

## Palliative care and pain management in patients with stomach cancer

Cuidados paliativos e manejo da dor em pacientes com câncer de estômago

Cuidados paliativos y manejo del dolor en pacientes con cáncer de estómago

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### ARTICLE HISTORY

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### ARTICLE INFORMATIONS

**Science-Metrix Classification (Domain):**

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**Main topic:**

Palliative care and pain management

**Main practical implications:**

It offers insights that can guide decisions in the hospital management of critically ill patients with stomach cancer.

**Originality/value:**

It presents an exhaustive review of the literature to guide new studies on the problem addressed.

### ABSTRACT

**Introduction:** Palliative care and pain management are increasingly important for the active and comprehensive treatment of patients who do not respond to curative treatment. **Objective:** To identify palliative care and pain management in patients with stomach cancer. **Methods:** Using a qualitative and descriptive approach, national and international literature, publications and scientific articles were reviewed to investigate palliative care and pain management in patients with stomach cancer. **Results:** The articles identified five treatments focused on palliative care, defined as palliative gastrectomy, bypass, palliative radiotherapy, and stenting. Pain management in patients with gastric cancer was also examined using selected studies. **Conclusion:** Studies focused on controlling symptoms and maintaining or improving quality of life in patients with gastric cancer were analyzed. The collected studies reported survival as the primary outcome variable. Consistent evidence was identified that patients with advanced gastric cancer benefit in both survival and quality of life with a combination of chemotherapy plus supportive care compared to receiving supportive care alone, which will be in combination with the use of opioid analgesics.

**Keywords:** gastric neoplasm; palliative therapy; gastrectomy, radiotherapy; chemotherapy.

### RESUMO

**Introdução:** Os cuidados paliativos e o controle da dor são cada vez mais importantes para o tratamento ativo e integral dos doentes que não respondem ao tratamento curativo. **Objetivo:** Identificar cuidados paliativos e manejo da dor em pacientes com câncer de estômago. **Métodos:** Através de uma abordagem qualitativa e descritiva, revisou-se a bibliografia nacional e internacional, publicações e artigos científicos para investigar cuidados paliativos e manejo da dor em pacientes com câncer de estômago. **Resultados:** Os artigos identificaram cinco tratamentos focados em cuidados paliativos, definidos como gastrectomia paliativa, bypass, radioterapia paliativa e colocação de stent. O controle da dor em pacientes com câncer de estômago também foi examinado por meio de estudos selecionados. **Conclusão:** Foram analisados estudos com foco no controle dos sintomas e na manutenção ou melhora da qualidade de vida de pacientes com câncer de estômago. Os estudos coletados relataram a sobrevivência como a variável de resultado primário. Identificamos evidências consistentes de que pacientes com câncer de estômago avançado se beneficiam tanto na sobrevida quanto na qualidade de vida de uma combinação de quimioterapia mais cuidados de suporte em comparação com receber apenas cuidados de suporte, que seriam combinados com o uso de analgésicos opioides.

**Palavras-chave:** neoplasia gástrica; terapia paliativa; gastrectomia, radioterapia; quimioterapia.

### RESUMEN

**Introducción:** Los cuidados paliativos y el tratamiento del dolor son cada vez más importantes para el tratamiento activo e integral de los pacientes que no responden al tratamiento curativo. **Objetivo:** Identificar los cuidados paliativos y manejo de dolor en pacientes con cáncer de estómago. **Métodos:** Mediante un enfoque cualitativo y descriptivo, se revisó la bibliografía, las publicaciones y los artículos científicos nacionales e internacionales para investigar los cuidados paliativos y el tratamiento del dolor en pacientes con cáncer de estómago. **Resultados:** Los artículos identificaron cinco tratamientos centrados en los cuidados paliativos, definidos como gastrectomía paliativa, bypass, radioterapia paliativa y colocación de endoprótesis vasculares. También se examinó el tratamiento del dolor en pacientes con cáncer de estómago mediante estudios seleccionados. **Conclusión:** Se analizaron los estudios enfocados en controlar los síntomas y mantener o mejorar la calidad de vida de pacientes con cáncer de estómago. Los estudios recopilados informaron de la supervivencia como variable principal de resultado. Se identificaron pruebas consistentes de que los pacientes con cáncer de estómago avanzado se benefician tanto en la supervivencia como en la calidad de vida con una combinación de quimioterapia más tratamiento de apoyo en comparación con recibir tratamiento de apoyo solo, que ira en combinación con el uso de analgésicos opioides.

**Palabras clave:** neoplasia gástrica; terapia paliativa; gastrectomía, radioterapia; quimioterapia.

## INTRODUCTION

Cancer has become the most common cause of death worldwide and it has been estimated that by 2030 there will be 21.4 million new cases of cancer each year, and that approximately 13.3 million patients will die from the disease (Peláez Cantero et al., 2022).

Stomach cancer is an important part of this health problem, as it is the second leading cause of cancer-related deaths. In Japan, Mexico and other Latin American countries, which are endemic areas, it is the most common gastrointestinal malignancy. Moreover, it is considered a disease of old age, with peak incidence occurring in the seventh decade of life. Consequently, in recent decades, an increase in the incidence of stomach cancer has been observed due to the increase in life expectancy of the general population (de Noriega et al., 2022; García-Padilla et al., 2021).

Hence, patients with stomach cancer often present with pain and weight loss, as well as being asymptomatic. Dysphagia may also be present if the tumours are proximal, but when they are distal, nausea and vomiting may predominate due to gastric outlet obstruction. In addition, stomach cancer-related pain is a common problem that may occur in patients undergoing active cancer treatment and may be a consequence of some complications following cancer treatment, which may be physical or psychological symptoms (García-Padilla et al., 2021; Sarmiento Medina et al., 2019).

On the other hand, the prevalence of cancer pain may be associated with the stage of the disease and the location of the cancer. Thus, in recent studies, more than 50% of cancer patients receiving anticancer treatment reported pain, and about 66% of patients with advanced cancer received palliative treatment. Therefore, the World Health Organisation's definition of palliative care and pain management, which focuses on the total care of patients whose disease does not respond to any curative treatment, has been noted to be of interest (Campos et al., 2022; Samy et al., 2019).

### **Stomach cancer**

Cancer is considered as arising in the tissues lining the stomach. It is the fifth most frequently diagnosed cancer and the third leading cause of death worldwide. Thus, the only potentially curative treatment approach for patients with stomach cancer is surgical resection with appropriate lymphadenectomy. However, patients with advanced or metastatic disease can only be offered palliative therapy regimens to prolong their life span (Herrero Trujillano et al., 2019; Lopes-Júnior et al., 2020).

### **Etiology**

Factors associated with an increased risk of stomach cancer in the stomach include various nutritional factors such as high salt content in foods, consumption of N-nitroso compounds, smoking, a diet low in vitamin A and C, consumption of large amounts of smoked or processed foods, refrigerated food deficits, contaminated drinking water, high body mass index (BMI), increased calorie intake and gastro-oesophageal reflux are associated with an increased risk of adenocarcinomas of the distal oesophagus and proximal stomach (León et al., 2019).

### **Epidemiology**

It has been estimated that 28 000 new cases of stomach cancer will be diagnosed in Ecuador, with an expected 10 960 new deaths during 2019. Thus, the reduction of stomach cancer can be achieved with proper identification and treatment, as well as lifestyle modifications among dietary and environmental risk factors, but it is still especially common in regions of the world where fresh food storage and water quality are totally deficient (Bautista-Hernández et al., 2021).

Particularly, this disease is observed in men over 50 years of age, with various related environmental factors. In contrast, the diffuse or infiltrative type is less frequent (30%), which is why it can be diagnosed at an earlier age in both sexes, leading to a worse prognosis (Castillo & Orrillo, 2021).

### **Evaluation**

For patients with symptoms suspicious for stomach cancer, upper endoscopy is more invasive and costly, but offers tissue diagnosis by direct biopsy of oesophageal, gastric or duodenal lesions (Reyes-Pacheco, 2019).

Any suspicious gastric ulcer should be biopsied several times for greater diagnostic accuracy. Likewise, screening for stomach cancer by upper endoscopy has successfully detected early stages of the disease, so that surgical treatment can be chosen (Ayala et al., 2022; Buitrago Martín et al., 2019).

The treatment modality for gastric cancer depends on accurate preoperative staging. The therapeutic approach may be endoscopic resection for limited superficial mucosal disease (< T1, N0), initial surgical resection with lymphadenectomy (< T3, any N), neoadjuvant (> T2)/adjuvant chemotherapy (> T1N1 or > T3N0), radiotherapy, or combined with resectable lesions or palliative systemic treatment for those with locally advanced metastatic or unresectable disease (T4, any N or M1) (Sánchez et al., 2020; Soto et al., 2022).

### Description of the stages of stomach cancer

The medical professionals use the following table to determine the stage of cancer by combining the following classifications: N (nodule-ganglion), T (tumour), M (metastasis) (Sánchez et al., 2020; Soto et al., 2022).

STAGES	GROUPING TO ESTABLISH THE STAGE	DESCRIPTION
0	Tis ,N0,M0	Involvement only on the surface of the endothelium (carcinoma ).
IA	T1,N0,M0	Has not spread to lymph nodes or other parts of the body.
IB	T1,N1,M0	Spread between 1 to 2 lymph nodes.
IIA	T1,N2,M0	Spread between 3 to 6 lymph nodes.
IIB	T1,N3a,M0	Involvement of the inner layers of the stomach wall.
IIIA	T2,N3a, M0	Involvement of the outer layers of the stomach wall.
IIIB	T3,N3a,M0	Spread to 7 to 15 lymph nodes.
IIIC	T3 ,T4a,N3b,M0	Involvement of all muscle layers and has spread to more than 16 lymph nodes.
IV	T,N Y M1	Spread to different parts of the body.

### Palliative therapy

However, locally advanced unresectable gastric cancer is often treated with advanced metastatic disease therapy regimens. The goals of medical treatment of advanced gastric cancer are primarily palliative care, to improve quality of life and prolong life for either weeks or months (Gargallo et al., 2021).

Based on this background, the aim of this paper is to identify palliative care and pain management in patients with stomach cancer.

## METHODS

The study was conducted in accordance with the Preferred Reporting System for Systematic Reviews and Meta-Analyses (PRISMA). A qualitative descriptive approach was used by reviewing national and international literature, publications and scientific articles to examine palliative care and pain management in patients with gastric cancer.

### Search method

Studies published in Spanish and English were collected from international databases such as PubMed and Scopus. In addition, country-specific searches were conducted using different search elements Scielo Ecuador and Enfermería Investiga for the period 2019-2023, with no restrictions on the country of origin or type of article.

In this way, articles were found using a bibliometric search technique with Boolean operators and a combination of the following search queries: (palliative care or pain management and stomach cancer), (stomach cancer or surgery and care), (quality of life or care or rehabilitation), (quality of life or care or rehabilitation), and (quality of life or care or rehabilitation).

### Inclusion and exclusion criteria

The PICO (Participants, Interventions, Comparisons and Outcomes) format was used in this research to define the inclusion criteria. Therefore, studies that met the following criteria were included in this analysis.

Studies on patients with gastric cancer receiving palliative care.

Studies in which patients received palliative care with or without education or self-management strategies.

Original studies in which the control group received usual health care interventions (e.g. routine medication and daily health advice).

Studies in English and Spanish related to the research topic (up to 5 years).

We specifically excluded non-original studies, theses, projects, blogs, conferences, etc. that do not address or contribute to the research objective.

### Data collection

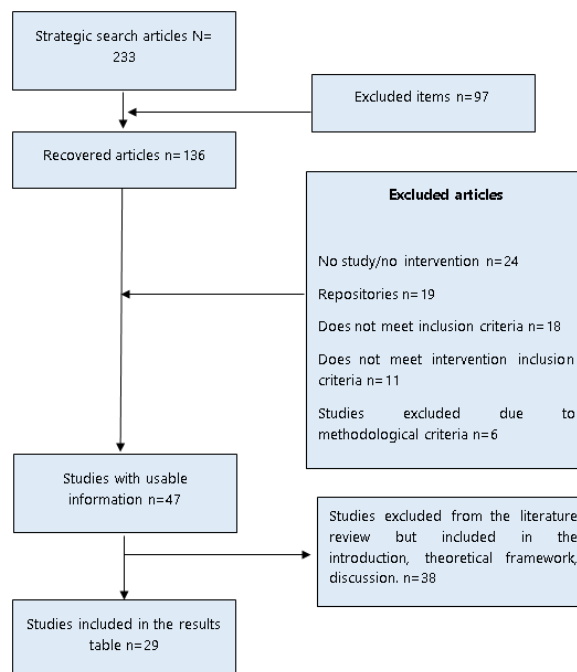
All studies identified in the database search were reviewed and analysed by team members to determine their relevance and inclusion and exclusion criteria for analyses based on title, abstract or full text, if available.

In this way, the studies selected for analysis were independently and critically reviewed to ensure the accuracy and completeness of the main studies, in particular the reliability and validity of the study in terms of methods and results.

Therefore, the PRISMA methodology assessment tool was used. It has been validated by experts and has a reliability of Cronbach alpha = 0.81. This tool was therefore suitable for this type of literature review: after being reviewed by independent reviewers, 30 articles were considered to be of sufficient quality to begin data extraction.

Subsequently, information retrieval techniques were used, resulting in an N=233 articles. Thus, the team members applied and filtered inclusion and exclusion criteria in order to analyse a sample of 30 articles. These aspects are discussed in the results section. For a better understanding of the selection of the articles, these are detailed in figure 1 below.

**Figure 1** Study selection



## RESULTS AND DISCUSSION

This study included research related to palliative care and pain management in patients with stomach cancer. These studies evaluated strategies and methods to improve the treatment and quality of life of these patients. These are described in table 1.

Table 1. Main studies

N°	Theme	Author	Year	Methodology	Results
1	Risk factors associated with postoperative morbidity and mortality in D2 radical gastrectomy for stomach cancer	Paredes O, García L, Luna J, Meza K, Chávez I, Berrospi F, Luque C, Ruiz E.	2022	Retrospective study	In some cases, gastrectomy is necessary, as it can control the obstruction. The author also believes that gastrectomy is necessary in cases of perforation, but postoperative morbidity is high.
2	Selective effect of laparoscopic Roux-en-Y gastric bypass on lipid metabolism	Ackerman M, Serra E, Flecha P.	2022	Prospective study	Bypass was significantly associated with increased overall survival.
3	Gastric herniation due to rupture of the diaphragmatic prosthesis in the postoperative period of pleuropneumectomy for mesothelioma: a complication to take into account	Cerra D, Rama P, López D, Gestal M, Díaz M.	2022	Case study analysis	A study on stenting in colorectal cancer suggests that treatment history before and after stenting is a risk factor for perforation.
4	End of life in patients with non-curable cancer	Vries D, Medina M, Osorio k, Rodríguez N.	2022	Descriptive study	Nurses were trained to teach patients how to connect with family and friends and to help them gain more social support, in addition to training in the administration of analgesics appropriate for the type and stage of cancer.
5	Helicobacter pylori genotypes associated with stomach cancer and dysplasia in patients from Colombia.	Carlosama Y, Acosta C, Sierra C, Bolaños H.	2022	Descriptive study	The nurses dynamically adapted their nursing interventions to patient outcomes.
6	Evaluation of the lipid profile in the medium-long term after bariatric surgery (gastric bypass versus vertical gastrectomy)	Abellán L, Navarro M, González r, Torregrosa N.	2021	Retrospective study	The disadvantages were a longer hospital stay and increased postoperative morbidity.
7	Complications of gastric and bariatric surgery	Rebibo L, Msika S.	2021	Descriptive study	Based on these criteria, we consider this approach to be the best option for patients who cannot tolerate surgical procedures.
8	Therapeutic and palliative indications of radiotherapy in lung and thoracic tumors	Casado D, Barco E, Cigarral B, Claros J, Figuero L, Olivares A.	2021	Descriptive study	Palliative radiotherapy is the best treatment to control local symptoms such as bleeding, obstruction and pain, and radiotherapy is less invasive than other treatments.
9	Spiritual dimension in nursing care	Morales B, Palencia J.	2021	Descriptive study	The combination of cognitive behavioral therapy, with nurses explaining how the stomach works, and physical activity improved the quality of life of cancer patients.
10	Stomach cancer	Claros J, Fonseca E, Cigarral B, Casado D.	2021	Descriptive study	The nurses taught patients how to adapt to dietary changes after gastrectomy. As treatment progressed, patients' interest gradually shifted to radiotherapy and chemotherapy.
11	Perception of the quality of nursing care in cancer patients from southern Ecuador	Burgueño F, Rodríguez D, Cedillo C, Ordoñez C.	2021	Descriptive study	The nurses took the patients' needs into account and helped them to adopt a proactive attitude.
12	Palliative care in cancer patients belonging to the Solca core of Tungurahua	Arias T, Cusme N.	2021	Descriptive study	Patients were also asked to record their daily activity levels to encourage them to keep exercising and to perform each movement correctly to increase muscle strength, stimulate the body and reduce fatigue.
13	Comparison of open versus laparoscopic gastrectomy in advanced stomach cancer	Panduro V, Dámaso B, Loza C, Herrera J, Arteaga K.	2020	Retrospective study	The symptoms of advanced stomach cancer are hemorrhage, obstruction and perforation, which require palliative resection.
14	Behavior of fasting ghrelin after gastric bypass and sleeve gastrectomy: analytical cohort study	Navarro M, González R, Torregrosa N, Romera E.	2020	Prospective study	Patients who underwent bypass surgery were able to return to normal eating within two weeks compared to those who underwent surgery.
15	Conversion by robotic hybrid technique to Roux-en-Y gastric bypass after gastric sleeve failure: short-term results	Aguilar F, Montoya J, Gutiérrez J, Blas R.	2020	Retrospective study	This approach is characterized by less intraoperative blood loss, shorter postoperative gastric bypass delay and shorter postoperative hospital stay.
16	Stomach cancer	Richard N, Sefrioui D, Fiore F.	2020	Descriptive study	As radiotherapy is slow to respond, surgery, endoscopy and interventional radiology are appropriate in the acute phase.
17	Motor pathology and gastric emptying disorders	Aínsa M, González J.	2020	Descriptive study	Haemostasias was achieved in 73% of patients within a median of two days.
18	Motor pathology and gastric emptying disorders	Suder L, Ramírez M, Hernández A, De la Mora J, Alonso J.	2020	Retrospective study	The author demonstrated that the median time to re-intervention with stenting is less than 104 days, but that there is a high rate of re-occlusion and re-intervention is necessary. The author showed that the median time to stent failure is 67.5 days.
19	Gastric outlet obstruction: when you cannot do an endoscopic gastroenterostomy or enteral stent, try an endoscopic duodenojejunosotomy or jejunojejunosotomy	Irani S, Jhashab M.	2020	Retrospective study	Perforation and major bleeding are directly related to mortality but are rare and require attention.
20	Quality of life in cancer patients in palliative care at two hospitals in Lambayeque. 2019 – 2020	Muro E, Reque A, Leguía J.	2020	Descriptive study	The nurses provided a range of interventions, such as knowledge transfer, psychosocial support and attention to cancer fatigue, in addition to the use of opioids which are necessary to manage pain.
21	Nursing care process in an oncological patient	Gozueta A.	2020	Descriptive study	The nurses actively helped patients manage their symptoms and illnesses and established positive and trusting relationships with them, including improving their cognitive abilities, which go hand in hand with opioid analgesics such as dipyron, tramadol, and codeine.
22	Living after a gastrectomy: experience of patients with stomach cancer	Carrillo G, Santamaria N.	2019	Descriptive study	Patients who underwent palliative gastrectomy tended to have a higher survival rate than patients who did not undergo palliative gastrectomy.
23	Gastric bypass techniques for obesity	Robert M, Pelascini E, Pasquer A.	2019	Descriptive study	The risk of another operation was significantly lower compared to stenting.
24	Evidence-based recommendations for cancer pain management.	León M, Santa-Cruz J., Martínez S, Bernal L.	2019	Descriptive study	Paracetamol is the most widely used analgesic in the world, ranking in the top two rungs of the analgesic scale described by the WHO.
25	Epidemiology of stomach cancer in the third level of health care in Chiapas	Canseco L, Zamudio F, Sánchez R, Trujillo M.	2019	Descriptive study	The positive response rate to bleeding is high, ranging from 69% to 91%.
26	Comparison of a covered metallic ureteral stent and a double-J stent for malignant ureteral obstruction in advanced gastric cancer	Kim E, Shin J, Cho S, Song S.	2019	Descriptive study	Stent implantation is an effective palliative measure that requires little or no hospitalization and allows early resumption of oral intake at low cost.
27	Surgical management of Gastric Trichobozoar	Loaiza P, Yopez F, Arguello A, Salguero J.	2019	Descriptive study	These measures helped to alleviate patients' anxiety and depression and reduce mental fatigue.
28	Chemotherapy at the end of life: infrequent clinical practice?	Santos M, Godoy M, Abajo C.	2019	Descriptive study	Palliative gastrectomy before chemotherapy was not beneficial for survival in patients with stomach cancer. It is important to know that patients undergoing total gastrectomy may not tolerate chemotherapy.
29	Risk of addiction to opioid analgesics in the treatment of chronic non-cancer pain	Acuña J.	2019	Descriptive study	The decision to perform palliative gastrectomy should be made carefully and in consultation with other healthcare professionals.

Note: own elaboration with research data (2023)

The studies analysed in this review identified a wide range of useful and effective palliative outcomes for pain

management and treatment of patients with gastric cancer. First and foremost, the goals of the interventions analysed focused on improving quality of life, not necessarily its duration. Given this, palliative therapy poses multiple challenges, but the most important is finding a balance between being honest with patients about their prognosis and maintaining a sense of hope.

Within all the articles, four palliative therapy focused treatments were identified, these are defined as palliative gastrectomy, bypass, palliative radiotherapy, chemotherapies. On the other hand, analgesic treatment was identified for the management of patients with stomach cancer and palliative care at the end of life.

Firstly, it is noted that symptoms of advanced stomach cancer have been cited as hemorrhage, obstruction, or perforation, which require palliative resection. According to the study carried out by Panduro et al, (2020), endoscopic approach and arterial embolization are preferred to control bleeding. However, Paredes et al, (2022) describe that gastrectomy is essential in some circumstances, as it can control the obstruction. In addition, the author considers that, for perforation, gastrectomy is necessary, but morbidity after surgery is high.

However, some articles debate whether palliative gastrectomy can improve the prognosis of patients with stomach cancer. Thus, the study by Carrillo and Santamaria (2019) showed that patients after palliative gastrectomy tended to have better survival than patients treated without palliative gastrectomy. On the other hand, Santos et al., (2019) showed that palliative gastrectomy before chemotherapy had no survival benefit for patients with stomach cancer. Importantly, patients undergoing total gastrectomy were less able to tolerate chemotherapy. In response to this, Acuña (2019) consider that the decision to offer palliative gastrectomy should be made in a considered manner and in consultation with other health professionals.

However, Navarro et al., (2020) showed that bypass patients were able to eat a regular meal at 2 weeks compared to stent patients. On the other hand, Robert et al., (2019) significantly reduced the risk of reoperation compared to stenting. In contrast, Ackerman et al., (2022) showed that bypass was significantly associated with longer overall survival. However,, Abellán et al., (2021) explain the disadvantages are longer hospital stays and high morbidity after surgery, they say. Therefore, this palliative treatment is considered suitable for patients with good functional status and the possibility of long survival.

On the other hand, less invasive methods, such as laparoscopy, have recently been used. Therefore, less invasive methods, such as laparoscopy, have recently been used. Aguilar et al., (2020) report that this method is associated with less intraoperative blood loss, less delayed postoperative gastric emptying and shorter hospital stay. Under the same criteria, Rebibo y Msika (2021) have shown that less invasive methods become feasible and less morbid, under this criterion the author considers this method to be optimal for patients who might not tolerate surgical intervention.

According to Casado et al., (2021), palliative radiotherapy is an option to control localized symptoms, such as bleeding, obstruction and pain, and is less invasive than other treatments. However, Richard et al., (2020) stipulate that response to radiotherapy may take time, so surgery, endoscopy or interventional radiological treatment is appropriate in an emergency situation.

According to the arguments of Kim et al., (2021), stenting is an effective palliative method and allows a quicker resumption of oral intake, with almost no hospital stay and at a lower cost. However, Suder et al., (2020) associate with a high rate of re-obstruction and need for re-intervention. The author showed that the median time to stent dysfunction was 67.5 days.

Otherwise, Cerra et al., (2022) mentioned that when planning treatment, the use of uncoated stents could be recommended. This study on stenting for colon cancer suggested that treatment history both before and after stenting was a risk factor for perforation. At the same time, Irani and Khashab (2020) consider that perforation and severe bleeding are directly related to mortality; therefore, they are infrequent and great caution should be exercised.

However, the available literature on chemotherapy for stomach cancer suggests that there may be a small benefit. Trials are generally based on the premise that the primary endpoint is patient survival, i.e. the amount, not necessarily the quality, of life provided. Chemotherapy for advanced gastric cancer was recently reviewed and does not need to be reviewed again (Canseco et al., 2019).

However, patients should be informed about the possible occurrence of pain at any stage of the disease, both during and after diagnostic interventions and as a consequence of cancer and/or anticancer treatments. Against this background, analgesic drugs are only one part of cancer pain management, and an integrated approach to pain management should be adopted, incorporating the treatment of mild, moderate and severe pain (Aínsa & González 2020).

Within the mild treatment approach, paracetamol and NSAIDs are universally accepted as part of the management of cancer pain at any stage of the WHO analgesic scale. There are several relevant systematic reviews on the efficacy of paracetamol and NSAIDs for the treatment of cancer pain, whether used alone or in combination with opioids (Bonet et al.,



2022).

According to León et al., (2019), paracetamol is the mainstay of the first two rungs of the analgesic ladder in many countries. However, Muro et al., (2022) highlights the lack of knowledge on the efficacy of paracetamol for cancer pain. According to this review, there is no conclusive evidence to support or refute the use of NSAIDs alone or in combination with opioids for the treatment of mild cancer pain. On the other hand, Goyzueta (2020) considers dipyrone to be another non-opioid analgesic that, according to a recent systematic review, could be used for the treatment of cancer pain, alone or in combination with opioids.

On the other hand, within moderate treatment there are few options for treating mild to moderate cancer pain. Tramadol, dihydrocodeine and codeine are the most widely available options. Vries et al., (2022) has described that tramadol is widely used in palliative care, although data on its use are limited and adverse effects can be serious. In addition, Merino et al., (2019), considers tramadol to have a potential role in step 2 of the analgesic ladder. On the contrary, Tuapanta and Torres (2021) mentions that tramadol can have significant side effects, such as dizziness, nausea, vomiting and constipation. Contreras and Sierra (2021) also stipulate that codeine has little or no analgesic effect until it is metabolized to morphine. Thus, in poor metabolizers it is essentially ineffective, while in ultrarapid metabolizers it is potentially toxic. Available evidence suggests that codeine is more effective against cancer pain in adults than placebo, but with a higher risk of nausea, vomiting and constipation.

Finally, pharmacological treatment for severe pain may use strong opioids and medical cannabis. Strong opioids are the mainstay of analgesic treatment of moderate to severe pain related to stomach cancer. Although a variety of potent opioids exist and there is no superiority of one over another, morphine is the most widely available and prescribed. Despite global agreement that access to opioids is essential, both access to and use of opioids remains poor in many countries (Claros et al., 2021).

On the other hand, Alcalde et al., (2021) consider that cannabinoids, which are effective against chronic neuropathic pain, can be included among the adjuvant medicines for palliative care of cancer patients. Canseco et al., (2019) detail that nabiximols may be a useful additional analgesic for patients with opioid-refractory cancer pain.

However, the study of Aínsa and González (2020) suggest that between 53% and 70% of patients with cancer-related pain require an alternative route of opioid administration in the months and hours before death. Sometimes, as patients approach death, pain is perceived as refractory and is often accompanied by other symptoms such as dyspnea, agitation, delirium and anxiety, any of which may exacerbate the underlying central mechanisms of pain.

In deciding that the pain is refractory, the clinician must, after careful assessment of the physical pain and total distress, be unlikely to provide relief. In this situation, sedation may be the only therapeutic option capable of providing adequate relief. The rationale for sedation, which should be a rare intervention for pain, is that it is an appropriate and proportionate goal (Carlosama et al., 2022).

However, before sedative drugs are administered, all possible causes of distress should be carefully assessed and evaluated through a specialized multidisciplinary approach that also includes psychiatric, psychological and pastoral care staff.

In this way, systemic nursing intervention focuses on patients based on their negative emotions. Thus, in the study of Muro et al., (2022) They noted that the nurses applied multiple interventions, such as knowledge education, psychosocial support and cancer-related fatigue-based nursing. The results of this study showed that, after the intervention, the fatigue status and quality of life of cancer patients could be improved. On the other hand, Goyzueta (2020) established a good relationship of trust, where the nurses actively guided the patients to cope correctly with the symptoms and treatment of the disease and improved the patients' cognition of the disease and consequently, the patients better followed the nursing measures that could alleviate body fatigue.

Thus, the fatigue-related symptoms, in the study of Vries et al., (2022) showed that nurses were trained to guide patients to help family and friends, and also to help patients gain more social support. Thus, Merino et al., (2019) They add that these measures alleviate patients' anxiety, depression and relieve their emotional fatigue.

In this respect, the study of Tuapanta and Torres (2021), showed that patients recorded their daily activity levels to encourage them to continue exercising and performing individual movements in an appropriate way to increase muscle strength and stimulate the body, which would reduce the feeling of fatigue. However, as a major negative life event, cancer takes a significant emotional toll on the family. In other words, Contreras y Sierra (2021) The cancer patients were able to assimilate their pathological condition through a combination of psychological and spiritual intervention to avoid suffering and to maintain the principle of autonomy in order to provide a dignified death

## CONCLUSIONS

According to the systematic review conducted, it was concluded that the main palliative therapies for gastric cancer were resection, bypass, chemotherapy. The results showed consistent evidence that patients with advanced gastric cancer benefit in both survival and quality of life from a combination of chemotherapy plus supportive care compared to receiving supportive care alone (Navarro, et al 2020).

In consideration of pain management, a range of pharmacological therapies are available for the control of cancer pain. Non-opioid analgesics (paracetamol and non-steroidal anti-inflammatory drugs (NSAIDs) such as aspirin and ibuprofen) are well established and commonly used as single agents to control mild to moderate cancer pain. When used in combination with opioids, these products can provide additional pain relief, leading to a reduction in opioid dosage and fewer opioid-related side effects. (Acuña, 2022).

Thus, the purpose of palliative care at the end of life is to alleviate the suffering of patients and their families by comprehensively assessing and treating the physical, psychosocial and spiritual symptoms that patients experience. As death approaches, a patient's symptom burden may worsen and require more aggressive palliation. As palliative measures intensify, so does the support provide to the dying patient's family. Once death has occurred, the role of palliative care focuses on support for the patient's family and bereavement. (Vries, et al 2022).

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Task	% of contribution of each author				
	A1	A2	A3	A4	A5
A. theoretical and conceptual foundations and problematization:	20%	20%	20%	20%	20%
B. data research and statistical analysis:	20%	20%	20%	20%	20%
C. elaboration of figures and tables:	20%	20%	20%	20%	20%
D. drafting, reviewing and writing of the text:	20%	20%	20%	20%	20%
E. selection of bibliographical references	20%	20%	20%	20%	20%
F. Other (please indicate)	-	-	-	-	-

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