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Palliative Care Unit at Home: Impact on Quality of Life in Cancer Patients at the End of Life in a Rural Environment

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Abstract

Introduction: Advanced cancer is accompanied by a substantial burden of symptoms, and palliative care (PC) plays an essential role, especially at the end of life (EOL). In fact, a comprehensive PC through Home Palliative Care Units (HPCU) has been associated with reducing potentially aggressive care at the EOL. We aim to study the impact of HPCU on the quality of assistance of cancer patients at Alcoy Health Department. **Methods:** A retrospective study was conducted including patients diagnosed with terminal cancer at the Medical Department of Hospital Virgen de los Lirios who died between January 2017 and December 2018. The Multivariate Cox regression model was used to assess the impact of HPCU assistance on the quality of life indicators. **Results:** 388 patients were included. The median age was 71 years; 65% patients were male, and 68% presented with a 0-2 score on the ECOG scale. On the multivariate analysis, a lack of assistance by HPCU was associated with a higher risk of consulting in the emergency department (OR = 1.29, 95% CI: 1.02-1.67), of hospital admissions (OR = 4.72, 95% CI: 2.45-9.09), a higher probability of continuing active treatment (OR = 2.59, 95% CI: 1.44-4.67), and a greater probability of dying in hospital (OR = 6.52, 95% CI: 3.78-11.27). **Conclusions:** Patients receiving HPCU assistance have a lower number of emergency room visits and hospital admissions, and are more likely to die at home. Taken together, these results support the relevance of HPCU providing a high quality attention of cancer patients.

Keywords

end of life, home care, quality of life, palliative treatment, medical oncology

Introduction

Cancer disease is one of the biggest health problems in our environment. In the report of the World Health Organization (WHO), cancer is the second leading cause of death globally.[1] The International Agency for Research on Cancer (IARC) estimates that 1 in 5 people develop cancer during their lifetime worldwide, with 1 in 8 men and 1 in 11 women dying from the disease. This data implies that around 50 million people would die of cancer within the following 5 years.[2]

Advanced cancer is significantly associated with an increasing burden of symptoms that may arise at any point of the disease, but specially during its last stages. Therefore, an integration of appropriate palliative care into standard management is essential to provide advanced cancer patients with adequate symptom management and comfort at the end of life (EOL).[3] EOL care is defined as “comprehensive care for life-limiting illness that meets the patient’s medical, physical, psychological, spiritual, and social needs.”[4]

Thirty years ago, palliative care was normally initiated at the end of life or at end-stage disease. Nowadays, early integration of palliative care (PC) in oncology has been developed to provide guidance about symptom management and to improve quality of life (QOL) of patients starting from the onset of the disease. Also the introduction of early comprehensive palliative care has been associated with reducing or avoiding the use of potentially aggressive care at the end of life, supporting preferred place of death, and possibly extended survival.[5-9]

A lot of the management concerns for cancer patients near the EOL are similar regardless of the site of cancer origin.[10] Although aggressive EOL care may be potentially increasing, this type of care is often not the preference of patients and their families and can be associated with substantial costs to the health care system, not only due to using expensive drugs, but also because of higher rates of emergency department

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department.[20,39] Interestingly, although the Alcoy Health Department provides health-care in a predominantly rural area, the prominent role of our HPCU enables health assistance of patients with advanced cancer centered in symptomatic control at home, and, importantly, a high rate of patients are able to pass away at home.

Our study has some limitations. Firstly, we performed an observational, retrospective analysis, based on one health department. Furthermore, given the retrospective basis of the study, we were unable to gather information regarding the quality of life reported by patients, as well as their preferences related to health-care at the EOL, which could have been weighed against the assistance that they received. Despite these limitations, there are also strengths that should be highlighted: even though the study is based on one health department, the sample size is relatively large. Moreover, the particularities of the Alcoy Health Department are comparable to multiple health departments in Spain, and also, in other countries across the world. These 2 facts permit one to extrapolate the results to other regions with similar geographic distribution.

Taken together, our results support the relevance of HPCU providing a high quality attention of cancer patients at the EOL, allowing them to fulfill their desire to die at home with adequate symptom control and possibly, entailing a lower cost for our health system given the reduction of emergency consultations and hospital admissions.

Conclusions

Patients receiving HPCU assistance have a lower number of emergency room visits, hospital admissions and a higher possibility of dying at home, which leads to an improvement in quality of life, and decreases the public health spending. Thus, providing adequate resources to HPCU should be a priority for the management of oncologic patients at the end of life. Our study warrants further investigation of the impact of assistance of HPCU in patients with cancer at the EOL, focusing not only on the parameters that we evaluated, but also on patient reported preferences, quality of life and cost-effectiveness.

Authors' Note

The study was conducted in accordance with the Declaration of Helsinki. The manuscript has not been published and is not under consideration for publication elsewhere. Written informed consent was exempted because of the retrospective nature of the study and assured anonymity.

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