



# Strengthening Palliative and Home Care Service During COVID-19 Pandemic in Developing Country: A Single Institution Report

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## Abstract

Palliative care is an essential part of integrated care to reduce the suffering condition (physical, psychological, social and occupational, or even spiritual conditions) caused by the patient's health condition and to improve quality of life. The service of palliative care is significantly increased, commonly at the end-of-life care. The most prevalent diagnosis in our Palliative Care unit is benign tumor and malignancy (35.7%), followed by stroke (14.2%) and the post-surgery patient who needed wound care (12.9%). The number of home visits for palliative care increased from 1537 in 2020 to 2110 in 2021. Because of the low number of nurses in our unit, the compensation adds some nurses to reduce the workload. In conclusion, the need for home visit palliative care during the COVID-19 pandemic is still increasing, but this condition should be followed by increasing the quantity and quality of home visits.

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## Introduction

Palliative care is an essential part of integrated care to reduce the suffering condition (physical, psychological, social and occupational, or even spiritual conditions) caused by the patient's health condition [1]. The main goal of palliative care is to improve the patient's quality of life (QoL) and help patient's family to face their problems about the patient's critical health condition [2], [3]. The palliative care will involve early detection, detailed assessment, and pain-reliever treatment. In addition, this care also provides solutions for other problems such as physical, psychosocial, and spiritual [2].

In this era, the service of palliative care is significantly increased, commonly for end-of-life care [3]. The need for healthcare is the ability of the patient to get the benefit from the healthcare. [4] The estimated of palliative care needs in global is 14% [1]. It is estimated that 78% of patients who need palliative care live in low-to-middle income countries [1].

However, the actualization of palliative care is difficult because of the COVID-19 pandemic [5]. The

healthcare providers are still in charge of fighting the COVID-19. A mechanism to provide safe and effective palliative care is needed [5]. A study by Wentlandt and Cook, *et al.* (2020) reports that the availability of palliative care inpatients in Toronto, Canada (developed country), was reduced. The reduction was estimated from 7% to 4.5% in January 2020 [6].

The COVID-19 pandemic affects the accessibility of healthcare, such as palliative care in hospitals. The COVID-19 pandemic induces the shift of patient care because of the reduction of home visits, visitation ban for the nurse, and the difficulties for the hospital admission [7]. The World Health Organization recommends community-based care for palliative care [1]. A study in India reports the total home visit for palliative care during the COVID-19 pandemic was reached 847 patients. The main duties for the team to home visits are to supply the morphine and other medications for the patient [8].

The data about the home visit for palliative care during the COVID-19 pandemic in developing countries are limited. This article will elaborate on our findings of the total home visits for palliative care during the COVID-19 pandemic in our center.

## Methods

This study is a descriptive cross-sectional study. This study aims to analyze palliative care needs in the home during the COVID-19 pandemic. We collected the data of the patient's diagnosis and the number of home visits for palliative care in 2020 in our palliative care unit for the baseline of our study. And then, we also collected the total home visit in 2021 from our palliative care unit to compare the number of home visit needs during the COVID-19 pandemic for palliative care.

## Results

### Patient's diagnosis in palliative care unit

The most prevalent diagnosis in our Palliative Care unit is benign tumor and malignancy (35.7%), followed by stroke (14.2%) and post-surgery patients who needed wound care (12.9%). The complete data of patients diagnosis in our Palliative Care Unit is included in Figure 1.

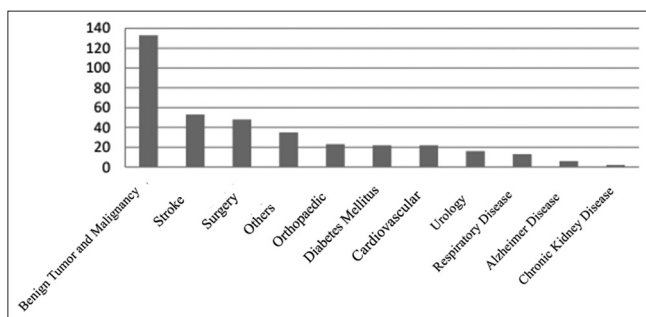


Figure 1: Patient's diagnosis in our palliative care unit

### The number of home visits for palliative care

From our database, the number of home visits for palliative care increased from 1537 visits in 2020 to 2110 in 2021 (Table 1). For that, we increased our human resources to cover the necessity.

Table 1: The number of home visits for palliative care

Month	Number of home visits	
	2020	2021
January	126	203
February	67	239
March	142	204
April	102	256
May	93	192
June	66	154
July	168	82
August	207	128
September	177	131
October	171	132
November	84	210
December	170	179
Total	1,573	2,110
Mean of home visits per month	131	175

Based on the graphic in Figure 2, the home visits for palliative care were distributed into the number

of shifts, the time of the shift, and the duration of the shift. The most frequent shift a day is three shifts in a day. It can be difficult because the nurses will be exhausted because 1-time care for a patient needs four nurses; therefore, 12 nurses are needed in one day. Most times, home visits for palliative care are in the morning. In addition, based on the duration of home visits, the most frequent care chosen by the patients is 1-day care.

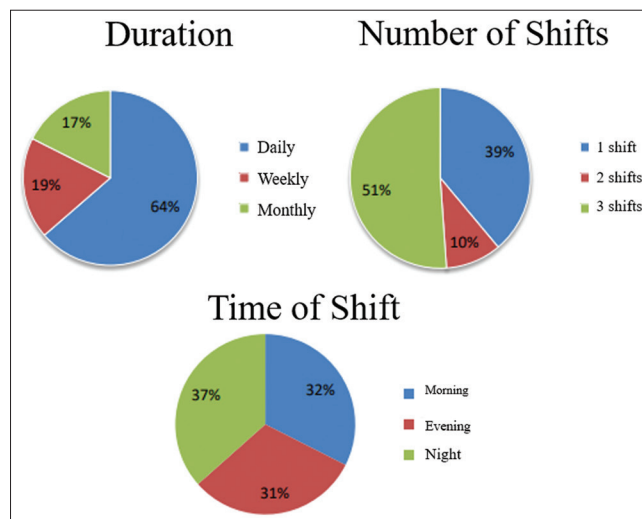


Figure 2: The duration, amount, and time of home visit shift

## Discussion

Palliative care is a medical field that has a crucial impact on patients with chronic diseases [9]. It prioritizes the relief of symptoms and psychological insults from severe conditions [10]. Palliative care starts from the diagnosis of the illness and is given along with the treatment of the disease [9]. The indications of palliative care depend on the patient's condition (physical, social, psychological, and spiritual) [9]. The more severe the disease (e.g., more severe the cancer stage), the more palliative care is needed.

Commonly, palliative care is used for patients with cancer. It is a component of comprehensive management for oncology conditions. The goals of palliative care on cancer patients are to relieve the symptoms burden, decrease the spiritual and psychological distress, increase the prognosis, and improve the mature coping mechanism for the patient [11].

However, palliative care also has evidence to benefit patients with non-cancer severe illnesses. A meta-analysis by Quinn and Shurrab *et al.* (2020) based on 28 trials from 13,664 patients reported that palliative care in serious non-cancer illnesses patients was significantly associated with less hospitalization, less emergency condition, and lower symptoms

burden. The patients in this meta-analysis were varied, which are with heart failure (4,086 patients), mixed disease (8,119 patients), dementia (1,036), and chronic obstructive pulmonary diseases (441 patients) [12].

Based on our study, the most diagnosis that needs for palliative care is benign tumor and malignancy, followed by stroke, post-surgery patients, and others. In contrast to our study, Cruz-Oliver D (2017) reports that cardiovascular disease is the most prevalent cause of palliative care (38.47%). It was followed by cancer (34.01%), chronic obstructive pulmonary disease (10.26%), HIV/AIDS (5.71%), and other cause [9].

About 56.8 million population in the world needs palliative care every year. According to the study by Connor *et al.* (2020), the total need for palliative care will be increased 2–3 times than the estimation before. Based on a condition in Turkey (a nation with 83.6 million population with 3.6 million additional refugees), the annual cancer case reached 233,834 cases with 126,335 deaths. The need for palliative care in Turkey is predicted to increase, associated with increasing non-communicable disease that worsens cancer [13].

Moriyama and Scherer *et al.* (2021) reported the change in the number of palliative care needs before and during the COVID-19 pandemic surge in New York. The palliative service volume increased from 678 (4% from total admission) before the COVID-19 pandemic to 1071 (10% of total admission during the peak of the COVID-19 pandemic) [14].

According to our data from 2020 to 2021, the number of home visits for palliative care increases from 1537 to 2110. An interesting study by Etkind *et al.* (2017) predicts palliative care needs in 2040 in England and Wales. This study predicts that if the palliative care needs based on age- and sex-specific proportions remain the same as in 2014, the need for palliative care will be increase 25% (from 375,398 to 469,305 individuals per year). The need for palliative home care increased, similar to the condition in 2006–2014. In that case, the increase of palliative care needs will be 42.4% (around 161,842 more individuals per year or 537,240 individuals in total) [15].

A study by Effendy and Fransisco, *et al.* [16] reports palliative care needs for patients with non-communicable diseases. This study reports from 124 adult patients with non-communicable disease that had screened with the Supportive and Palliative Care Indicators Tool (SPICT), as many as 76 patients (61.3%) requiring palliative care [16]. In addition, during the COVID-19 pandemic, the need for palliative care is still high, especially for home visits. A study by Sharma (2020) reports the total home visit for palliative care during the COVID-19 pandemic was reached 847 patients [8].

Because of the limitation of the number of nurses in our center, the nurses had to work as many as 33 shift home visits with overtime shifts (10 long morning shifts and 11 long evening shifts). The Palliative Care

Unit committed to never denying the ask of home visits; therefore, to compensate the exhausted nurses during the care, the Palliative Care Unit searched for additional nurses and managers to work outside the working time.

## Conclusion

In conclusion, the need for palliative care even during the COVID-19 pandemic is still increasing, especially for home visits. However, the increase of palliative care needs should be followed by increasing the quantity and quality of home visits.

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