



QUALITY OF LIFE IN PATIENTS WITH ADVANCED CANCER ACCORDING TO PLACE OF CARE IN A REFERRAL HOSPITAL

CALIDAD DE VIDA EN PACIENTES CON CÁNCER AVANZADO SEGÚN LUGAR DE ATENCIÓN EN UN HOSPITAL DE REFERENCIA

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ABSTRACT

The quality of life perceived by patients with advanced cancer from a tertiary hospital is compared according to home care versus hospital care. Observational, cross-sectional study, included patients older than 18 years with cancer with multiple metastases. EORTC QLQ-C15-PAL quality of life survey was applied to patients with adequate cognitive level (Pfeiffer questionnaire). Chi square and Mann-Whitney, $p < 0.05$, and SPSS 24.0 were used. 83 patients in the hospital group and 69 at home. Median age 66 and 76 years respectively ($p < 0.01$); the female sex predominated ($p = 0.60$). They presented moderate or severe cognitive impairment, 25% hospital group and 58% home ($p < 0.01$). The median quality of life score was 49.5 in the hospital group and 48 in the home group ($p = 0.60$), the physical functional aspect had a lower score in the hospital group ($p < 0.01$). The perceived quality of life is acceptable, the home group is older and has cognitive impairment.

Key words: Quality of life; Palliative care; Advanced cancer (source: MeSH NLM).

RESUMEN

Se compara la calidad de vida percibida por pacientes con cáncer avanzado de un hospital terciario según atención en domicilio versus hospitalaria. Estudio observacional, transversal, incluyó pacientes mayores de 18 años con cáncer con metástasis múltiple. Se aplicó encuesta de calidad de vida EORTC QLQ-C15-PAL a los pacientes con adecuado nivel cognitivo (cuestionario de Pfeiffer). Se utilizó Chi cuadrado y Mann-Whitney, $p < 0,05$, y SPSS 24.0. 83 pacientes grupo hospitalario y 69 domiciliario. Mediana de edad 66 años y 76 respectivamente ($p < 0,01$); predominó el sexo femenino ($p = 0,60$). Presentó deterioro cognitivo moderado o severo, 25% grupo hospitalario y 58% domiciliario ($p < 0,01$). La mediana del puntaje de calidad de vida fue 49,5 grupo hospitalario y 48 domiciliario ($p = 0,60$), el aspecto funcional físico tuvo menor puntuación en grupo hospitalario ($p < 0,01$). La calidad de vida percibida es aceptable, el grupo domiciliario tienen mayor edad y deterioro cognitivo.

Palabras clave: Calidad de vida; Cuidados paliativos; Cáncer avanzado (fuente: DeCS BIREME).

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Cite as: José Amado-Tineo, Moisés Apolaya- Segura, Elizabeth Che-H, Otto Vargas-Tineo, Jessika Solis, Teodoro Oscanoa-Espinoza. Quality of life in patients with advanced cancer according to place of care in a referral hospital. Rev. Fac. Med. Hum. January 2021; 21(1):138-144. DOI 10.25176/RFMH.v21i1.3603

Journal home page: <http://revistas.urp.edu.pe/index.php/RFMH>

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INTRODUCTION

Cancer is a growing health problem and, in Peru, the most frequent types are those that affect the breast, uterus, stomach and lung, but it is diagnosed late in more than 50% of cases⁽¹⁾, these advanced stages of disease are related with greater suffering and deterioration of the quality of life in the patient and the family⁽²⁾.

Quality of life is a complex concept that includes physical, social, emotional and spiritual well-being, it depends on several factors and there are validated instruments for its study in oncological diseases. International reports link the better quality of life of these patients with a better prognosis and adequate satisfaction of health care^(3,4).

Palliative care is a mandatory therapeutic alternative to improve the quality of life in patients with advanced diseases, especially at the end of life stage⁽⁵⁾. In Peru, in August 2018 the law of the national palliative care plan for oncological and non-oncological diseases was enacted, however currently palliative care is still not accessible to everyone, concentrating in the main cities and with greater application for oncological diseases; but few studies evaluate quality of life in these patients⁽⁶⁾.

Due to difficulties in accessing timely care, many of the oncological patients are cared for in referral hospitals and attend to emergency services with subsequent hospitalization, even when they already belong to palliative care programs⁽⁶⁾. The objective of the present study is to compare the quality of life perceived by patients with advanced cancer at the end of the life stage in a referral hospital, with patients from a home palliative care program.

THE STUDY

An observational cross-sectional study was carried out in the adult palliative and emergency care services of the Hospital Nacional Edgardo Rebagliati Martins, a Peruvian tertiary-level hospital belonging to the social security system, between July 2018 and February 2019. It included to patients over 18 years of age admitted to participating services, with advanced oncological disease. The inclusion criteria were

confirmatory histological diagnosis plus multiple brain, liver or lung metastases; excluding those who died in the first 24 hours of data collection, those who changed study group or did not give their written consent.

Two groups were evaluated for three consecutive months, the hospital group: patients who were admitted through the emergency service and died in a hospital service; and the home group: patients belonging to the specialized palliative care program who died at home (Figure 1).

Daily income reports, medical records and an interview with a patient or family member were reviewed. Informed consent was requested to participate in the study in patients who met inclusion criteria. The evaluation and interview were conducted by two specialist physicians with experience in palliative care.

A structured questionnaire on quality of life (EORTC QLQ-C15-PAL quality of life measurement questionnaire in Spanish version 1)⁽⁷⁾ was applied to patients with adequate cognitive level (Pfeiffer portable questionnaire score of the mental state in Spanish version <5 points), on the patient's stretcher or during the home visit according to the study group. The quality of life survey provides a total score and also has dimensions: overall quality of life, functional aspect (physical and emotional), and symptoms.

Subsequently, a follow-up was carried out in the institutional statistical system to determine the place of death. The data were coded and processed in Microsoft Excel 2010 program and analyzed with IBM SPSS 24.0. Frequencies and percentages are described for discrete variables and measures of dispersion for continuous variables. In quantitative variables, statistical hypothesis tests were applied according to their type of distribution and in qualitative variables, a Pearson's chi-squared test was applied; considering significant $p < 0.05$.

The research project was approved by the Ethics Committee of the Hospital Nacional Edgardo Rebagliati Martins (Letter No. 085 – CE-GHNERM-GRPR-ESSALUD-2018) and was developed following principles of good research practice, ensuring respect and confidentiality.

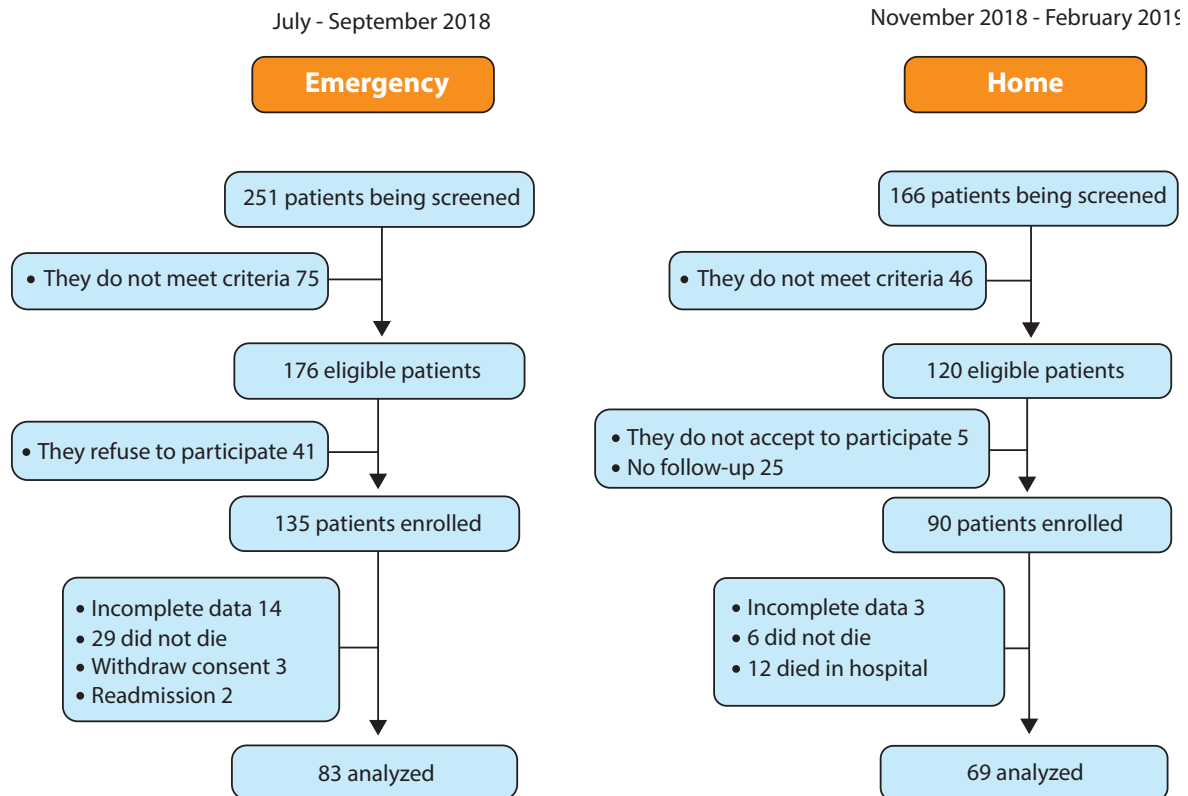


Figure 1. Selection flow chart for patients with advanced cancer who entered the study.

FINDINGS

69 patients are shown in the home group and 83 patients in the hospital group (Table 1), with a higher proportion of women in both groups (61 and 57% respectively); age, functional dependence, cognitive impairment, time of illness and existence of a caregiver were higher in the home group ($p < 0.001$) (Table 1). The most frequent types of cancer in both groups were colon, breast, lung and gastric (Figure 2).

The time of illness in the terminal stage was determined in 12 cases of the home group (median 4.3 months with range between 1 and 13) and in 22 hospital cases (median 3.5 months range between 1 day and 4 years). The patients in the home group remained in this service for a median of 147 days

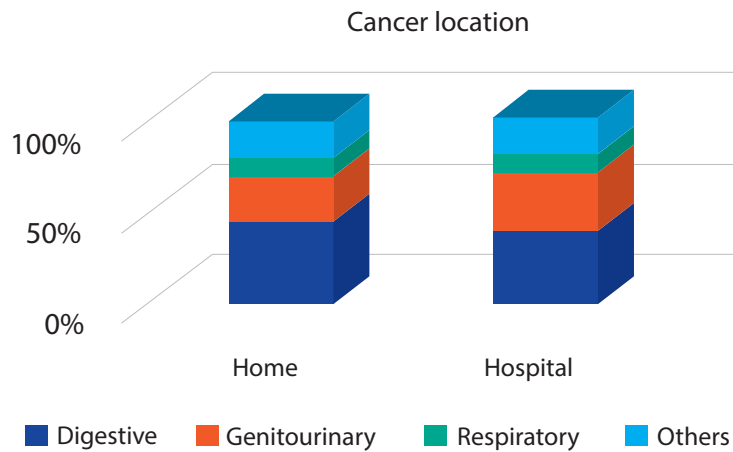
until their death (range of 2 to 398 days), 7% dying at rest home and 93% at home. Among the patients in the hospital group, 39% died in the emergency department and 61% in other hospitalization rooms.

The quality of life survey was performed in 49% (34 of 69) of the home group and 84% (70 of 83) of hospitalized patients. The median of the EORTC QLQ-C15-PAL Quality of Life Measurement Questionnaire being 49.5 for the home group and 50 for the hospital group ($p = 0.597$ according to the Mann-Whitney U test) considered acceptable according to the instrument used (Figure 3). The physical appearance of the hospital patients was lower than those of the home group ($p < 0.001$) and no significant difference was found in the other dimensions (Figure 3).

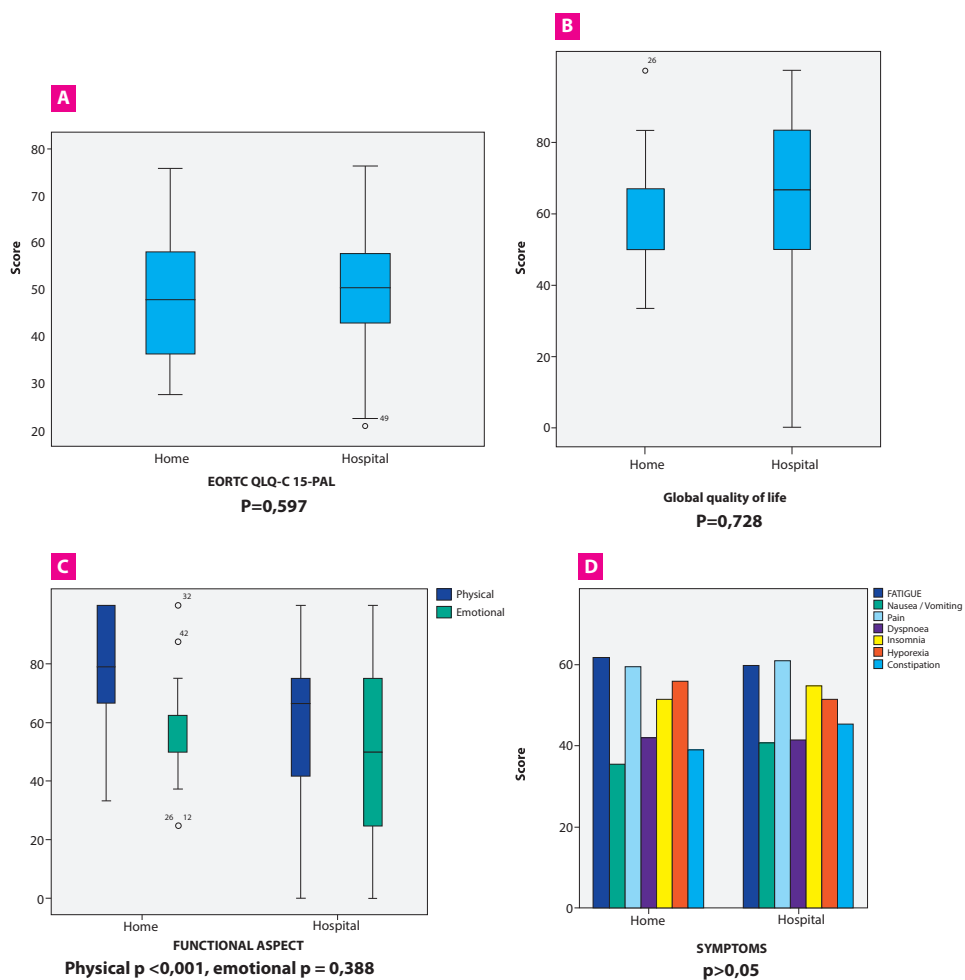
**Table 1.** Characteristics of patients with advanced cancer according to place of care.

Characteristics	Home (69 patients)		Hospital (83 patients)		p
	n	%	n	%	
Female	42	60.9	47	56.6	0.597 *
Age (years)	76.3		66.0		< 0.001 **
Median	79		69		
Range	37-94		30-94		
Dependence:					< 0.001 *
• Independent	2	2.9	12	14.5	
• Partial	16	23.2	58	69.9	
• Total	51	73.9	13	15.7	
Cognitive impairment:					< 0.001 *
• None or mild	29	42.0	62	74.7	
• Moderate or severe	40	58.0	21	25.3	
Cancer location:					0.675 *
Digestive	31	44.9	32	38.6	
Genitourinary	17	24.6	28	33.7	
Respiratory	7	10.2	8	9.6	
Others	14	20.3	15	18.1	
Survival time:					< 0.001 **
Median (days)	54		5		
Range	1 – 225		1 – 75		
Caregiver:					< 0.001 *
• None	0	0	20	24.1	
• Recruited	5	7.2	3	3.6	
• Familiar	64	92.8	60	72.3	
Son/Daughter	44		35		
Partner	8		16		
Brother/Sister	6		6		

* Pearson's chi-squared test; ** Mann-Whitney U test



Graphic 1. Patients with advanced cancer according to place of care: main location of the disease.



Graphic 2. Patients with advanced cancer according to place of care: a. Score of the EORTC QLQ-C15-PAL Quality of Life Measurement Questionnaire. b. Overall quality of life score of patients. c. Quality of life score in the functional aspect (physical and emotional). d. Symptom score in a quality of life survey in patients with advanced cancer by place of care.



DISCUSIÓN

The quality of life perceived by patients with advanced cancer in the present study is acceptable and similar in patients treated at home and in hospital, at the end of life stage. The EORTC QLQ C15-PAL scale shows similar values in emotional aspects, symptoms and global quality of life; however, a lower score is showed in the physical aspect of the hospital group.

There are many factors that influence these results, the first is that the response rate in the home group was much lower than the hospital group (42 vs 75%) mainly due to cognitive impairment, older age and greater functional dependence of these patients. This could be explained because patients who are in the program have a longer time of illness and their quality of life is influenced by the application of palliative care, but patients with cognitive impairment could not express it⁽⁸⁾.

The survival time contradicts the perception of quality of life, since the survival of hospital patients is much lower than that of patients at home and is apparently inversely related to the perceived quality of life. An influencing factor in this aspect could be the conception that being in a hospital ward makes them feel better even though their final outcome is faster⁽⁹⁾.

It has been previously reported in our environment that patients belonging to a home palliative program attended hospital services with relative frequency (mainly emergency)⁽¹⁰⁾. The level of preparation of the family and the doctors in the goals of palliative care is also important here.

The perceived quality of life was slightly lower than other studies, but there was also a difference such as the higher proportion of men and older age reported in Europe⁽¹¹⁾. In the functional aspect, the greater physical functional dependence is correlated in patients who are cared for at home, as this is a condition for entering this program. However,

the emotional aspect did not show a significant difference.

Regarding symptoms, there is evidence of less control of fatigue and pain in both groups, these symptoms are mentioned as the most frequent in this type of patients, reporting that in advanced phases pain can appear in 70% of patients⁽¹²⁾. It is worth mentioning the good control of nausea and dyspnea, however, the instrument used does not differentiate whether the patients previously had this symptom and it was controlled. The response rate in each group also influences.

There are several studies on quality of life, but few use validated instruments in palliative care⁽¹³⁾. The EORTC QLQ C15-PAL survey is a reduced and practical version of the original survey that assesses quality of life exclusively in palliative care; it is relatively new, but it has been showing validity and good reliability^(21,23). It is recalled that the EORTC QLQ questionnaires are used to compare groups and assess the evolution of quality of life in the same patient, rather than qualify it⁽¹¹⁻¹⁴⁾.

The present study was conducted in a single hospital, with a short observation period and a small sample size. However, it is an important reference in our environment to understand the perception of the patients with advanced diseases' quality of life. The study could be expanded with the opinion of the caregivers, to know the perception of health care in patients who could not be evaluated due to their cognitive deterioration.

CONCLUSION

We can conclude that the quality of life perceived by patients with advanced oncological disease treated in a referral hospital is acceptable, with intermediate control of symptoms and a better score on physical appearance in the home group than in the hospital group; however, the home group are older, have functional dependence and cognitive impairment.

Authorship contributions: The authors participated in the genesis of the idea, project design, data collection and interpretation, analysis of results and preparation of this research work's manuscript.

Funding sources: Self-financed.

Conflicts of Interest: The authors declare no conflicts of interest in the publication of this article.

Received: November 9, 2020

Approved: January 8, 2021

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