

AMERICAN UNIVERSITY OF BEIRUT

HOME CARE FOR ELDERLY AND HOMEBOUND: PROPOSAL  
FOR A TRAINING MODULE FOR INFORMAL CAREGIVERS

by  
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# ABSTRACT OF THE PROJECT OF

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for

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Major: Community and Public Health

Title: Home Care for Elderly and Homebound: Proposal for a training module for informal caregivers

Introduction: As people grow older, they become at risk for chronic diseases and illnesses if they already do not suffer from one; thus, their health needs increase and require access to health services to fulfill those needs and get treatment. Unfortunately, not all elderly and homebound have access to health services, especially in Lebanon. This is due to the economic situation that results in decreasing access to healthcare for the elderly who are jobless and have unemployed children. As a result, they become the most vulnerable and lose all sources of support. In addition, the absence of primary health care centers in some areas play a major role in the accessibility of health services for the elderly.

Purpose: The purpose of the project is to propose a training program that provides home care services for elderly and homebound by their own primary caregivers through assessment, education, and training.

Methods: Three articles out of 35 were chosen from PubMed, CINAHL, and google scholar databases based on the following inclusion and exclusion criteria. The inclusion criteria included articles focusing on key areas that need to be included in the training of informal caregivers for home care of elderly, whereas the exclusion criteria included key areas for training informal caregivers of non-elderly population. Five articles out of 27 were chosen from CINAHL and PubMed concerning the functional, cognitive, and environmental tools that are used in the assessment of elderly based on the following inclusion and exclusion criteria. The inclusion criteria included articles that focused on recent assessment tools used in home care to assess the physical, cognitive, and environmental conditions of elderly including the validation of each in Arabic. The exclusion criteria included assessment tools used for non-elderly population, not easily used in home care, and not validated in Arabic. In addition, from google scholar database one article out of 10 was selected based on the following inclusion and exclusion criteria. The inclusion criteria mainly focused on articles that developed an actual training program for informal caregivers for elderly in home care, specified the basis of such program, and was proven effective and beneficial after its evaluation. The exclusion criteria included training programs that were not mainly specific to the informal caregivers for elderly, were not detailed and proven effective.

Results: A training module for informal caregivers was proposed. It includes 12 sessions given over a duration of 12 days, which tackles the basics of home care services that can be provided and the assessment tools that can be used. This training module mainly targets informal caregivers including family members, relatives, or neighbors.

Discussion: The training programs for the informal caregivers have effects on both the elderlies and the caregivers. It improves the quality of lives of the elderlies by allowing them to receive their care at home. Moreover, for the caregivers it improves their confidence in providing care, increases their satisfaction in the caregiving role, and decreases the depression and the burden they feel. However, challenges may be faced when implementing such programs. For example, some caregivers will not take the training seriously and may not abide by the materials given and some will not participate since they think they already know the material. More research is recommended about the factors that can affect their participation and develop a program to work on improving those factors.

Conclusion: In Lebanon, the majority of the population in the community are the elderlies. This population is more susceptible to chronic illnesses that require frequent visitation to health care center, which is sometimes hard because of the lack of financial capability, and accessibility to health care. That is why sometimes family caregivers or informal caregivers (like neighbors) provide the care needed to elderlies without having the necessary knowledge and skills. Therefore, a training program with educational sessions about the basics of home care is proposed to train and educate the caregivers and improve their caring abilities. As a result, the elderly will receive a good quality of care that will positively affect their quality of life, and the caregivers will gain more confidence in their skills, which will decrease their stress, anxiety, and the feeling of burden.

# CHAPTER I

## INTRODUCTION

### **A. Background**

The elderly population is on the rise and is expected to continue increasing further due to the decline in fertility rates and increase in life expectancy. The rise in elderly population comes with several challenges at the individual, family, and health care system levels.

When people grow old, they often require complex healthcare needs compared to younger adults due to physical, psychological, and social decline in functionality.

Older adults have weakened physical functions and mental abilities, which reduce their ability to adapt to their environment. Moreover, the physical degradation of the brain decreases their cognitive functioning that impairs their ability to perform their daily activities and lead to social isolation (Kim et al, 2018). With aging also comes chronic diseases. Therefore, it is important to promote healthy aging, help the elderly build, and maintain their functional abilities to meet their basic needs that include health care, mental health, and self-actualization (Putri et al, 2018).

The rise in elderly population is also associated with economic and social effects on families and caregivers. As they grow old, they will suffer from several chronic diseases and require continuous management and health services which is expensive and many family members cannot afford. In addition, caregivers or family members taking care of an elderly will most of the time spend their time in providing care and will not have enough time for social life (Raül, et al., 2021).

The health care of elderly population is costly. It requires a specialized healthcare workforce working in elderly organizations with a dedicated budget (Raül, et al., 2021).



Home health care can play an important role in mitigating some of those challenges by managing elderly population at home. Home health care has also several benefits over hospital-based health care such as reducing the risk of exposure to nosocomial infections, supporting aging and independence, and maintaining high quality of life knowing that elderlies prefer to stay at home more than at the hospitals (Mitzner et al, 2009). Abdi et al (2019) showed that elderlies require home health care support in the following domains. First, mental functions because some of them felt depressed, anxious, worry, and frustrated especially if they had an illness with poor prognosis. Second, physical functions that included pain, visual impairment, hearing impairment, fatigability, urinary incontinence, and digestive system impairments. Third, self-care and domestic life such as washing, dressing, toileting, preparing meals, and bathing. Fourth, mobility such as walking, changing body positions, carrying objects, hand and arm use which affected their ability to do their daily activities. Fifth, social life and mainly feeling socially isolated and lonely due to their physical impairments that affected their ability to sustain their relationships, which led to their social isolation (Mitzner et al, 2009).

Home health care patients also need assistance in treating and managing their chronic health conditions such as heart disease, diabetes, cerebral vascular disease, chronic obstructive pulmonary disease, malignant neoplasms, congestive heart failure, osteoarthritis, fractures, and hypertension. Both patients and caregivers need training and education so that they can take care and manage these conditions (Fuhrman, 2009).

Home health care is delivered by caregivers. There are two types of caregivers: formal caregivers and informal caregivers. The formal caregivers are mainly paid and include a multidisciplinary team. Informal caregivers are unpaid and include family members like spouses, children, or siblings; and friends or neighbors (Kalwij et al, 2014).

In terms of multidisciplinary formal caregiving, ideally the team needs to be composed of specialties that meet the need of the elderly patient. The physician's role, often a geriatrician, is to pay a home visit to the elderly patient to diagnose, treat the illness, and determine the home health care needs. Second, in collaboration with the physician, a registered nurse performs the assessment and develops a plan of care. This care can include wound dressing, ostomy care, intravenous therapy, administering medications, pain management, and monitoring the general health of the patient depending on the health condition of the elderly (Aging in Place, 2022). Third, physical/ occupation, and/or speech therapist are needed depending on the health condition. A speech therapist is meant to assist elderly patients that need help in relearning how to perform their daily duties or improve their speech after a certain illness. A physical therapist can help the patient to regain muscle strength and joints. An occupational therapist can help patient with physical, developmental, social, or emotional disabilities and relearn how to perform daily functions (Bayada, 2022). Fourth, medical social services, which involve medical social workers providing services to the elderlies that, include counseling and locating community resources. Fifth, care from home health aides that involve health aided assisting elderlies with their basic needs like getting out of bed, walking, bathing, and dressing. This is all done by trained health aides and under the supervision of the nurse (Fuhrman, 2009). Sixth, homemaker or basic assistance care that involve a homemaker who helps with household chores like laundry, meal preparation, grocery shopping, and other housekeeping work. Seventh, volunteer care that involves volunteers from community organizations giving basic comfort to patients through companionship, helping with personal care, providing transportation, and emotional support (Bayada, 2022). Eighth, nutritional support that involves dietitians visiting the patients to provide dietary assessments and guidance. Ninth, laboratory and X-ray imaging which involves

performing blood tests and x-rays through portable machines at home. Tenth, pharmaceutical services which include the delivery of medication and medical equipment at home and providing training on them (JOHNS HOPKINS, 2022), (Landers et al, 2016).

Most of the time, those services are not readily available, and hence family caregivers provide most of the care and services to the elderly at home and in this case its referred to it as “informal services”. Often, however, those informal caregivers are ill prepared to assume this role. (Moreira et al, 2018).

## **B. Situation Analysis in Lebanon**

Lebanon is a rapidly aging country due to decreased fertility rates, having longer life expectancy, and high rates of young adult immigration (Abdulrahim et al., 2014).

Approximately 10% of the Lebanese population are above the age of 65 and 12 % of this elderly population live alone and usually older women tend to live alone more than men do (Abdulrahim et al., 2014).

Older adults in Lebanon tend to live at home rather than in old nursing homes. They have chronic health conditions rendering them less functional and home bound. They have limited access to health care services due to absence of health insurance after retirement (Hallit et al., 2018).

This challenge is systemic and entrenched in the society. Historically, the elderly and homebound individuals were the most vulnerable because they lose all sources of support once they are outside the labor market. The situation got even worse in this economic crisis.

Informal caregiving including the wife, daughter, and daughter in law has been the main model of care for the elderly population, but with several challenges. One of which is the poor

preparation for taking on this responsibility, which can cause problems especially in caring for a person with many health problems (Sibai et al., 2015).

Therefore, the goal of this project is to propose a training module for informal caregivers for elderly and homebound individuals in Lebanon.

The specific objectives are:

1. To conduct a narrative review of the literature to identify the key areas that need to be included in the educational sessions
2. To conduct a narrative review of the literature to identify assessment tools used in home care to be included in the educational sessions
3. To recommend a training program protocol based on evidence-based training programs drawn from the literature that includes:
  - a. Assessment using validated tools for the physical and cognitive health, environmental and social needs
  - b. Training on the types of essential home care services

## CHAPTER II

### BACKGROUND AND LITERATURE REVIEW

#### **A. Changing demographic profile in the Middle East Region and the need for home care.**

Aging population in the Eastern Mediterranean is increasing and with it the rise in the chronic diseases leading to an escalation in permanent or temporarily functional disabilities and reduced quality of life (World Health Organization, 2015). In addition, demographic transitions like lower fertility, lower mortality, and longer life expectancy, are the main causes for this acceleration in the aging population of the Eastern Mediterranean countries (Hussein et al., 2017).

Arab countries are expected to have a growth in elderly population. Notably, the Arab countries share the same cultural background whereby older people tend to live with or near their children. Among Arabs, the family is a social institution and the main care provider for its elderly members. They provide assistance and stress on the respect for older adults. They place high obligations on the family to support and care for the old age members. That is why older adults in those countries live at home and receive care from one or more family members like children, spouses, or other close relatives. Hence, family members are naturally the main unpaid caregivers and they make use of formal or paid care services to support them (Hussein et al, 2017; Abdelmoneium et al, 2016). But, most of the family caregivers do not have the required information or training to take care of old people that suffer from specific diseases and this stays a challenge and burden on the caregivers.

## **B. Need for home health care in the region**

Given the gaps in home health care in the region, most elderly do not have their needs met and their care is not being given enough attention. That is why some strategies were suggested to improve the home care for elderly. The World Health Organization (WHO) Regional Office for the Eastern Mediterranean suggested home health care delivery as a viable, acceptable and cost-effective approach for elderly care (WHO, 2015) and one of the most important strategies was to empower and train the family members as caregivers so that they will be able to provide the care needed.

## **C. Home health care services**

To be effective, there are certain pillars to build on the home health care services. Landers et al (2016) showed that it is important *to integrate* those services with the health care system. That is to ensure that it is not a standalone service but rather connected to the range of services available in the mainstream health care system. Further, *information sharing between the multidisciplinary team* and using different channels of communication (such as telehealth, messaging, wearable instruments), and *training of providers* are crucial (Romagnoli et al (2013)).

In Uganda, for example, Karungi et al (2022) showed that a home health care service for dementia patients, where caregivers were given a 5-day training improved their health outcomes (Karungi et al, 2022). The training focused on: understanding dementia, community-based management and care for people with dementia, community engagement, and monitoring and evaluation.

Effective home health care services have an impact on the health care system. Home health care services reduce in-patient health care utilization, decrease hospital admission, reduce hospital stay, reduce hospital-acquired infections and decrease health cost (Xiao et al., 2018; Romagnoli et al., 2013). On the other hand, home health care services increase patient safety, encourage independence, promote high quality of life, and improve health outcomes (Romagnoli et al., 2013; Mitzner et al., 2009).

#### **D. Home health care services in Lebanon: A situational analysis**

In Lebanon, formal home care services in Lebanon are scarce and not sustainable. They are limited to only 2-3 organization that only provide part time nursing staff and other services (Chemali et al, 2008). These organizations provide free of charge services but they are limited in capacity.

Informal caregiving at home is the main model used in Lebanon (Sibai et al., 2015; Abdulrahim et al., 2014). Family members in Lebanon usually account for the majority of caregivers of older adults living at home and they fall under the class of “informal care” (Abou Mrad et al, 2022). Most of the elderlies in Lebanon live with their families who provides the care needed when their elderly is functionally weakened, this is referred to as informal care giving (Séoud et al, 2007).

In Conclusion, in Lebanon the home health care services options are limited and suboptimal in quality. Knowing that a strong home health care service is very important and has many benefits to the community mainly to the old population, it is of utmost priority to focus on this area of health care.

## CHAPTER III METHODS

Concerning objective one, which is to conduct a narrative review of the literature to identify key areas that need to be included in the educational sessions. An excessive literature search was done to search for articles published mainly through PubMed,, CINHAL, and Google Scholar. The following keywords were used in the process of the search, which are “educational materials”, “caregivers”, and “home care”. The following inclusion and exclusion criteria were used. Inclusion criteria included articles that focused on key areas that need to be included in the training of informal caregivers for home care of elderlies. The exclusion criteria included key areas for training informal caregivers of non-elderly population.

For objective two, that is to conduct a narrative review of literature for assessment tools for the physical, cognitive, and environmental assessment of the elderlies. Two databases, PubMed and CINHAL, were thoroughly searched for recent published articles that are relevant to the concerned topic. The keyword used for this search were the following: “physical assessment tool”, “elderlies”, “home care”, “cognitive assessment”, “environmental assessment”, and “validity”. The following inclusion and exclusion criteria were used to select articles. The inclusion criteria included articles that focused on recent assessment tools used in home care to assess the physical, cognitive, and environmental conditions of elderlies including the validation of each in Arabic. The exclusion criteria included assessment tools used for non-elderly population, not easily used in home care, and not validated in Arabic.

For objective three, we searched Google Scholar using these keywords “older adults”, “caregivers”, “training”, and “homecare”. Based on the following inclusion and exclusion



criteria the articles were chosen. The inclusion criteria mainly focused on articles that developed an actual training program for informal caregivers for elderlies in home care, specified the basis of such program, and was proven effective and beneficial after its evaluation. The exclusion criteria included training programs that were not mainly specific to the informal caregivers for elderlies, were not detailed and proven effective.

Based on the criteria for developing an educational program, the proposed training module was prepared and included the purpose of the program, the learning outcomes for each session, and the delivery approach for the sessions.

Several approaches for training were taken into consideration and included individual approach, group approach, and mass approach (term used to refer to the education of whole community).

The individual approach requires delivering information through direct personal contact, home visits, and personal letters. The group approach requires delivering the material to a group through using lectures, demonstration, group discussion, panel discussion, symposium, workshop, conferences, seminars, and role-plays.

## CHAPTER IV RESULTS

### **The results of the narrative review are as follows:**

For objective one, 35 articles were found during my research through the above-mentioned databases, but only three main articles contained the most relevant information to my topic, and mostly were between 2015 and 2022. Those three articles essentially focused on the topics that should be included in the educational materials for the caregivers concerning homecare for elderlies.

For objective two, five articles out of 27 were found the most convenient because of its content and mainly were between the years 2009 and 2018. Those five articles mainly specified the most recent tools used in-home care to assess the physical, cognitive, and environmental conditions of the elderlies. In addition, three of these articles proved the validity for each tool in Arabic. The validated tools were Katz Index of Independence in Activities of daily living (for physical assessment), the Mini Mental State Examination (for cognitive assessment), and the Home Safety Self- Assessment Tool (for environmental assessment).

For objective three, one article out of 10 was chosen after an excessive research using the above-mentioned database. This article was published in 2012 and it mainly specified the basis of a training program like the content, duration of each session, the total number of sessions based on the content, the duration of the program, the evaluation process and how was it done. This article was chosen because it developed an actual training program for caregivers (all steps needed for the development of such program was mentioned), and the program was proven to be effective and beneficial after its evaluation.

The proposed training module for the informal caregivers is as per the following:

-**The main purpose of the training module** is to educate and train the informal caregivers about the essentials of home care and how to provide it adequately to the elderlies.

- **The expected learning outcomes of the training module:**

At the end of the training program, the participants will be able to:

- To identify the different home care services that can be provided to the elderlies
- To apply the knowledge and skills they learned about the home care services in the care they provide

- **Table 1- Training sessions and their corresponding learning outcomes**

Sessions	Lesson Plans	Learning Outcomes
<p align="center"><b>Session One</b></p>	<p><b>Introduction to home care services (benefits) and available resources in the community</b></p>	<p><b>At the end of this session, the participants will be able to identify the benefits of home care services and list some available resources in the community</b></p>
<p align="center"><b>Session Two</b></p>	<p><b>1<sup>st</sup> Hour: Introduction to the Katz Index of Independence in Activities of Daily Living and how to use the tool</b></p> <p><b>2<sup>nd</sup> hour: Simulation about practicing the use of the tool through role playing</b></p>	<p><b>At the end of this session, the participants will be able to :</b></p> <ul style="list-style-type: none"> <li><b>-Define Katz Index of Independence in Activities of daily Living</b></li> <li><b>-Describe how to use the tool</b></li> <li><b>-Use this tool in the physical assessment of the elderly</b></li> </ul>

<b>Session Three</b>	<p><b>1<sup>st</sup> hour: Introduction to the Mini-Mental State Examination tool (MMSE) and how to use it</b></p> <p><b>2<sup>nd</sup> hour: Simulation about practicing the use of the tool through role playing</b></p>	<p><b>At the end of this session, the participants will be able to:</b></p> <ul style="list-style-type: none"> <li><b>-Identify the importance of MMSE</b></li> <li><b>-Explain how to use the tool</b></li> <li><b>-Use this tool in the cognitive assessment of the elderly</b></li> </ul>
<b>Session Four</b>	<p><b>1<sup>st</sup> hour: Introduction to the Home Safety Self- Assessment Tool (HSSAT) and how to use it</b></p> <p><b>2<sup>nd</sup> hour: Simulation about practicing the use of the tool through role playing</b></p>	<p><b>At the end of the session, the participants will be able to :</b></p> <ul style="list-style-type: none"> <li><b>-State the importance of HSSAT</b></li> <li><b>-Identify ways to use the tool</b></li> <li><b>-Apply this tool in the environmental assessment of elderly's homes.</b></li> </ul>
<b>Session Five</b>	<b>Importance of fall prevention especially for the elderly and home bound elderlies</b>	<b>At the end of this session, the participants will be able to identify the importance of fall prevention for the elderlies and some ways for it</b>
<b>Session Six</b>	<b>Hygiene care (bathing and toileting) , its importance and</b>	<b>At the end of this session, the participants</b>

	<b>ways to provide the care</b>	<b>will be able to :</b>  -Define hygiene care  -Identify the importance of hygiene care  -List some ways to provide this type of care
<b>Session Seven</b>	<b>Mobility assistance and how to help in mobility (assistance in walking, range of motion exercises, and positioning in bed)</b>	<b>At the end of this session, the participants will be able to list ways for mobility assistance of the elderlies</b>
<b>Session Eight</b>	<b>Assistance in activities of daily living (personal hygiene, feeding, meal preparation, continence care, transferring, and lifting)</b>	<b>At the end of this session, the participants will be able to state ways for providing assistance in activities of daily living</b>
<b>Session Nine</b>	<b>Monitoring changes in physical conditions and corresponding course of action</b>	<b>At the end of the session, the participants will be able to identify changes in physical conditions and specify the corresponding course of action</b>
<b>Session Ten</b>	<b>Engaging the elderly in a cognitive activity</b>	<b>At the end of this session, the participants will be able to carry out cognitive activities for the elderly</b>
<b>Session Eleven</b>	<b>Assistance in home medication (right dose, right route, right time)</b>	<b>At the end of this session, the participants will be able to list ways for managing home medications of the</b>

		<b>elderly</b>
<b>Session Twelve</b>	<b>Introduction to interventions related to a healthy life style (healthy diet mainly low salt/low fat diet, importance of non-smoking, importance of physical activity)</b>	<b>At the end of this session, the participants will be able to:</b> <b>-List ways for healthy diet</b> <b>-Identify the importance of non-smoking</b> <b>-Identify importance of physical activity</b> <b>-Carry out the interventions for healthy lifestyle for the elderly</b>

**Target Population:**

The caregivers should:

- Be from the family members/ neighbors/ or anyone already assisting the elderlies in their activities of daily living
- Be Between the ages of 18-50
- Pass the caregiving appraisal scale (Appendix 4: Caregiving Appraisal Scales)

This scale assesses the primary caregiver’s attitudes toward caregiving. It involves 25 statements rated on a 5-point scale (5=agree a lot, 4=agree a little, 3=neither, 2=disagree a little, and 1=disagree a lot) that tackles the following: caregiving satisfaction, caregiving mastery, caregiving demand, and environmental impact. Based on the feedback the caregivers provide for each

statement, the assessor can identify whether he/she is eligible for participating in the sessions or not. A registered nurse will administer this tool to caregivers.

### **Delivery of Sessions:**

**Duration:** Each session will be 2-hour session with a 10 minutes break in between. One session will be given every day for a total of 12 days (12 sessions).

**Location:** In a primary health center of a certain community

**Instructor:** A registered nurse will deliver the sessions

The sessions will be delivered as a power point presentation and the attendants will receive a handout that contains the material of every session (in English and Arabic), so that they can get back to it later.

### **Evaluation:**

A pretest posttest will be given in each session to evaluate the participant's knowledge before and after the educational session. It will include open-ended questions in both the Arabic and English language.

For session 1, the pretest posttest will include the following questions:

1. List some benefits of home care services.

For session 2, the pretest posttest will include the following questions:

1. Why hygiene care is important?
2. What are the types of hygiene care?
3. For each type of hygiene care, specify when and how should be done.

For session 3, the pretest posttest will include the following questions:

1. Specify the importance of fall prevention
2. List some ways to prevent falls

For session 4, the pretest posttest will include the following questions:

1. State some ways for mobility assistance

For session 5, the pretest posttest will include the following questions:

1. Specify ways for providing assistance in activities of daily living

For session 6, the pretest posttest will include the following questions:

1. What are physical changes that can occur to the elderlies and how to act?

For session 7, the pretest posttest will include the following questions:

1. What are the cognitive activities that can be used for the elderlies?

For session 8, the pretest posttest will include the following questions:

1. List ways that can help elderlies in managing their medications

For session 9, the pretest posttest will include the following questions:

1. State methods for healthy diet.
2. Identify the importance of non-smoking.
3. State reasons that make physical activity important

For session 10, the pretest posttest will include the following questions:

1. Provide an overview on Katz Index of independence in activities of daily living.
2. Specify how to use this tool?

For session 11, the pretest posttest will include the following questions:

1. Define and identify the importance of the Mini-Mental State Examination



2. Specify steps for using this tool

For session 12, the pretest posttest will include the following questions:

1. What is Home Safety Self- Assessment Tool (HSSAT) and why is it important?
2. How this tool is used?

At the end of the program, a small evaluation survey will be distributed to the attendants which include open-ended questions about the program in general. It will include the following questions:

- What part of the program was the most helpful?
- What part of the program was the least helpful?
- What things you found missing in the program that could be added?
- How do you think that attending these educational session will affect the caring for your elderly?

**Monitoring of the program:**

- A registered nurse will follow up with a visit after one month from giving the sessions to see if the caregivers are implementing what they have learned from the educational sessions and if they are using the assessment tools correctly.

**Rubric for Evaluation:**

-Pre-posttest of participants at least 75% improvement in understanding

-Achieving 65% compliance to each lesson session during monitoring after one month from giving the sessions

-Receiving qualitative feedback from caregivers on the facilitators and challenges of the proposed training module

**Budget:**

-The registered nurse will be paid 300,000L.L per session this means 3,600,000L.L for 12 sessions and 1,000,000 L.L for the follow up home visits.

-The lesson materials, survey, and the pretest and posttest will be printed, so the cost could be 500,000L.L.

-A facemask box could be needed so that facemasks can be distributed that may cost 100,000L.L and a big bottle of hand sanitizer also 100,000L.L.

-Snacks and Drinks will be available at break time that will cost approximately 400,000L.L per session, this means 4,800,000L.L for the total 12 sessions

So the total cost would be 10,100,000L.L

**Assessment tools to be used in the training:**

The caregivers providing care for the elderlies also should have knowledge and training about some assessment tools that are usually used in the physical, cognitive, and environmental assessment of the elderlies.

First, there is the Katz Index of Independence in Activities of Daily that is commonly used for the physical assessment of the elderly at their homes and mainly in activities of daily living (ADLs) ( Appendix 1: Katz Index of Independence in Activities of Daily Living) . This tool consists of basic ADLs like bathing, dressing, toileting, transfers, continence, and feeding. Each ADL is scored on a 3-point scale of independence, and the scoring is in two ways. Either the independence in several combinations of the ADL determines ordinal rank on the alpha scale, or the number of ADLs for which the individual is dependent for the numeric scale. For example,

for the ordinal scale it is made of eight levels, where A= independence in feeding, continence, transferring, going to toilet, dressing, and bathing. B= independence in all except one of these functions; C= independence in all except bathing and one additional function; D= independence in all except bathing, dressing, and one additional function. E= independence in all except bathing, going to the toilet, and one more; F= independence in all except bathing, dressing, going to the toilet, transferring, and one more; and finally G= dependence in all six functions (White et al ,2011) . The Katz Index of Independence in Activities of Daily was translated and validated in Arabic, and tested mainly in Lebanon on elderlies. Thus, the translated version of the instrument was a reliable and valid measure for the assessment of activities of daily living in the elderly population (Nasser et al, 2009)

Second, the Mini-Mental State Examination (MMSE) was identified the best tool for cognitive assessment of the elderly population ( Appendix 2: Mini-Mental Health State Examination) It is a set of 11 questions and a total of 30 points questionnaire that is used to detect any cognitive impairment like problems with thinking, communication, understanding, and memory. This tool is mainly used to assess six mental abilities that include orientation to time and place, attention and concentration, short- term memory, language skills, visual and spatial relationships between objects, and ability to understand and follow instructions. The MMSE involves fulfilling the following tasks: memorizing a few objects and then repeating the list later, copying a drawing, writing a grammatically correct sentence, identifying correctly where you are, and identifying correctly the current day of the week, followed by the date, the month, the season, and then the year. The highest score for the MMSE is 30, if the elderly scored 25 or above it is classified as normal; however, if they scored below 24 it will be considered abnormal and will indicate possible cognitive impairment (Kujawski et al, 2018). The Mini-Mental State Examination has

an Arabic version that was proved a valid tool to assess cognitive status among Lebanese elderly population (El-Hayek et al, 2019).

Third, the Home Safety Self- Assessment Tool is a tool developed especially for elderlies and their informal caregivers to help assess fall risks in their home and guide them in improving their home environment (Appendix 3: Home Safety Checklist). It is mainly used to assess fall risk factors through a risk factor section consisting of 64 risk items in nine areas of the home (home entrances, hallway, living room, kitchen, bedroom, bathroom, staircases, and basement). It provides information and instructions on how to improve the home environment and to keep elderlies safe from any falls (Tomita et al, 2014). Moreover, this the Home Safety Self- Assessment Tool (HSSAT) was proved that it is a valid and consistent instrument to assess fall risks in the home environment and to provide information about ways for home safety improvement (Tomita et al, 2014).

The content of each training session that will be given by the registered nurse and content of the handout that will be distributed to the participants upon their attendance of each session is as follows:

**Benefits of home care services:**

- Reduce hospital admissions
- Reduce falls
- Cost Saving
- Maintains dignity
- Improve quality of life

## **Katz Index of Independence in Activities of Daily Living:**

### **Definition**

It is a tool used to assess the functional status of the elderly in their ability to perform the activities of daily living independently and to detect problems in carrying out activities of daily living.

### **What does the Katz Index measure?**

**It measures the following six categories:**

- Bathing (whether the elderly can bath with or without any help)
- Dressing ( the elderly chooses clothes, put them on, and take them off without help)
- Toileting (elderly can get on and off the toilet, remove clothing and put them back on, and clean genital area without assistance)
- Transferring (moving from one place to another with or without help of mechanical transfer aids, but without the help of someone)
- Continence (ability to control urination or defecation without problems)
- Feeding (ability to feed oneself)

### **Scoring of the tool:**

- The six activities that are used is measured simply according to whether or not the elderly is able to do the basic tasks without any assistance.
- There is a total of 6 points (one point for each activity)
- Each activity that is fulfilled by the elderly independently receives one point
- A score of 6 means that the person is completely functional (person is independent)
- A score of 0 means that the person needs full time assistance (person is very dependent)
- The higher the total score, the more independent the person is rated

## **Mini-Mental State Examination:**

### **Definition:**

It is a tool used to measure the cognitive impairment in older adults, to evaluate the severity of the cognitive impairment at a certain point in time, and to follow the cognitive changes in an elderly overtime.

## **What does the MMSE measure?**

**It measures the following six mental abilities:**

1. Orientation to time and place
2. Attention and concentration
3. Short- term memory
4. Language skills
5. Visual and spatial relationships between objects
6. Ability to understand and follow instructions

## **Content of MMSE:**

**It involves fulfilling the following tasks:**

- Memorizing a few objects and then repeating the list later
- Copying a drawing
- Writing a grammatically correct sentence
- Identifying correctly where you are, the current day of the week, followed by the date, the month, the season, and then the year

## **Scoring of MMSE:**

It is usually scored on a scale of 0-30 and as follows:

- 0-17: Severe cognitive impairment
- 18-23: Mild cognitive impairment
- 24-30: No cognitive impairment

## **Home Safety Self- Assessment Tool (HSSAT):**

### **Definition:**

It is a tool developed to help assess fall risks in their home and guide them in improving their home environment.

It is mainly used to assess fall risk factors through a risk factor section consisting of 64 risk items in specific parts of the home:

1. House keeping
2. Floors
3. Bathroom
4. Traffic Lanes
5. Lightening
6. Stairways
7. Ladders and Step stools
8. Outdoor areas
9. Footwear
10. Personal precautions

Each part contains a set of questions (yes/no questions) related to the specific area or section at home.

If the answer to a specific question was no, this means that there is a problem in that category and needs to be fixed in order to prevent future falls.

If the answer was yes, then there is no risk for fall in that specific area of the home.

### **Importance of fall prevention:**

- Prevent injury death, unintentional injuries, and hospital admissions for trauma.
- Decrease the independency of the elderly and inability to do be active
- Decrease significant functional impairment

### **Ways for fall prevention:**

- Wearing sensible shoes that fits properly that is usually flat with nonskid soles and avoid high heels, floppy slippers, and shoes that can make them slip and fall
- Keep floors clutter free
- Remove small throw rugs, or use double sided tape to keep rugs from slipping
- Add grab bars in the bathroom, next to and inside the tub, and next to the toilet
- Install handrails and lights on all staircases
- Ensure adequate lightning at home
- Encourage the elderly for exercise (like walking) since it improves their strength, flexibility, and balance

### **Hygiene care:**

Types of hygiene care:

**Dental:** it prevents gum diseases, cavities and bad breath (brushing the teeth, mouthwash)

**Body:** bathing will help prevent skin irritation and remove bacteria that cause body odor.

**How to provide body care:** shower or bathe daily, using soap and water to rinse away dead skin cells, oil, and bacteria. People can pay special attention to areas that accumulate more sweat, such as the armpits, in between the toes, and the groin area



**Hand washing** is one of the best ways to prevent the spread of communicable diseases

**When to wash our hands:**

- Before, during, and after preparing food
- Before eating food
- After going to the bathroom
- After blowing the nose, coughing, or sneezing
- After touching garbage or dirty surfaces or objects

**How to wash hands:** (steps)

1. Wet the hands with clean, running water, then turn off the tap and apply soap.
2. Lather the hands by rubbing them together with the soap, remembering to reach the backs of the hands, between the fingers, and under the nails.
3. Scrub the hands for at least 20 seconds, which a person can time by humming the “Happy Birthday” song twice.
4. Rinse the hands well under clean, running water.
5. Dry the hands using a clean towel or air-dry them.

**Nails:** Fingernails may harbor dirt and germs, contributing to the spread of bacteria. It is easier for dirt and germs to collect under longer nails, so keeping them short can help reduce the risk of spreading infections.

**How to clean the nails:**

- Using sanitized tools to trim the nails and keep them short is one of the best ways to ensure that no dirt can collect underneath them.
- Scrubbing the underside of the nails with a nail brush can form part of a person's hand washing routine

**Mobility Assistance:**

- Encourage to take a small walk everyday
- Perform range of motion exercises to stay active as shown in the range of motion figure presented in Appendix 5: Range of Motion Exercises

**Assistance in activities of daily living:**

Provide help in:

- Bathing if necessary
- Feeding if necessary
- Dressing
- Continence care
- Toileting
- Transferring

:

For eating:

- Make sure the elderly has a balanced meal and plenty of healthful fluids like water or juice.
- Encourage them to eat independently if capable

- Serve finger foods that are easy to handle and eat.
- Use adaptive equipment such as plate protectors or silverware with specially constructed handles.
- Do not force them to eat. Try to persuade the person to eat and figure out why they are not eating.

For bathing:

- To avoid falls, remove or fasten throw rugs.
- It's possible that a full bath isn't required every day so a sponge bath instead can be better
- Check for the temperature of the water in the bath or shower
- Use bath chair with handrails when giving bath in the tub and place rubber mats to prevent slipping
- Use a handheld shower head
- Ensure that the bathroom is warm and had adequate lightning
- Allow the individual to wash himself or herself (if able). If needed, assist them in following simple directions through each stage. Another option is to put your hand on top of theirs to help with the cleaning process.
- Ensure that the genital areas, difficult to reach areas, and areas that are underneath skin folds are well cleaned and dried after the bath
- Avoid rubbing the skin and pat instead
- Apply lotion to keep the skin moisturized
- Never leave a frail or confused elderly unattended in the shower

For dressing:

- If the elderly can dress him/herself, lay out the clothes in the order they need to put in
- Buy comfortable clothes that are loose-fitting
- Buy clothes that are easy to put on and take off

For using the toilet:

- Apply safety features in the bathroom like raised toilet seats and grab bars
- Ensure the availability of urinal or bedside commode that could be helpful in case getting to bathroom is hard especially at night
- Schedule a routine bathroom visits to prevent accidents
- Inform the doctor if there is any sign of incontinence

**Monitoring changes in physical conditions and corresponding course of action:**

- In case of severe dyspnea and shortness of breath, that is not resolving on medication  
→call the Red Cross on 140.
- In case of a pulse below 60 )→ call the attending physician for instructions if available  
or the Red cross on 140
- In case of severe headache and changes in vision → call the Red Cross on 140 or the  
attending physician for instructions if available

**Engaging the elderly in a cognitive activity:**

Cognitive activities help maintain their brain and cognitive abilities like memory, thinking, attention, and reasoning skills. Such activities may include:

- Puzzles
- Sudoku on the phone

- Recall names of people or places
- Remembering an event that happened in the past with the exact time and place
- Trying to do mental calculation

**Assistance in home medication:**

- ❖ Keep an updated record and list of all the medications the elderly is taking
- ❖ Ensure the elderly is taking the right medication, at the right time, through the right route, and the right dosage
- ❖ Ensure the proper storage of medications at home (in the proper location) and keep them stored all together in one place unless a medication needs to be stored in a cool place (refrigerated)
- ❖ Be sure to store all the medications in a safe place away from the elderly if they have cognitive and memory problems
- ❖ Avoid mixing different medications together in the same container
- ❖ Try to store the medication in a cool dry place away and avoid storing in the bathroom cabinet or kitchen due to heat and moisture that can cause deterioration
- ❖ Try to store the medications in specific areas in the bedroom, dining room, or living room
- ❖ Store the refrigerated medications in a specific plastic box away from the other items in the refrigerator
- ❖ Keep the oral medications placed separately from the other medications that are used externally (creams, ointments)
- ❖ Ensure the constant checking for expiration dates of the medications and discard the expired ones

- ❖ Avoid sharing or exchanging medications with others
- ❖ In case of doubts for any medication, try to ask the doctor or pharmacists

### **Healthy Lifestyle Interventions:**

#### **Low salt diet:**

1. Reduce salt consumption at home by:
  - Not adding salt during the preparation of the meal
  - Limiting salty snack consumption
  - Not having saltshaker on the table
  - Choosing products with lower sodium content
2. Follow the DASH diet which includes the following tips:
  - Add a serving of vegetables at lunch one day and dinner at next, and add fruit at one meal or as a snack
  - Increase the use fat free and low-fat milk products to three servings per day
  - Decrease the eating of meat
  - Include two or more vegetarian- style, or meatless meals each week
  - Increase servings of vegetables, brown rice, and cooked dry beans
  - For desserts and snacks, eat fruits or foods that are low in saturated fat, cholesterol, and sugar. Such as rice cakes, unsalted nuts or seeds, raisins, fat free/low fat yogurt, popcorn with no salt and butter, or raw vegetables
  - Use fresh, frozen, or low sodium canned vegetables and fruits

#### **Low fat diet:**

- Limit the total intake of fats and oils

- Avoid butter, stick margarine, lard (animal fat), and coconut oil
- Limit the use of mayonnaise, salad dressings, gravies, and sauces except if they are homemade with low fat ingredients
- Decrease chocolate eating
- Choose low-fat and nonfat products, such as low-fat mayonnaise, low-fat peanut butter, and low-fat or fat-free salad dressings
- Use vegetable oil such as olive oil or canola oil
- Increase the use of chicken, fish, turkey, and lean meats
- Increase the use of dried beans, peas, and lentils
- In case of red meat consumption, limit it to no more than three servings per week
- Avoid fatty meats like bacon, sausage, franks, luncheon meats, and ribs
- Avoid all organ meats including liver
- Choose nonfat or fat free yogurt and milk
- Most cheeses are high in fat. Choose cheeses made from non-fat milk, such as mozzarella and ricotta cheese
- Avoid cream and sauces made from cream
- Eat a wide variety of fruits and vegetables
- Use lemon juice or vinegar on the vegetables
- Avoid adding sauces, oil, or fat to vegetables
- Choose to eat whole- grain breads, cereals, pastas, and rice
- Avoid eating high fat snack foods like cookies, pies, pastries, doughnuts, and croissants
- Avoid eating deep fried foods
- Trim visible fat off meats and remove skin from poultry before cooking

- Try to bake, boil, or roast the chicken, fish, or lean meats
- Drain and discard fat that drains out of meat as you cook it
- Use herbs or no-oil marinades to flavor foods

### **Importance of non-smoking:**

- Improves health status and boosts quality of life
- Reduces the risk of premature death and can add 10 years to life expectancy
- Decreases the risk for many health effects such as cardiovascular disease, chronic obstructive pulmonary disease (COPD), poor reproductive health outcomes, and cancer
- Reduces the risk of cancers including cancer of the stomach, pancreas, lung, liver, cervix, colon, rectum, and acute myeloid leukemia (AML)
- Reduces the risk of diabetes and helps the blood vessels to work better
- Benefits the people who are already diagnosed with coronary heart disease or COPD
- Benefits the health of pregnant women and their fetuses
- Diminishes the financial burden that smoking places on the people who smoke, their families, healthcare systems, and the society
- Ability to do ordinary activities like climbing stairs or a housework
- Better smell of your breath, clothes, and hair

### **Importance of physical activity:**

- Promotes weight reduction
- Helps in reducing blood pressure
- Reduces the “bad ”cholesterol levels in the blood, as well as the total cholesterol, and can raise the “good” cholesterol



- Decreases the chance of having a heart attack or any other cardiac event like stroke, and reduces the possibility of needing a coronary revascularization procedure
- Improves muscular strength and function
- Improves the body's ability to take in, use, and transport oxygen which allow the performance of regular daily activities with less fatigue
- Helps in the improvements of quality-of-life measures like more self-confidence, lower stress, and less anxiety
- Reduces the risk of non-communicable diseases such as cardiovascular disease, stroke, diabetes, and some types of cancer
- Improves mental health
- Delays the onset of dementia
- Improves the quality of life and well-being

## CHAPTER V DISCUSSION

The older population in the world is growing which means an increase in the chronic diseases and conditions that will require more medical services. However, not all elderlies have accessibility or financial capability to these services. In addition, those elderlies who suffer from chronic conditions like hypertension, diabetes, stroke, cancer, fractures, chronic obstructive pulmonary disease, arthritis, and heart disease require assistance and have needs in different aspects of their lives. For example, they need assistance in their activities of daily living (eating, bathing, dressing, toileting, transferring to or from the bed or chair, and walking or moving inside the house), managing their medications, housework, and mental functions. Many elderlies prefer to get the help they need in their homes instead of going to the hospital, which is why home care services is highly recommended. It is more cost effective and less expensive than hospital admissions; it reduces hospital-acquired infections that the seniors are at risk for more than any other population, and it encourages independence and promotes high quality of life for the older adults.

For example, a study done by Leff et al. (2005) showed that the hospital care for older adults costs 7480\$ which is more expensive compared to home care. In addition, elderlies who receive home care save the system around 6500\$ over a year and most importantly the hospital readmissions are decreased (National Association for Home Care and Hospice, 2017). That is why it is important to encourage home care and train informal caregivers to provide efficient care.

The proposed educational program for informal caregivers included 12 sessions that tackled the following information: Importance of homecare services, hygiene care and its

importance, importance of fall prevention, mobility assistance, assistance in activities of daily living, monitoring changes in physical conditions, engaging elderlies in cognitive activities, assistance in home medications, and interventions related to healthy lifestyle. In addition, the program addressed the use of several assessment tools such as the Katz index of independence in activities of daily living, the Mini-mental state examination, and the home safety self-assessment tool. Those sessions are to be given by a registered nurse who is a trained healthcare professional.

This type of program significantly affects the quality of life for elderlies. It allows them to stay at home in their familiar surrounding with their belongings, which will provide them with more comfort and help them receive the needed medical treatment without going to the hospital. In addition, this program allows elderlies to keep up with a daily routine, especially in their activities of daily living; the most important thing is that it reduces their feeling of loneliness since they will be spending time with a companion and not alone the whole time (Tay et al, 2021). Moreover, such a program improves and increases the use of home care for elderlies, decreases hospital admissions and stays and decreases healthcare costs. Thus, the elderly will be receiving quality care from competent caregivers. (World Health Organization, 2015).

Care of an older adult that has multiple needs can be very challenging and require multiple skills. This can cause stress, depression, and burden to the caregivers especially if they lack the appropriate knowledge to provide correct care. Many family or informal caregivers are providing care for their elderlies at home (like giving medications, assisting with activities of daily living, and monitoring vital signs) without being properly trained to do so. That is why training programs for the caregivers are offered and have proven to have positive effects (Brown et al, 2012). The most important effect is that it increases the confidence of the caregivers in their

abilities to provide the required care correctly and increases their satisfaction in the caregiving role (Brown et al, 2012). Those types of programs were also proven to decrease the incidence of depression among caregivers and improves their self-care (Cho, et al, 2019). When the caregivers become confident in the care they are providing to the elderlies, their psychological well-being will be better, and this will affect the people they are caring for.

Although these types of programs have positive outcomes for the elderlies and their caregivers, those benefits may diminish with time if the program is not properly sustained (Cho, et al, 2019). We cannot know if the caregivers are still doing what they have learned after their training or if they are still doing it correctly. Regular follow-up and monitoring are needed to maintain and reinforce the acquired learning in order to sustain the benefits of such programs on the caregivers and elderlies.

Moreover, sometimes those programs are challenging to implement because not all caregivers will take it seriously and actually apply what they have learned. In addition, some will not even participate in it since they might think they already know and are satisfied with what they are doing (Burgdorf et al, 2022). That is why more research about the factors (their interests, level of commitment) that can affect the participation of the caregivers in such programs is recommended to work on those factors and help them overcome them (Friedman et al, 2020). Moreover, we can expect attrition because some participants may start and not be able to continue the whole training. (Reinhard et al, 2008).

In addition, it is hard to find someone that can help in the funding of such programs because some people or organizations will find it unnecessary, and that simple education can be done in clinic during a doctor's visit.

Information about home care and its importance to both elderlies and their caregivers is still lacking and not enough; that is why, more research and publication in that domain are needed. Furthermore, there are few training programs for family caregivers and informal caregivers at home; therefore, developing such programs and encouraging its implementation is highly recommended.

## CHAPTER VI CONCLUSION

In Lebanon, the majority of the population in the community are the elderlies. This population is more susceptible to chronic illnesses like cardiovascular disease, stroke, cancer, diabetes, respiratory problems, arthritis, eye problems (glaucoma), and genitourinary problems. All these diseases require frequent visitation to health care center, which is sometimes hard because of the lack of financial capability, and accessibility to health care. That is why sometimes family caregivers or informal caregivers (like neighbors) provide the care needed to elderlies without having the necessary knowledge and skills. Therefore, a training program with educational sessions about the basic of home care is required to train and educate the caregivers and improve their caring abilities. As a result, the elderly will receive a good quality of care that will positively affect their quality of life, and the caregivers will gain more confidence in their skills that will decrease their stress, anxiety, and the feeling of burden.

## APPENDIX

*(If not available, delete this page)*

### Appendix 1: Katz Index of Independence in Activities of Daily Living

Patient Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Patient ID # \_\_\_\_\_

<b>Katz Index of Independence in Activities of Daily Living</b>		
<b>Activities</b> Points (1 or 0)	<b>Independence</b> (1 Point)	<b>Dependence</b> (0 Points)
	<b>NO</b> supervision, direction or personal assistance.	<b>WITH</b> supervision, direction, personal assistance or total care.
<b>BATHING</b> Points: _____	<b>(1 POINT)</b> Bathes self completely or needs help in bathing only a single part of the body such as the back, genital area or disabled extremity.	<b>(0 POINTS)</b> Need help with bathing more than one part of the body, getting in or out of the tub or shower. Requires total bathing
<b>DRESSING</b> Points: _____	<b>(1 POINT)</b> Get clothes from closets and drawers and puts on clothes and outer garments complete with fasteners. May have help tying shoes.	<b>(0 POINTS)</b> Needs help with dressing self or needs to be completely dressed.
<b>TOILETING</b> Points: _____	<b>(1 POINT)</b> Goes to toilet, gets on and off, arranges clothes, cleans genital area without help.	<b>(0 POINTS)</b> Needs help transferring to the toilet, cleaning self or uses bedpan or commode.
<b>TRANSFERRING</b> Points: _____	<b>(1 POINT)</b> Moves in and out of bed or chair unassisted. Mechanical transfer aids are acceptable	<b>(0 POINTS)</b> Needs help in moving from bed to chair or requires a complete transfer.
<b>CONTINENCE</b> Points: _____	<b>(1 POINT)</b> Exercises complete self control over urination and defecation.	<b>(0 POINTS)</b> Is partially or totally incontinent of bowel or bladder
<b>FEEDING</b> Points: _____	<b>(1 POINT)</b> Gets food from plate into mouth without help. Preparation of food may be done by another person.	<b>(0 POINTS)</b> Needs partial or total help with feeding or requires parenteral feeding.
<b>TOTAL POINTS:</b> _____ <b>SCORING:</b> 6 = High ( <i>patient independent</i> )    0 = Low ( <i>patient very dependent</i> )		

Source:  
 by this: Best Practices in Nursing Care to Older Adults, The Hartford Institute for Geriatric Nursing, New York University, College of Nursing, [www.hartfordign.org](http://www.hartfordign.org)


MaineHealth

Appendix 2: Mini-Mental Health State Examination

## Mini-Mental State Examination (MMSE)

Patient's Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Instructions: Score one point for each correct response within each question or activity.**

Maximum Score	Patient's Score	Questions
5		"What is the year? Season? Date? Day? Month?"
5		"Where are we now? State? County? Town/city? Hospital? Floor?"
3		The examiner names three unrelated objects clearly and slowly, then the instructor asks the patient to name all three of them. The patient's response is used for scoring. The examiner repeats them until patient learns all of them, if possible.
5		"I would like you to count backward from 100 by sevens." (93, 86, 79, 72, 65, ...) Alternative: "Spell WORLD backwards." (D-L-R-O-W)
3		"Earlier I told you the names of three things. Can you tell me what those were?"
2		Show the patient two simple objects, such as a wristwatch and a pencil, and ask the patient to name them.
1		"Repeat the phrase: 'No ifs, ands, or buts.'"
3		"Take the paper in your right hand, fold it in half, and put it on the floor." (The examiner gives the patient a piece of blank paper.)
1		"Please read this and do what it says." (Written instruction is "Close your eyes.")
1		"Make up and write a sentence about anything." (This sentence must contain a noun and a verb.)
1		"Please copy this picture." (The examiner gives the patient a blank piece of paper and asks him/her to draw the symbol below. All 10 angles must be present and two must intersect.)  
30		TOTAL



Score	Degree of Impairment	Formal Psychometric Assessment	Day-to-Day Functioning
25-30	Questionably significant	If clinical signs of cognitive impairment are present, formal assessment of cognition may be valuable.	May have clinically significant but mild deficits. Likely to affect only most demanding activities of daily living.
20-25	Mild	Formal assessment may be helpful to better determine pattern and extent of deficits.	Significant effect. May require some supervision, support and assistance.
10-20	Moderate	Formal assessment may be helpful if there are specific clinical indications.	Clear impairment. May require 24-hour supervision.
0-10	Severe	Patient not likely to be testable.	Marked impairment. Likely to require 24-hour supervision and assistance with ADL.

### Appendix 3: Home Safety Checklist

#### Patient Assessment Tool--Home Safety Checklist

Date: \_\_\_\_\_ Name: \_\_\_\_\_

*Any "no" answers indicate a potentially dangerous situation in your home.  
Try to correct them AS SOON AS POSSIBLE to prevent a fall or other accident!  
Circle either Y (yes) or n (no) for each of the following items:*

#### HOUSEKEEPING

1. Y | n : Do you clean up spills as soon as they occur?
2. Y | n : Do you keep floors and stairways clean and free of clutter?
3. Y | n : Do you put away books, magazines, sewing supplies and other objects as soon as you're through with them and never leave them on floors or stairways?
4. Y | n : Do you store frequently used items on shelves that are within easy reach?

#### FLOORS

1. Y | n : Do you keep everyone from walking on freshly washed floors before they're dry?
2. Y | n : If you wax floors, do you apply 2 thin coats and buff each thoroughly or else use self-polishing, nonskid wax?
3. Y | n : Do all small rugs have nonskid backings?
4. Y | n : Have you eliminated small rugs at the tops and bottoms of stairways?
5. Y | n : Are all carpet edges tacked down?
6. Y | n : Are rugs and carpets free of curled edges, worn spots and rips?
7. Y | n : Have you chosen rugs and carpets with short, dense pile?
8. Y | n : Are rugs and carpets installed over good-quality, medium-thick pads?

## **BATHROOM**

1. Y | n : Do you use a rubber mat or nonslip decals in the tub or shower?
2. Y | n : Do you have a grab bar securely anchored over the tub or on the shower wall?
3. Y | n : Do you have a nonskid rug on bathroom floor?
4. Y | n : Do you keep soap in an easy-to-reach receptacle?

## **TRAFFIC LANES**

1. Y | n : Can you walk across every room in your home, and from one room to another, without detouring around furniture?
2. Y | n : Is the traffic lane from your bedroom to the bathroom free of obstacles?
3. Y | n : Are telephone and appliance cords kept away from areas where people walk?

## **LIGHTING**

1. Y | n : Do you have light switches near every doorway?
2. Y | n : Do you have enough good lighting to eliminate shadowy areas?
3. Y | n : Do you have a lamp or light switch within easy reach from your bed?
4. Y | n : Do you have night lights in your bathroom and in the hallway leading from your bedroom to the bathroom?
5. Y | n : Are all stairways well lighted?
6. Y | n : Do you have light switches at both the tops and bottoms of stairways?

## **STAIRWAYS**

1. Y | n : Do securely fastened handrails extend the full length of the stairs on each side of stairways?
2. Y | n : Do rails stand out from the walls so you can get a good grip?
3. Y | n : Are rails distinctly shaped so you're alerted when you reach the end of a stairway?
4. Y | n : Are all stairways in good condition, with no broken, sagging or sloping steps?
5. Y | n : Are all stairway carpeting and metal edges securely fastened and in good condition?
6. Y | n : Have you replaced any single-level steps with gradually rising ramps or made sure such steps are well lighted?

## **LADDERS AND STEP STOOLS**

1. Y | n : Do you have a sturdy step stool that you use to reach high cupboard and closet shelves?
2. Y | n : Are all ladders and step stools in good condition?
3. Y | n : Do you always use a step stool or ladder that's tall enough for the job?
4. Y | n : Before you climb a ladder or step stool, do you always make sure it's fully open and that the stepladder spreaders are locked?
5. Y | n : When you use a ladder or step stool, do you face the steps and keep your body between the side rails?
6. Y | n : Do you avoid standing on top of a step stool or climbing beyond the second step from the top on a stepladder?

## **OUTDOOR AREAS**

1. Y | n : Are walks and driveways in your yard and other areas free of breaks?
2. Y | n : Are lawns and gardens free of holes?
3. Y | n : Do you put away garden tools and hoses when they're not in use?
4. Y | n : Are outdoor areas kept free of rocks, loose boards and other tripping hazards?
5. Y | n : Do you keep outdoor walkways, steps and porches free of wet leaves and snow?
6. Y | n : Do you sprinkle icy outdoor areas with deicers as soon as possible after a snowfall or freeze?
7. Y | n : Do you have mats at doorways for people to wipe their feet on?
8. Y | n : Do you know the safest way of walking when you can't avoid walking on a slippery surface?

## **FOOTWEAR**

1. Y | n : Do your shoes have soles and heels that provide good traction?
2. Y | n : Do you wear house slippers that fit well and don't fall off?
3. Y | n : Do you avoid walking in stocking feet?
4. Y | n : Do you wear low-heeled oxfords, loafers or good-quality sneakers when you work in your house or yard?
5. Y | n : Do you replace boots or galoshes when their soles or heels are worn too smooth to keep you from slipping on wet or icy surfaces?

## **PERSONAL PRECAUTIONS**

1. Y | n : Are you always alert for unexpected hazards such as out-of-place furniture?

2. Y | n : If young grandchildren visit, are you alert for children playing on the floor and toys left in your path?
3. Y | n : If you have pets, are you alert for sudden movements across your path and pets getting underfoot?
4. Y | n : When you carry bulky packages, do you make sure they don't obstruct your vision?
5. Y | n : Do you divide large loads into smaller loads whenever possible?
6. Y | n : When you reach or bend, do you hold onto a firm support and avoid throwing your head back or turning it too far?
7. Y | n : Do you always use a ladder or step stool to reach high places and never stand on a chair?
8. Y | n : Do you always move deliberately and avoid rushing to answer the phone or doorbell?
9. Y | n : Do you take time to get your balance when you change position from lying down to sitting and from sitting to standing?
10. Y | n : Do you hold onto grab bars when you change position in the tub or shower?
11. Y | n : Do you keep yourself in good condition with moderate exercise, good diet, adequate rest and regular medical checkups?
12. Y | n : If you wear glasses, is your prescription up to date?
13. Y | n : Do you know how to reduce injury in a fall?
14. Y | n : If you live alone, do you have daily contact with a friend or neighbor?

#### **Appendix 4: Caregiving Appraisal Scales**

##### **Revised Caregiving Appraisal Scales**

A. Series...I would like to talk about some feelings you may be having in caring for your (mother, etc.). Please tell me whether you

---

5 = AGREE A LOT

---

4 = AGREE A LITTLE

---

3 = NEITHER

---

2 = DISAGREE A LITTLE

---

1 = DISAGREE A LOT

---

B. Series...Tell me how often you feel each way.

---

5 = NEARLY ALWAYS

---

4 = QUITE FREQUENTLY

---

3 = SOMETIMES

---

2 = RARELY

---

1 = NEVER

---

Items followed by (R) are reversed in coding prior to adding to each index.

---

Caregiving burden (high score is burdened)

---

A. I can fit in most of the things I need to do in spite of the time it takes to care for E. (R)

---

A. Taking care of E gives me a trapped feeling.

---

B. How often do you feel that your health has suffered because of the care you must give E?

---

B. How often do you feel that because of the time you spend with E you don't have enough time for yourself?

---

B. How often do you feel that your social life has suffered because you are caring for E?

---

B. How often do you feel very tired as a result of caring for E?

---

B. How often do you feel you will be unable to care for E much longer?

---

B. How often do you feel isolated and alone as a result of caring for E?

---

B. How often do you feel that you have lost control of your life because of caring for E?

---

Caregiving satisfaction (high score is satisfied)

---

A. I get a sense of satisfaction from helping my E.

---

B. How often do you feel that helping E has made you feel closer to him/her?

---

B. How often do you feel that you really enjoy being with E?

---

B. How often do you feel that taking responsibility for E gives a boost to your self-esteem?

---

B. How often do you feel that E's pleasure over some little thing gives you pleasure?

---

B. How often do you feel that caring for E gives more meaning to your life?

---

Caregiving mastery (high score is mastery)

---

A. I feel able to handle most problems in care of E.

---

A. I am pretty good at figuring out what E needs.

---

B. How often do you feel reassured knowing that as long as you are helping E, she/he is getting proper care?

---

B. How often do you feel uncertain about what to do about E? (R)

---

B. How often do you feel that you should be doing more for E? (R)

---

B. How often do you feel that you could do a better job in caring for E? (R)

---

Caregiving demands (high score is demanding)

---

B. How often do you feel that E is too demanding?

---

B. How often do you feel that nothing you can do seems to please E?

---

B. How often do you feel that E shows real appreciation of what you do for him/her? (R)

---

Caregiving impact (high score is unfavorable impact)

---

B. How often do you feel that caring for E does not allow you as much privacy as you would like?

---

B. How often do you feel uncomfortable about having friends over because of E?

---

B. How often do you feel that caring for E has interfered with the use of space in your home?

---

*Note:* E = elder, the care receiver's name, or relationship to caregiver (e.g., "your mother")

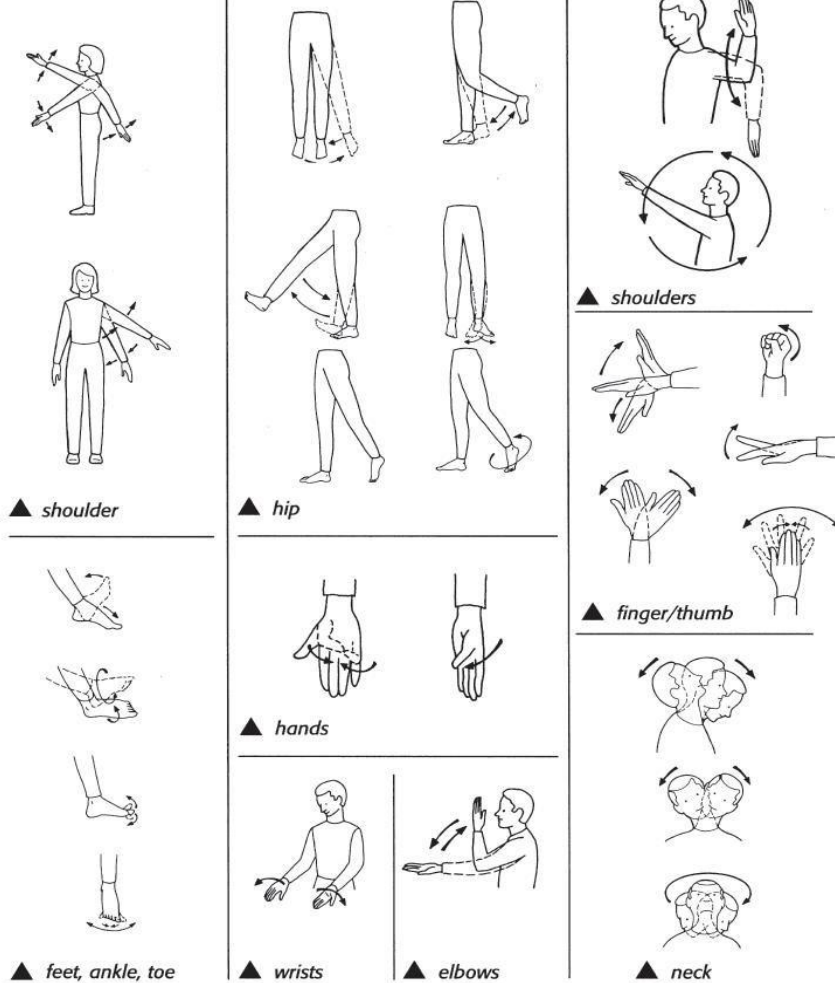
## **Appendix 5: Range of Motion Exercises**

# Range of Motion Exercises (ROM)

Here are some things to do when you are asked to help the person in your care exercise at home:

- Communicate what you are doing.
- Use the flat palms of both hands, not the fingertips, to hold a body part.
- Take each movement only as far as the joint will go into a comfortable stretch. (Mild discomfort is okay, but it should go away quickly.)
- Do each exercise 3 to 5 times.
- Use slow, steady movements to help relax muscles and increase joint range.
- If joints are swollen and painful, exercise very gently.

## Joints Used in ROM



Source: *The Comfort of Home: A Complete Guide for Caregivers*



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