



Impact of Covid-19 Pandemic on Home Care Services Utilisation Among Adults: Results of The Retrospective Study

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Abstract

Aim: To examine how the use of home care services changed for individuals across service types and sociodemographic characteristics during the COVID-19 pandemic.

Setting and Participants: In this retrospective descriptive study, the services provided by a private hospital's home health services unit between March 2020 and March 2022 were examined. Data were obtained from private hospital databases.

Results: We determined that 1398 patients received 2097 home visits and 2574 health services. Most of the patients were over 65 years old and female. Approximately half of the home health services (45.7%) were done to take a specimen for blood and urine analysis. Most specimens were due to routine medical examinations for chronic disease. Other frequently requested services are Polymerase Chain Reaction (PCR) testing, surgical and pressure wound dressing, drug administrations (intramuscular, intravenous and subcutaneous), medical examination and nasogastric/urinary catheter applications.

Conclusions and Implications: Those who applied most to home care during the pandemic period; were women, 65 years old and had a chronic disease. The most common reason for home care applications was to take specimens at home. This study provides information about the change in-home care services in pandemic situations. So, it sheds light on future research or contributes to making plans to manage similar conditions that cause changes in health services.

Keywords: COVID-19, Home Care, Home Care Nursing Pandemic, Older People.

Introduction

Home care can be defined as the provision of health services in the home to support, restore or maintain functionality and health [1-3]. Home care can effectively facilitate the treatment process of patients who do not require hospitalisation and whose care needs can be managed and followed at home. So home care is a unique discipline within health care [4].

The COVID-19 crisis has caused many problems in the health systems of different countries. It has also changed how the world looks at-home care [3-5]. During the COVID-19 pandemic, home care has become one of the primary care models meeting the medical needs of patients and vulnerable populations [4,6]. As hospitals flooded with patients, home care quickly became an attractive alternative for patients requiring higher levels of care. Home care

helps reduce hospitalisations by meeting patients' care and treatment needs at home. This feature also minimised the risk of exposure of the elderly population to COVID-19 during the pandemic [3,7].

During the COVID-19 pandemic, many countries implemented epidemic control measures to limit activities outside the home, such as the closure of non-essential services, to reduce the surge of patients requiring hospital care [6]. As a result, home care services are involved in the identification and management of COVID-19 patients, as well as the support of patients with non-COVID-19 health needs [8]. As a result, home care has implemented several changes [9].

Intense security measures in hospitals due to the pandemic, the fear of COVID-19, and the fact that the health team dedicates most of their resources to COVID-19 patients have prevented people from applying to hospitals. Remarkably, the restrictions for adults 65 years and older prevented their access to hospital services that they should receive. In addition, many people spent the early stages of the disease or the rehabilitation process at home. These factors have caused changes in the application of home care services [2,3].

Several studies have found that people have reduced or avoided the use of adult daycare due to the risk of COVID-19 exposure. According to Dawson et al. [10], the decrease in adult daycare usage has resulted in an increase in home care usage in several countries, and Rodrigues et al. [5] demonstrated that in Austria, adult daycare has been replaced by informal family care. In Türkiye, home care services have different coverage from these definitions. According to the home health services directive of the Ministry of Health Türkiye, providing medical examination, treatment, medical care and rehabilitation services in the home environment within the framework of the diagnosis and planned treatment of the individual, assisting in the preparation of reports on the use of medical devices and materials related to home use, informing the patient and his/her family about the disease and care plan process [11].

To the best of our knowledge, there is no study on how the pandemic affects the need for home care services in Türkiye. This research aimed to determine the frequency and type of home care needs during the pandemic period.

Materials and Methods

Study Design, Setting, Participants

This retrospective study was carried out between March 2020 and March 2022.

Data Collection and Analysis

We used electronic patient records of home health services unit of a private hospital in Türkiye. There were no inclusion or exclusion criteria. The use of data does not require review by a Research Ethics Board. We obtained Institutional permission from the hospital. We analyzed the data by calculating statistics such as frequencies, percentages, averages.

Results

We found home care services for 1398 patients and 2574 care interventions done in this period. The mean age of the participants was 76 ± 10 years, 86% were over 65 years old, and 70% were women.

		n	%
Gender	Female	979	70
	Male	419	30
Age	<65 years	196	14
	≥ 65 years	1202	86

Table.1. Participants Characteristics (N=1398)

Regarding the disease characteristics of individuals receiving home health services; 83% were individuals with chronic diseases, 10% were terminally ill, and 7% were patients who had undergone

surgery. We found that 45.7% of care services were for taking specimens for blood and urine analysis (Figure 1).

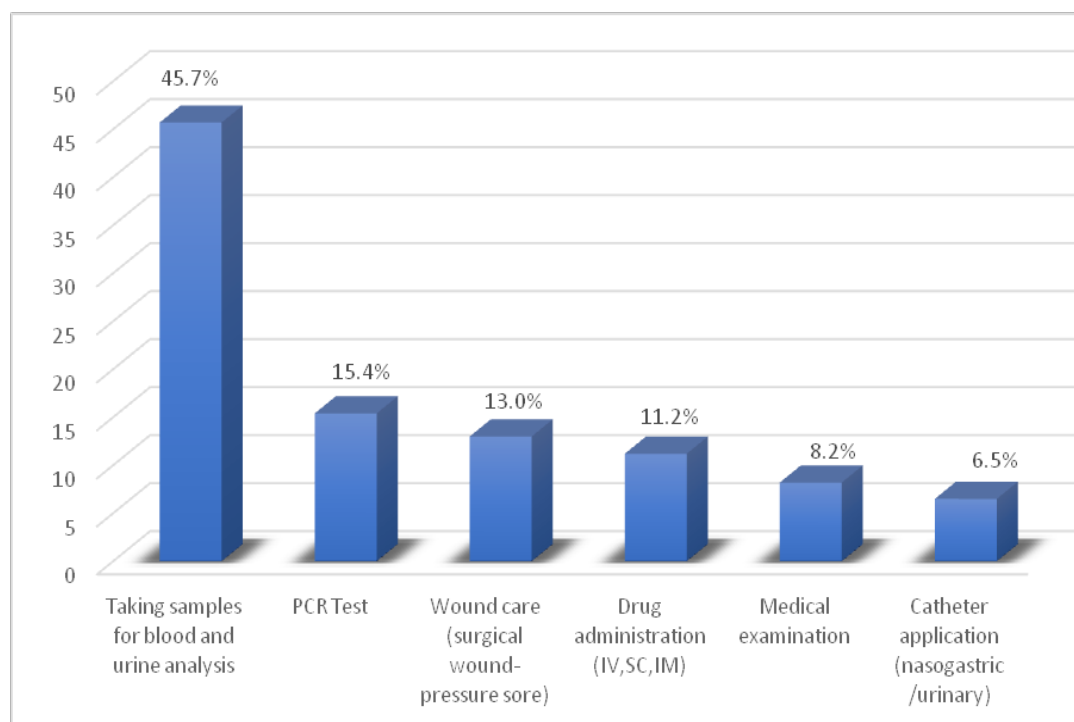


Figure 1- Home care services scope

Discussion

Ensuring continuity of care, especially for the elderly and people with chronic illness, is critical to home care management during a pandemic. This is a retrospective study to determine home care users' characteristics and reason for submission during the COVID-19 pandemic in Türkiye. The research findings highlight the changes in home care users and their needs because of the COVID-19 pandemic.

We determined that most of the individuals who need home care during the pandemic period are women. The fact that the life expectancy of women in the world and Türkiye is higher than that of men explains this result. In studies conducted in Türkiye before the pandemic, the percentage of women among those who applied to home care ranged between 55-68% [11-13]. In studies conducted in different countries, the corresponding percentage is between 51-74% [14-18]. In conclusion, women needed more care than men compared to before the pandemic.

In this study, we found that most participants who needed home

care were aged over 65. In studies conducted before the pandemic in our country, this percentage is between 50-74% [11,13,19,20]. In other countries, this percentage ranges between 51-76% [14-18]. Based on the results of this study, we can conclude that the percentage of individuals over the age of 65 among individuals who demand home care is higher than the percentage observed before the pandemic.

Most of the patients receiving home care have a chronic disease. In other studies conducted before the pandemic in Türkiye, it is a typical result that most patients have a chronic illness. Still, the percentage of these patients are between 19 and 48.1% [7,12,20,21]. Similarly, the percentage of patients with chronic diseases is much lower in other countries than in our study [14-18]. During the pandemic, it became difficult for patients with chronic diseases to use hospitals for follow-up and treatment. A systematic review states that there is a decrease in the use of health services [22]. We think that home care needs may have increased due to this reason. In addition, patients

with Covid-19 spent their early and post-hospital periods at home. Another reason may be that there are health problems during these intervals.

About half of the participants required home care for specimen collection. In some of the studies conducted before the pandemic in Türkiye, it is stated that the patients' most frequently requested home health service is medical examinations. This is followed by drug treatment, injection, catheterisation and wound care services [12,21,23,24]. In this study, the rate of patients requesting medical examinations is low. We could not reach any systematic review of why home care is needed in other countries. Home care service delivery in countries will affect the study's results. For this reason, we could not compare Türkiye and other countries, as the study results may be misleading.

This is the only study investigating the use of home care services during the pandemic period in Türkiye is the contribution of this study. However, there are also some limitations. The most important limitation of the study is the lack of comparison between the period before and after the pandemic. In addition, another limitation is that the study reflects the results of only one hospital home care services.

Conclusion

During the pandemic, most of the home care service users were women. There has been an increase in the frequency of individuals over 65 and those with chronic diseases who received home care after the pandemic. Individuals applied for the most common "specimen" of home care needs.

Even though the pandemic is over, healthcare providers should continue to plan for how to meet home care services needs in similar conditions. The study results show a picture of the change in-home care services in crises such as pandemics, natural disasters etc. which change the usual delivery of health services. More research is needed to improve our understanding of the subject further. In particular, there is a need for studies in which variables such as the region of residence, the institution where the service is received, the existence of health insurance and the characteristics of the service recipients are also collected. Especially studies with solid evidence level investigating the changes in home care services before and after the pandemic have critical importance. The results of the current study enables a simulation of health care policy in crises such as a pandemic.

Competing interest: All authors declare that there is no conflict of interest.

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