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# Assessing Knowledge of Older Adults' Caregivers about Goals, Mission, and Values of Home Health Care at KAMC in Riyadh

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#### **Abstract**

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BACKGROUND: Older adults suffer from several underlying diseases and conditions. Furthermore, their physical and mental health gradually deteriorated over time which made this population need care from others. Homecare healthcare is the direct provision of clinical services and/or medical supplies to patients in their homes. Caregivers play a critical role in providing efficient care for elders and they can be family members or hired professionals.

AIM: The study aimed to assess the awareness of older adults' caregivers about the goals, mission, and values of home health care (HHC) at King Abdulaziz Medical City (KAMC) in Riyadh and the factors affecting their knowledge

METHODS: This cross-sectional descriptive research was conducted on all caregivers of older adults at the HHC department at KAMC, Riyadh between the periods from December 15, 2023, to April 15, 2023. The study was conducted using a standardized self-administered questionnaire that involved three parts. Analysis of data was carried out by SPSS software version 24.

RESULTS: A number of 302 participants were enrolled; 58.3% were males and 36.4% were daughters of the patients. There were 92.4%, 87.7%, and 78.1% knew about the goals, mission, and values of HHC, respectively. There 75.2% and 85.8% knew about the services and focus of HHC. The mean ± SD of knowledge score was 12.75 ± 4.05. Significant correlations were found between the mean score of knowledge and nationality (p = 0.02) and the relation of the participant to the patient (p = 0.007).

CONCLUSION: Caregivers of older adults exhibited good knowledge regarding the goals, mission, and values of HHC. Furthermore, there was general good knowledge, but with few gaps. Nationality and relation to the patient were the only significant factors associated with knowledge.

## Introduction

The continuous progression in healthcare and improvement of technology related to diseases led to the improvement in human life expectancy over the years [1], [2]. It was estimated that there will be two billion individuals over the age of 60 years by 2050 with 80% of them living in developing countries [3]. The term older adults vary based on different purposes and perspectives; conventionally, the focus was on individuals aged 60 years and older, whereas researchers identified subgroups of older adults as younger old of 65-75 years, and older whose age 75-85 years and oldest old whose age is older than 85 years [4]. The elderly population suffers from various underlying diseases and conditions and they include weakness, stumbles, delirium, and others [5]. The physical and mental health of the elderly population gradually deteriorated over time with increased risk of disease and eventually, death [5]. Aging is often accompanied by chronic diseases and a continuous decline in physical and mental independence which makes caregiving more complex and challenging [6].

The burden of disease is shifting globally from acute, life-threatening infectious diseases to chronic, disabling non-communicable diseases linked to population aging. This change can result in limits, such as functional disability that are either temporary or permanent, and a lower quality of life. The rising expenses of healthcare and long-term care make this a significant concern for the healthcare delivery system [7]. The aging of the population and the growth of the very oldest segments are associated with the transition from informal to formal home healthcare (HHC) delivery [8], [9]. The national clinical homecare association defined HHC as the direct delivery of clinical services and/or medical supplies to community patients [10].

The growing issues related to health and deterioration of the elderly health necessitate providing better caregiving options for those populations, especially for the increasing number of this growing population [2]. Caregivers play a critical role in providing efficient care for elders [11]. Caregivers play a role in the emotional, physical, psychological, and sometimes financial assistance of the older population who cannot care

themselves [12]. The caregiver can be a family member, hired professional, or friend and their roles can vary widely based on the specific circumstances and needs of the individual who receives care [13]. Informal caregivers are the cornerstone of long-term care for individuals who require assistance due to disease, age, or disability [14]. However, caregivers may perform their roles in helping elderly patients with inadequate or no knowledge of support, care, assistance, and information [15], [16]. In addition, there is no previous Saudi study that investigated the knowledge of caregivers regarding HHC. Therefore, this study aimed to assess the knowledge of older adults' caregivers about the goals, mission, and values of HHC at King Abdulaziz Medical City (KAMC) in Riyadh and the factors affecting their knowledge level.

# **Subjects and Methods**

## Settings and subjects

This study was cross-sectional descriptive and was conducted at the HHC department at KAMC, Riyadh between the period from December 15, 2023 to April 15, 2023. The study was conducted on all caregivers of older adults in KAMC, whereas caregivers outside KAMC were excluded. Confidentiality was assured for the participants. Informed consent was obtained from all the participating caregivers before the beginning of the study and approval was obtained from KAIMRC.

#### Study tool and analysis

The study was carried out using a standardized self-administered questionnaire adapted and modified from a previous study. The questionnaire was distributed among the participants in a hard copy during a home visit or by electronic mobile sheet. The questionnaire involved three parts; the first investigated sociodemographic data, the second part investigated knowledge and attitude regarding goals, mission, and values of HHC at AMC and the third section investigated the knowledge of goals, mission, and values of HHC at KAMC among the caregivers. The questions in the questionnaire consisted of 24 multiple-choice questions.

Analysis of data was carried out by SPSS software version 24; descriptive statistics were represented in frequency and proportion or mean and standard deviation based on the type of data. Caregiver's scores are compared based on their demographics. The Chi-square test was used to compare different subgroups for nominal variables. A p = 0.05 was considered significant.

#### Results

A total of 302 participants were included; there 93 (30.8%) of the participants aged 24–30 years and more than one-half were males 176 (58.3%). The largest proportion of the participants were daughters of the elders 110 (36.4%) and the most predominant duration of taking care of the elders was 1–2 years as reported by 74 (24.5%) and 2–3 years as reported by 72 (23.8%) of the participants. There 98 (32.5%) reported duration of 1–2 years of service under HHC. The major provided care was provided to stable geriatric with comorbidities 115 (38.1%), Table 1.

Table 1: Sociodemographic characteristics of study participants

Variable	Count	Table n %
Age		
24–30	93	30.8
30–35	77	25.5
35–40	64	21.2
>40	68	22.5
Gender		
Male	176	58.3
Female	126	41.7
Nationality		
Saudi	296	98.0
Non-Saudi	6	2.0
Relation to patient		
Daughter	110	36.4
Son	70	23.2
Wife	29	9.6
Husband	19	6.3
Sister/brother	44	14.6
other	30	9.9
How many months/year have you been taking care of patier	nts?	
1–2 years	74	24.5
2–3 years	72	23.8
4–5 years	34	11.3
>5 years	60	19.9
<6 months	62	20.5
Duration of service under home health care		
1–2 years	98	32.5
2–3 years	67	22.2
4–5 years	25	8.3
>5 years	39	12.9
<6 months	73	24.2
Your patient under home health care for?		
Palliative	16	5.3
Stable geriatric with comorbidities	115	38.1
Stable geriatric with comorbidities and anticoagulant	14	4.6
Stable geriatric with comorbidities and anticoagukant	10	3.3
and wound care		
Stable Geriatric with comorbidities and tracheostomy	47	15.6
Tracheostomy	42	13.9
Wound care	27	8.9
Wound care and anticoagulant	14	4.6
Other	17	5.6

knowledge regarding HHC investigated through ten questions, the questions and the answers of the participants are displayed in Table 2. It was found among the caregivers that the largest proportions knew about the goals (92.4%), mission (87.7%), values (78.1%), and services (75.2%) of HHC. Furthermore, the largest proportions knew the focus of HHC (85.8%), the design of HHC (85.8%), the role of HHC in delivering patient-centered care in the comfort of their own homes (88.7%), and the role in providing direct care (81.5%). Furthermore, 84.8% knew that HHC ensures that all staff members are highly trained, skilled, and dedicated to providing exceptional care and ensuring the benefits of patients (86.4%).

There were seven questions that investigated the knowledge about HHC among the participants

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Table 2: Knowledge of study participants about home healthcare

Knowledge	Yes (%)		May be		No		Do not know	
	n	%	n	%	n	%	n	%
Do you know the GOALS of home health care?	279	92.4	14	4.6	7	2.3	2	0.7
Do you know the MISSION of home healthcare?	265	87.7	16	5.3	17	5.6	4	1.3
Do you know the VALUES of home healthcare?	236	78.1	31	10.3	29	9.6	6	2.0
Do you know the SERVICES provided by home healthcare			44	14.6	24	7.9	7	2.3
HHC focuses on prevention, handling cases quickly and effectively to prevent patients from ER urgent visits, reduce			18	6.0	17	5.6	8	2.6
inpatient admission, decrease hospital length of stay, re-admission, and OPD visit								
HHC ensures that all staff members are highly trained, skilled, and dedicated to providing exceptional care	256	84.8	22	7.3	17	5.6	7	2.3
HCC is designed to help patients recover from all kinds of illness or injury, manage chronic conditions and commits to	259	85.8	20	6.6	17	5.6	6	2.0
achieving optimal physical, psychological, social, and spiritual outcomes								
The HHC is committed to delivering patient-centered care in the comfort of their own homes while promoting	268	88.7	15	5.0	14	4.6	5	1.7
independence, safety, and well-being								
In addition to providing direct patient care, the department is also involved in medical research, education, and training.	246	81.5	27	8.9	17	5.6	12	4.0
We strive to be a world-class healthcare an organization that is recognized for its excellence in patient care, research								
and education								
The department ensures that patients benefit fully from the medical treatment, protecting them from different diseases	261	86.4	21	7.0	16	5.3	4	1.3
and illnesses, allowing them to adapt to their home's environment, focusing on utilizing all available resources	_0.	23			. •	2.0		

HHC: Home healthcare, ER: Emergency room, OPD: Outpatient department, HCC: Hepatocellular carcinoma.

(Table 3). The largest proportion of the participants reported no age limit to consider patients for HHC based on condition and the need for HHC services 205 (67.9%) and 155 (51.3%) reported one person per month should have a Fu routine visit. There 224 (74.2%) subjects stated contacting a HHC physician in case of medical concern about the patient and 198 (65.6%) agreed about the virtual clinic under HHC. More than one-half also knew that a HHC team provided the needed vaccine for the patient and 207 (68.5%) reported the presence of a rapid response team for any case that needed urgent care, whereas 137 (45.4%) denied that HHC provided postpartum care.

Table 3: Level of knowledge about home health care among study participants

Level of knowledge	Count	n %
What is the optimal age to consider a patient for home health care?		
60-70 years	43	14.2
>70 years	17	5.6
No age limit it's based on condition and the need for HHC services	205	67.9
Do not know	37	12.3
How often a person should have Fu routine visit if the patient is stable		
1/month	155	51.3
After 6 months	18	6.0
Any time	114	37.7
Do not know	15	5.0
If you have any medical concerns about the patient what will be your first step?		
Contact HHC physician	224	74.2
Approach MRP	16	5.3
Go to ER	53	17.5
Do not know	9	3.0
There is a virtual clinic under home health care do you about it?		
May be	22	7.3
No	64	21.2
Do not know	18	6.0
Yes	198	65.6
Do you know that the Home health care team		
provided the needed vaccine for the		
May be	24	7.9
No	81	26.8
Do not know	11	3.6
Yes	186	61.6
Home health care provides postpartum care as well, do you know about it?		
May be	22	7.3
No	137	45.4
Do not know	22	7.3
Yes	121	40.1
There is a Rapid Response Team for any case		
that needs urgent care, do you know about it?		
May be	18	6.0
No	58	19.2
Do not know	19	6.3
Yes	207	68.5
HHC: Home Health Care, ER: Emergency room, MRP: Material requirements planning.		

HHC: Home Health Care, ER: Emergency room, MRP: Material requirements planning.

The score of knowledge ranged between 0 and 17 with a mean  $\pm$  SD of 12.75  $\pm$  4.05 with a mean percentage of 75.03% (Table 4).

Table 4: The overall level of knowledge

Score	Minimum	Maximum	Mean	SD
No score	0.00	17.00	12.7550	4.05029
Know percent	0	100	75.03	23.8

SD: standard deviation.

The correlations between the demographics of the participants and the mean score of knowledge were evaluated (Table 5). A significant correlation was found between nationality and the mean score of knowledge (p = 0.02), where Saudi participants scored a higher mean score of knowledge compared to non-Saudi participants. Furthermore, there was a significant correlation between the relation between the patient and caregiver with the mean score of knowledge (p = 0.007) and the wife scored the highest mean score among others. On the other hand, the other evaluated factors, including age, gender, duration of taking care of the patient, and being under the service of HHC did not display significant correlations with the knowledge.

Table 5: Relation of knowledge score percent with sociodemographic

Variable	Mean	SD	p-valu
Age			
24-30	70.2720	25.41021	0.065
30-35	74.2552	22.98200	
35-40	79.2279	23.19957	
>40	78.4602	22.30368	
Gender			
Male	75.0000	22.98961	0.98
Female	75.0700	25.03897	
Nationality			
Saudi	75.4769	23.55819	0.022
Non-Saudi	52.9412	28.81753	
Relation to patient			
Daughter	75.6150	22.06501	0.007
Son	75.6303	23.64180	
Wife	78.7018	23.49860	
Husband	55.7276	34.09558	
Sister/brother	77.0053	22.50929	
Other	77.2549	21.33440	
How many months/year	you are taking care of the	ne patient?	
<6 months	67.6471	27.06658	0.097
1-2 years	77.0270	20.14708	
2–3 years	77.0425	22.79636	
4–5 years	74.9135	27.97971	
>5 years	77.8431	22.31057	
Duration of service und	er home healthcare		
<6 months	73.0056	23.23831	0.088
1-2 years	71.9688	25.90771	
2–3 years	75.4170	24.25195	
4–5 years	77.8824	22.41735	
>5 years	84.0121	17.33200	

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## Discussion

Every day, caregivers are expected to complete a variety of complex activities for older adults [17]. This study was conducted on caregivers to assess their knowledge about the goals, mission, and values of HHC at KAMC in Riyadh. Informal caregivers can be spouses, siblings, adult children, or other relatives who take the role of caregiver out of love, a deep sense of commitment, and compassion [14]. In the present study, the daughter was the major caregiver, followed by the son. Family caregiving was reported to be a common phenomenon in Sub-Saharan Africa where the younger spouse which is often the wife or children are the personnel who care for their older family members [18]. However, this study found out that the wife was in the fourth rank as a caregiver following sister and brother.

Services for HHC must be specifically designed and coordinated care plans that are suited to assisting older adults in getting the assistance they require while still living in their own homes. In most cases, HHC is more convenient, less costly, and just as effective as care received in a hospital [19]. In the present study, a high proportion of the participants knew the goals, mission, values, and focus of HHC as well as the services provided by HHC. This indicates good knowledge among the caregivers regarding HHC.

In this study, a high proportion of the participants agreed that HHC ensures that all staff members are highly trained, skilled, and dedicated to providing exceptional care. Skillful caregivers are crucial for better care provided to elderly patients. In addition, skills are required for adequate knowledge and hence proper practice and better care provided to the patients; a highly significant correlation was found between the skills of caregivers and their knowledge [20].

The majority of our participants knew the role of the department in education and training for excellent patient care. A study conducted on 126 caregivers who care for the elderly at home revealed that there was a poor training program and there is a need to enhance and develop their giving skills [2]. Another Egyptian study conducted on caregivers revealed that no one of the caregivers had previous training or discussed the care goals with healthcare providers [21].

The older population is potentially at risk for experiencing adverse effects regarding their health and well-being [22]. A previous qualitative study revealed that the caregivers had knowledge about common health issues of the elderly; however, they were not informed about how to manage such conditions at home [23]. Such findings may explain the presence of a rapid response team for cases that need urgent care and more than one-half of the participants in this study knew about this rapid response team.

A previous study assessed the knowledge of caregivers regarding home care for the elderly reported an average level of knowledge among 43.9%, whereas 40.3% had poor knowledge [20]. In the present study, the overall knowledge was good as 75.03% had the knowledge and the mean score of knowledge among the participants was 12.75 out of 17 scoring as the maximum score. However, our findings indicate that there are some gaps in the knowledge of the caregivers regarding HHC, and further education and training are required.

It was stated that the knowledge of caregivers is dependent on their educational background and other factors such as workload [11]. This study revealed two factors only that correlated with knowledge score and they included nationality and relation of the caregiver to the patients. Saudi caregivers exhibited higher mean knowledge compared to non-Saudi caregivers. Although the wife was in the fourth rank as a caregiver in this study, being a caregiver wife was significantly associated with higher knowledge compared to other relations. A previous study revealed that knowledge level was significantly associated with education level and those with high education displayed a significantly high level of knowledge [002]. However, the present study did not assess the level of education of the participants.

## Conclusion

Caregivers of older adults in this study exhibited good knowledge regarding the goals, mission, values, and focus of HHC as well as the services provided by HHC. In addition, the participants reported generally good knowledge, but with few gaps that require further education and training. We could identify only two factors that affected the level of knowledge and they included nationality and relation to the patients, where Saudi participants and wives had the highest level of knowledge.

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