تمريض صحة المجتمع

كلية التمريض – جامعة عين شمس

أ.د./ نوال محمود سليمان

أستاذ بقسم تمريض صحة المجتمع

كلية التمريض – جامعة عين شمس

أ.م.د./ ماجدة عبد الستار أحمد

أستاذ مساعد بقسم تمريض صحة المجتمع

كلية التمريض – جامعة عين شمس

كما أشكر جميع أفراد عائلتى الذين أعطونى الدعم المعنوى وأخص بالشكر:

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Abstract

Impaired physical mobility is a potential or actual limitation of independent physical movement within the environment. **The aim** of this study was to evaluate the effect of home health care for the older adults with impaired physical mobility. Research hypothesis: The home health care will improve the older adults' performance of activities of daily livings. **The study design** was a quasi experimental design. **The setting:** the study conducted in the Geriatric Unit affiliated to Ain Shams University Hospital in Cairo governorate, homes of the studied sample. **The sample:** A purposive sample representing 20% of the total number (330) of older adults, who attended the previous mentioned setting in the latest year (2010), with criteria of older adults, age 60 years or above, diagnosed as impaired physical mobility and agreed to participate in the study. For data collection, three tools were used: **the first tool:** an interviewing questionnaire to assess the socio-demographic data of the older adults, their medical history, clients' main complain; (pain), older adults practice of exercises, older adults' activities of daily living (ADLs), and Functional assessment and clients' knowledge about impaired physical mobility. **The second tool:** medical record review. **The third tool:** an observational check list for assessment of safety home environment. **The results:** The study showed that 51.7% of the studied older adults were female, 43.3% of older adults suffered from Osteoporosis, and 21.7% had Arthritis and 75.0% of older adults had correct total knowledge pre home health care program, and they improved to reach 98.3% of them post program, 31.7% of older adults can do total ADLs independently pre program and then they improved and reached 46.7% of them post program and , 55% of home environment characteristics were in a good condition pre program, and they improved to 90% post program. **Conclusion:** Home health care succeeded in improving older adults' knowledge and activities of daily livings. **Recommendation:** This study recommended the need to increase older adults and public awareness through mass media to provide more explanation about impaired physical mobility and its effect on older adults' health status and ADLs.

Key words: Older adults, impaired physical mobility, activities of daily living, public awareness, home health care.

SUBJECTS and METHODS

Study design:

A quasi experimental design used in this study.

Technical design:

The technical design includes: the setting, sampling, and tools for data collection.

Setting:

The study was conducted in the Geriatric Unit affiliated to Ain Shams University Hospital in Cairo governorate and homes of the studied sample.

Sampling:

A purposive sample of **66** older adults representing **20%** of the total number **330** of older adults, who attended the previous mentioned setting in the latest year **2010**, with criteria of older adults, age **60** years or above, diagnosed as impaired physical mobility and agreed to participate in the study.

Tools for data collection:-

The following three tools for data collection were used:

The first tool:-

An Interviewing questionnaire:

This tool is an Arabic interviewing questionnaire constructed by the researcher after reviewing related recent literatures and the content validity was tested by five specialists, it included the following parts:-

- **Part one:** It is concerned with socio-demographic data of the older adults involved in study such as age, gender, marital state, educational level, job, family size, family income.
- **Part two:** concerned with present and past medical history.

- **Part three:** concerned with clients' main complain; (pain), pain site, cause, time, duration, ways for removing pain of older adults involved in the study.
- **Part four:** concerned with older adults practice of exercises such as walking 30 minutes daily, neck, shoulders, elbows, wrists, pelvis, knees, ankles, fingers' exercises.

Scoring system: 3 scoring levels were used for each item: (3) for "practice regularly/good", (2) for "practice sometimes/moderate", and (1) for "does not practice/poor".

- **Part five:** It was concerned with **older adults' activities of daily living (ADLs)** by using **Barthel index**. There are 10 items in the **Barthel index**, personal care, bathing, preparing food, feeding self, elimination, ascending stairs, wearing clothes, movement and more complex activities, such as shopping and using public transportation, cooking, cleaning, laundry, washing clothes, using telephone) were described by a scale of instrumental activities of daily living (IADLs) as introduced by **Cleveland scale (Lippincott et al., 2005 and Miller, 2004)**.
- **Scoring system:** it was include 15 items or questions, each item has 4 scoring levels: (1) for "unable to perform task", (2) for "attempt task but unsafe", (3) for "moderate help required", and (4) for "fully independent".
- **Part six: Functional assessment tool** generally included a scale for measuring a person's level of independence in performing specific ADLs and IADLs. ADLs include activities that are essential to personal care, whereas IADLs comprise the more complex activities that are essential in community-living situations by **Cleveland scale (Miller, 2004 and Maas et al., 2001)**. It included I- sense activities such as hearing, vision, speech, testing,

and touching. II- plural interaction as plural contact, behaviour, and personal mood. III- mind activity as attention, memory, creativity. IV- physiological activities as digestion, evacuation, urination, and sleeping.

Scoring system: 3 scoring levels were used for each item: (3) for “good”, (2) for “moderate”, and (1) for “poor”.

"This tool was used for pre home health care program assessment and post home health care program evaluation".

Part seven: Clients' knowledge:

It was concerned with clients' knowledge regarding meaning of older adults, aging; factors lead to impaired mobility, factors affecting skeletal system, meaning, causes, signs and symptoms, prevention and management of impaired physical mobility disorders such as: arthritis, osteoarthritis, rheumatoid arthritis, gout, osteoporosis, infected arthritis.

*This tool was used for pre home health care program assessment and post home health care program evaluation.

Scoring system: a score was assigned (2) for the clients' correct answer, (1) for incomplete answer and (zero) for the incorrect answer. The total score for this part was (**106**) marks, divided as following:

The total points of knowledge represent the optimal score and accordingly the points obtained will be classified into satisfactory knowledge = $\geq 50\% = (\geq 53)$ and unsatisfactory knowledge = $< 50\% = (< 53)$.

The second tool:-

A medical record in the Geriatric Unit to collect the data about the diagnosis, and joint function (disable, positive joint and joint movement).