

# The Extent Use of Home Health Care Services among Patients in the Tabuk Region, Saudi Arabia

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## ABSTRACT

**Background:** Home health care entails a variety of services such as medical and therapeutical services, as well as different other services which will be provided at residential setting in goal of promoting, maintaining, or restoring health.

**Objectives:** To investigate the extent in using the home health care services among patients with chronic diseases or disabilities in the Tabuk region - Saudi Arabia.

**Subjects and Methods:** A retrospective cohort study was conducted among all patients who received the home health care services by home health care department at king Salman armed force hospital in Tabuk- Saudi Arabia through reviewing the diagnosis registered in patients' medical record. Data was collected and patients were divided into two categories; diseased patients and disable patients.

**Results:** The study included 105 patients; 72.3% of them aged over 62 years. More than half of them (53.3%) were females and 66.7% live in urban areas. History of chronic diseases, disability and both were reported among 10.5% 31.4% and 21.9% of the participants, respectively. Use of home health services was reported by almost half of the participants (49.5%). Patient's gender was the only factor significantly

associated with utilization of the home health care services as males were more likely to utilize these services compared to females ( $0.61 \pm 0.492$  vs.  $0.39 \pm 0.493$ ),  $p=0.025$ .

**Conclusion:** Almost half of patients who suffer from chronic diseases or disabilities, or both in Tabuk Region, Saudi Arabia use home health care services with men use home health care services more than women.

**Keywords:** Long Term, Home Health Care Services, Saudi Arabia.

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## INTRODUCTION

Home health care is the largest growing sector in the health care business. The profession is vast, approximately 1.3 million people has been employing in a range of jobs related to home health care sector, including personal assistants and aides which are around 1.2 million. Although the agencies were founded in the late 1800s, the majority of their development came after the passage of Medicare in 1965. After the 1987 Medicare changes, which resulted in easier reimbursement to home care firms, the industry grew even faster.<sup>1</sup> Several factors are responsible for this high and fast growth of home health care services, which includes Patient preference for treatment delivered in their own homes, as well as early release from acute care institutions and hospitals, in addition to aging population. This may regularly enhance pressure on home health care providers to increase quality of care and efficiency, in addition to effective cost services.<sup>2</sup>

Home health care entails a variety of services such as medical and therapeutical services, as well as different other services

which will be provided at residential setting in goal of promoting, maintaining, or restoring health, as well as maximizing independence while minimizing the effects of disability and illness.<sup>3</sup>

Home care agencies are divided into three categories: Certified home health agencies (CHHAs), Long-term home health care programs (LTHHCPs) and licensed home care services companies (LHCSAs). Certified home health agencies are permitted to offer nursing care, home health aides, personal care and housekeepers, and housekeeping services to Medicare and Medicaid patients who require short-term specialized care. Long-term home health care programs, sometimes known as "nursing homes without walls," provide services that enable patients to remain at home while meeting the requirements of a sanitarium. They are obligated to offer all CHHA services as well as case management under federally exempted family and community services. Lastly, either directly or via contracts with another

program, Licensed home care services companies provide at least one of the following services: nursing care, home health aides, personal care, private duty nursing, homemakers, and physical/occupational and speech therapy.<sup>4</sup>

In 1991, the King Faisal Specialized Hospital and Research Center in Saudi Arabia was the first to offer home health care services to patients with advanced cancer.<sup>5</sup> The Saudi Ministry of Health (MOH) developed another HHC program in 2008, which includes therapeutic, preventative, educational, rehabilitative, and social services by a certified medical team. The majority of people who get home health care are elderly.<sup>6</sup>

Different services are provided also in home health care services in king Salman Armed Force Hospital at department of home health care in Tabuk- Saudi Arabia. These services include respiratory therapy services, physiotherapy services, occupational health services as well as mental health services. Limited studies were conducted regarding the home health care services needed for different patients (chronic disease patient, disable patient or patient with both disability and chronic disease) in the Kingdom of Saudi Arabia. So, the aim of our study is to investigate the extent in using the home health care services among patients with chronic diseases or disabilities in the Tabuk region - Saudi Arabia.

**SUBJECTS AND METHODS**

A retrospective cohort study was conducted among all patients who received the home health care services by home health care department at king Salman armed force hospital in Tabuk- Saudi Arabia through reviewing the diagnosis registered in patients' medical record.

Data was collected and patients were divided into two categories; diseased patients and disable patients. Then inquiry about the use of home health care services among chronic disease patients and

disable patients was implemented. In addition, demographic characteristics as well as socioeconomic factors were studied too. Ethical approval of the study protocol was obtained from the Research and Ethics Committee at King Salman Armed Forces hospital in Tabuk, Saudi Arabia.

A score was created for home health care services (Wound care, respiratory therapy service, physiotherapy service, occupational health service and mental health service) in the way that yes was given a score of 1 and no was given a score of 0 and total score was computed and used a continuous variable for comparisons.

Data entry and statistical analysis were performed using the Statistical Package for Social Sciences software, version 26. Categorical variables were described in the form of frequency and percentage whereas continuous numerical variables were described in the form of mean and standard deviation (SD). Student's t-test was utilized to compare means of two different groups and p value <0.05 was considered for statistical significance.

**RESULTS**

The demographic characteristics of the patients (n=105) are shown in Table (1). Overall, 72.3% of patients aged over 62 years. More than half of them (53.3%) were females and 66.7% live in urban areas. History of chronic diseases, disability and both were reported among 10.5% 31.4% and 21.9% of the participants, respectively as shown in Table 2.

From Figure 1, use of home health services was reported by almost half of the participants (49.5%).

Patient's gender was the only factor significantly associated with utilization of the home health care services as shown in Table 3 as males were more likely to utilize these services compared to females (0.61±0.492 vs. 0.39±0.493), p=0.025.

**Table 1: Socio-demographic characteristics of the study participants (N =105)**

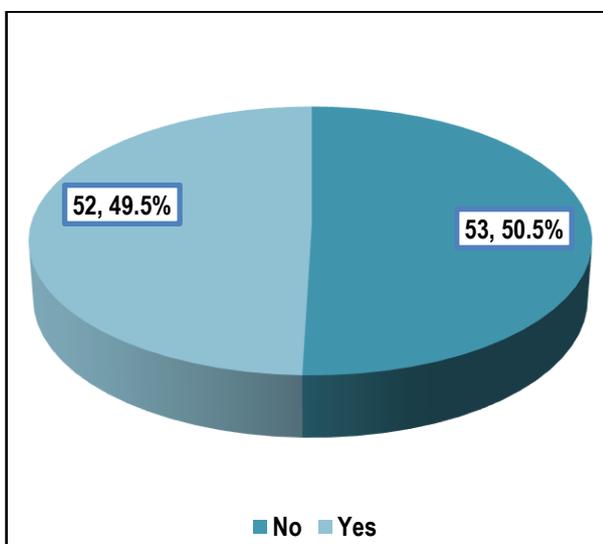
Variables		Number	%
Age Group	20-40	8	7.6
	41-61	21	20.0
	62-82	56	53.3
	83-103	20	19.0
Sex	Male	49	46.7
	Female	56	53.3
Residence	Urban	70	66.7
	Rural	35	33.3

**Table 2: Medical characteristics of the participants**

Variables		Number	%
Chronic diseases	No	11	10.5
	Yes	94	89.5
Disability	No	72	68.6
	Yes	33	31.4
Both	No	82	78.1
	Yes	23	21.9

**Table 3: Factors associated with utilization of home health care services among the participants**

	Score of home healthcare services		p-value
	Mean	SD	
<b>Gender</b>			
Female	0.39	0.493	0.025
Male	0.61	0.492	
<b>Residence</b>			
Urban	0.49	0.503	0.785
Rural	0.51	0.507	
<b>Chronic diseases</b>			
No	0.45	0.522	0.778
Yes	0.50	0.503	
<b>Disability patients</b>			
No	0.49	0.503	0.785
Yes	0.52	0.508	
<b>Disability and chronic disease</b>			
No	0.48	0.502	0.452
Yes	0.57	0.507	

**Figure 1: Use of home health service among patients with chronic diseases or disability or both**

## DISCUSSION

Home health care is a Medicare part consists of physician-ordered part-time and medically required skilled care. They could be nursing, physical therapy, occupational therapy, and speech-language therapy. Quality measurement of home health care uses two grades which include outcome measurement and process measurement.<sup>7</sup>

This research investigated the using of home health services among patients who had chronic disease and disability in Tabuk city- Saudi Arabia.

Our results are consistent with those of other similar Saudi studies regarding gender distribution of the participants utilized the home health care services.<sup>6,8</sup> Personal assistants stand for personal care workers and home care attendants primary tasks include daily living chores (such as bathing, grooming, clothing, and eating), sanitation, and transporting.<sup>4</sup>

In the current study, the use of home health services was observed among almost half of patients with history of chronic diseases, disability and both (49.5%). Our finding consistent with that of the study carried out by Meyer et al., 2002<sup>9</sup> who related a decrease in the percentage of patients with chronic diseases visiting the emergency by forty percent, in addition to a decrease in hospital admissions by sixty percent.

In agreement with Redondo-Sendino et al., 2006,<sup>10</sup> the present study revealed an association between patient's gender and utilization of home health care services where males were more utilized these services than females.

Limitations of the present study include the fact that being conducted in only one city in the Kingdom of Saudi Arabia, which could impact the generalizability of results. Also, the relatively small sample size is considered another limitation of the study. Despite those limitations, the study could have a public health importance as the first trial to explore this important service in the Saudi community in Tabuk Region.

In conclusion, we found through this study that almost half of patients who suffer from chronic diseases or disabilities, or both, use home health care services with men use home health care services more than women.

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