

Role of nursing in patients receiving chemotherapy

Atuação da enfermagem em pacientes em tratamento quimioterápico

Rol de enfermería en pacientes que reciben quimioterapia

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Nursing care for patients undergoing cytostatic therapy must be comprehensive from a holistic approach.

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It offers a synthesis of the available literature about the nursing role, confirming as one of the most essential pillars when providing the care required by cancer patients.

ABSTRACT

Introduction: Treatment with chemotherapy is the most widely used in almost all types of neoplasms, however, the side effects that it triggers affect the patient's style and quality of life, for this reason the nursing staff must know what their intervention should be with these patients. **Objective:** To analyze the role played by the nursing staff in patients receiving chemotherapy. **Methodology:** A study was carried out with a qualitative, descriptive approach, non-experimental design, the databases used included search engines such as Scopus, PubMed, eJournals, Google Scholar and Trip Database, Scielo, Ocronos). A total of 27 articles are included. **Results:** Nursing care for patients undergoing cytostatic therapy must be comprehensive from a holistic approach. In which it allows to cope with activities that are of the utmost importance for the patient such as reducing the risk of phlebitis and extravasation, controlling nausea and vomiting, informing about side effects. In this way it provides physical, emotional, psychological, and practical support. **Conclusion:** The nursing role is one of the most essential pillars when providing the care required by cancer patients, allowing maintaining the integrity of the skin, achieving optimal nutritional status, attending to the emotional spheres of the patient, reducing the degree of duration of diarrhoea, correct medication administration and effective communication.

Keywords: Nursing Staff, Chemotherapy, Nursing care.

RESUMO

Introdução: O tratamento com quimioterapia é o mais utilizado em quase todos os tipos de neoplasias, no entanto, os efeitos colaterais que desencadeia afetam o estilo e a qualidade de vida do paciente, por isso a equipe de enfermagem deve saber qual deve ser sua intervenção com esses pacientes. **Objetivo:** Analisar o papel desempenhado pela equipe de enfermagem em pacientes em tratamento quimioterápico. **Metodologia:** Realizou-se um estudo de abordagem qualitativa, descritiva, de desenho não experimental, as bases de dados utilizadas incluíram motores de busca como Scopus, PubMed, eJournals, Google Scholar e Trip Database, Scielo, Ocronos). Um total de 27 artigos estão incluídos. **Resultados:** A assistência de enfermagem ao paciente submetido à terapia citostática deve ser integral a partir de uma abordagem holística. No qual permite lidar com atividades de extrema importância para o paciente como diminuir o risco de flebite e extravasamento, controlar náuseas e vômitos, informar sobre efeitos colaterais. Desta forma, fornece apoio físico, emocional, psicológico e prático. **Conclusão:** A atuação da enfermagem é um dos pilares mais essenciais na prestação dos cuidados requeridos pelo paciente oncológico, permitindo manter a integridade da pele, atingir um estado nutricional ideal, atender as esferas emocionais do paciente, diminuir o grau de duração da diarreia, a correta administração do medicamento e a comunicação afetiva.

Palavras-chave: Equipe de Enfermagem, Quimioterapia, Cuidados de Enfermagem.

RESUMEN

Introducción: El tratamiento con quimioterapia es el más utilizado en casi todos los tipos de neoplasias, sin embargo, los efectos secundarios que desencadena afectan el estilo y calidad de vida del paciente, por ello el personal de enfermería debe conocer cuál debe ser su intervención con estos pacientes. **Objetivo:** Analizar el rol que cumple el personal de enfermería en pacientes que reciben quimioterapia. **Metodología:** Se realizó un estudio con un enfoque cualitativo, descriptivo, diseño no experimental, las bases de datos utilizadas incluyeron motores de búsqueda como Scopus, PubMed, eJournals, Scholar Google y Trip Database, Scielo, Ocronos). Se incluyen un total de 27 artículos. **Resultados:** El cuidado de enfermería en el paciente sometido a terapia con citostáticos debe ser integral desde un enfoque holístico. En la cual permite sobrellevar actividades que son de suma importancia para el paciente como reducir el riesgo de flebitis y extravasación, controlar náuseas y vómitos, informar sobre los efectos secundarios. De esta manera brinda apoyo físico, emocional, psicológico y práctico. **Conclusión:** El rol de enfermería es uno de los pilares más indispensables al momento de brindar los cuidados que requieran los pacientes oncológicos, permitiendo mantener la integridad de la piel, conseguir un estado nutricional óptimo, atender las esferas emocionales del paciente, disminuir el grado duración de la diarrea, la administración correcta del medicamento y comunicación afectiva.

Palabras clave: Personal de Enfermería, Quimioterapia, Atención de enfermería

INTRODUCTION

The generic definition of cancer is that it is a disease caused by uncontrolled and uncontrolled growth of a cell or a type of cell, and in the late 1920s cancer was one of the top three leading causes of death (Tinoco, 2019). Today, neoplasms continue to be among the leading causes of mortality worldwide. In Latin America, the first cancer patient appeared in Puerto Rico in 1950; in Mexico, cancer mortality rates continue rising (Aldaco et al., 2019), and nationally, stomach cancer was the leading cause of death until 2013 (Corral et al., 2019). Based on this and understanding cancer as a public health problem, several lines of treatment have been developed that seek to control the progression of cancer, increase patient survival and cure the pathology, which is why the treatment is constantly developing and advancing (Wakiuchi, et al, 2019).

Currently, there are several types of treatment among them is chemotherapy, which depending on its intention can be curative, neoadjuvant, adjuvant, concomitant and palliative, all this treatment is carried out through the use of cytostatic drugs in order to improve the prognosis and quality of life of the cancer patient (Blanco et al., 2021), However, although this is the fastest-acting treatment, being so aggressive, it produces more side effects (Aldaco et al., 2019). Due to the aggressive nature of the treatment and the effects it has on patients, nurses must support the patient by providing holistic and quality care.

Humanised nursing care is present in every action that the staff performs, valuing the patient fully and seeking to meet the patient's needs without neglecting ethics and values (Oliva et al.,2022), quality nursing care requires that the nurse works in collaboration with colleagues and other health professionals, so that the approach to the patient is complete, collaboration with psychologists, rehabilitators and logically the doctor is very important, since the total satisfaction of the patient is sought without neglecting any area during their recovery (Hermosilla, et al, 2021).

Cancer is a pathology that starts when specific cells in the body begin to replicate in an excessive manner and can cause spread to other parts of the body, it has been shown that patients suffering from some type of neoplasm have a higher rate of hospital mortality (Dardiotis, et al, 2019), There are many types of neoplasms, the risk factors associated with the pathology are various and depend on the type of cancer, however it was found that age, overweight, smoking, alcoholism and family history are common factors among cancer patients (Bello, et al, 2021).

The diagnosis of a neoplasm is made on the basis of different imaging and laboratory studies relevant to each type of cancer, for example, for the detection of cervical cancer, the Pap smear is the test of choice (Bravo & Román, 2021), while in the case of prostate cancer, PSA levels help in the detection of prostate cancer. (García, Zapata and Sánchez, 2019), This will normally be accompanied by a biopsy of the tissue in question. When a patient is informed about his or her health situation and learns that he or she has cancer, there is usually a feeling of uncertainty, which is shared with his or her family. Due to the seriousness of the situation, the accompaniment provided to the patient and his family is complex, as it is the health personnel who must find ways to help the patient cope with the pathology (Ruyscher et al,2020).

When cancer is detected early, patient survival is greatly increased because treatment can be started as early as possible to delay the development and decrease the lethality of the pathology, however, more than 50% of cancers are detected when they are already at a fairly advanced stage (Crosby, et al, 2022). The treatment is given depending on the type of cancer affecting the organism, chemotherapy is the first line of treatment and is prescribed at different stages of the anticancer treatment, which can have a neoadjuvant, adjuvant or palliative approach (Dominguéz, 2019). While chemotherapy aims to restore the patient's health and help improve quality of life, however, the patient's prognosis will depend on the degree of involvement.

The side effects of treatment with cytostatics are various, at a systemic level the organism is immunodebilitated, for this reason the patient's health care must be exaggerated, other adverse effects that stand out are those that occur at a gastrointestinal level, patients subjected to chemotherapy report feeling nausea all the time, which can lead to vomiting and diarrhoea, This is explained by the fact that the mucous membranes of the intestine are more prone to present alterations due to radiation and cytostatics (Guzmán and Alvira, 2021), the toxic effects on the skin tissue are also well known and of these the one that generates the greatest conflict in patients is alopecia, which affects the patient's perception of their body image and can compromise their adherence to treatment (Lesague, Guillot and Sibaud, 2020).

The nursing staff who provide care to oncology patients who are receiving chemotherapy cycles must be aware of the implications of the use of this treatment and logically of the negative effects that it can have on the patient, all of this with a view to reducing the unpleasant symptoms that it generates at a biological, psychological and social level (McKinnon, et al, 2019), In these patients, nursing care must also facilitate the patient's and family's understanding of the disease, and the nurse's educational role must be based on open communication between the patient, the family and the direct caregiver (Arias and Cuzme, 2021).

Within this pathological process, the psychological aspects play a determining role in the patient and his family, as

the affectation at an emotional level can compromise the patient's health, which is why including psychological skills in the medical and nursing procedure is important and helps the recovery of the oncological patient (Campagne, 2019). The nursing care provided throughout the treatment should not only consider the visible signs and symptoms but also assess the patient's emotional component and provide accompaniment (Icaza, et al, 2020).

Within the ethical principles that regulate the professional practice of nursing we find beneficence and non-maleficence, the activities carried out by the nursing professional must adhere to ethics, accompanying the patient in each of the stages of the disease, listening, understanding, supporting, and respecting their decision (Parra y Pino, 2020). Understanding that the nursing care of the oncology patient receiving chemotherapy encompasses several spheres of the patient, and that survival rates improve if care is adequate (Gimeno, 2021), nurses have an obligation to know the importance of their role, whether in the patient's recovery or in the process of reaching a dignified death. Therefore, the aim of this research is to analyze the role of nursing staff in patients receiving chemotherapy.

METHODS

The study uses a qualitative, descriptive, non-experimental design approach, responding to the research needs currently demanded by nursing (Moreno, et al, 2021). This research seeks to synthesize and counterbalance information obtained from high impact articles that were published in indexed journals (Secada, 2021). These articles were searched based on health science descriptors such as chemotherapy, nursing care, neoplasia, etc.

Data search: scientific search engines (Scopus, PubMed, eJournals, Scholar Google and Trip Database, Scielo, Ocronos) were used to find the most relevant studies for reliable analysis.

Population, sample, exclusion, and inclusion criteria:

Inclusion and exclusion criteria were employed to ensure that the data attributed to the research and did not contain ambiguous results, duplicates or information that was derived from the main theme. On the other hand, we excluded articles that were derived from the research objectives and did not contribute to the analysis and discussion, as well as studies that were out of date, non-academic articles, such as dissertations or unpublished papers, and paid-for articles.

A total of 460 articles were found which were filtered according to the type of research, title and abstract of the study, after which a total of 35 useful articles were obtained which were reviewed in their entirety until 27 articles fulfilled all the selection criteria and were suitable for the study.

RESULTS AND DISCUSSION

	General information on the research.	Methodology	Results and conclusion.
1	Theme: Adherence to pediatric acute chemotherapy-induced nausea and vomiting guidelines in Canadian hospitals Year: 2019	Multicentre study	Nausea and vomiting are common occurrences in pediatric patients receiving cancer treatment, usually treated with anti-emetic medication. The relationship between unpleasant symptom theory and nursing practice allows for patient assessment and justification of patient care actions (McKinnon, et al, 2019).
2	Theme: Effect of Self-Efficacy Intervention Combined with Humanistic Nursing on Self-Care Ability and Quality of Life in Patients Receiving Chemotherapy for Malignant Tumors Type: Scientific research Year: 2022	Quantitative Randomized experimental	Before the intervention, no significant differences in psychological state, self-care ability and quality of life were identified between the two groups, but afterwards the experimental group had higher satisfaction. The self-efficacy intervention combined with humanistic nursing can significantly improve patients' self-care capacity, quality of life and nursing satisfaction, and is therefore worthy of promotion in the clinic. (Ling, et al, 2022)
3	Theme: Experiences and views of nurses about unmet needs of older cancer patients receiving chemotherapy: A qualitative study Type: Scientific research Year: 2022	Qualitative descriptive phenomenological study with convenience sampling.	Nurses providing services in outpatient chemotherapy units should make a holistic assessment of older cancer patients, be aware that these patients may not be able to express their needs, be more sensitive to them and ensure that the voice of older patients is heard (Ayvat and Atli, 2022).
4	Theme: Managing Chemotherapy Extravasation Across Transitions of Care: A Clinical Nurse Specialist	Quantitative descriptive	With chemotherapy extravasation, the site does not immediately show signs of tissue injury, which creates a false sense of security. Applying this process improves nursing staff management of chemotherapy

	Initiative Type: Scientific research Year: 2021		extravasations and increases patient safety and patient and nurse satisfaction (Karius and Colvin, 2021).
5	Theme: Oral care in cancer nursing: Practice and barriers Type: Scientific research Year: 2019	Quantitative descriptive cross-sectional descriptive study	In the hospitals where the survey was conducted, there was no protocol for oral care of cancer patients. The nurses expressed that oral care in oncology patients was one of the most ignored aspects of oncology nursing (Pai, Ongole and Banerjee, 2019).
6	Theme: Experiences of People with Cancer from Rural and Remote Areas of Western Australia Using Supported Accommodation in Perth While Undergoing Treatment Type: Scientific research Year: 2022	Phenomeno-logical quantitative study	Patients can derive a number of positive health benefits from contact with staff, patients and the public. Interactions with staff, patients and the hospital environment supported the well-being of those receiving cancer treatment (Chua, et al, 2022).
7	Theme: Assessing the lung cancer risk reduction potential of candidate modified risk tobacco products Type: Scientific research Year: 2019	Quantitative, descriptive, field study	Better supportive care will lead to a higher success rate with fewer side effects of new treatment options and thus greater cost-effectiveness, implementing these recommendations in clinical practice will benefit patients and all of them are achievable, although some may require additional resources. The risk reduction potential of cMRTPs, including their potential to reduce lung cancer risk, needs to be evaluated (Hoeng, et al, 2019).
8	Theme: Is There a Difference in Unmet Supportive Care Needs Between Older and Younger Outpatients Receiving Chemotherapy? Type: Scientific research Year: 2021	Quantitative, descriptive analytical study	Elderly patients reported fewer unmet needs than younger patients. It is suggested to focus on the fact that patients' needs change with age and that they have difficulty expressing their needs (Ayvat and Atli, 2021).
9	Theme: Perspectives of Oncology Nursing and Investigational Pharmacy in Oncology Research Type: Scientific research Year: 2020	Quantitative descriptive study	Multiple nursing roles may be involved in the care of patients being treated. Ensuring appropriate safeguards, accurate and specific delivery and documentation of the identification protocol and completion of patient education are key (Black and Kulkarni, 2020).
10	Theme: Advance Care Planning: Having Goals-of-Care Conversations in Oncology Nursing Type: Scientific research Year: 2021	Quantitative descriptive study	Patient decision-making tools and aids include guidelines for advance care planning, goals of care and patient-related resources for knowledge and skills (Boucher, 2021).
11	Theme: Extravasation of chemotherapy drugs - updated recommendations Type: Scientific research Year: 2020	Clinical Practice Guideline	Preventive measures are essential and include early consideration of indications for long-term venous access devices, choice of injection site, venous line monitoring before each application of chemotherapy drugs, and patient education. The recommended procedures help to reduce the risk and consequences of extravasation (Vokurka, et al, 2020).
12	Theme: Limb Hypothermia for the Prevention of Chemotherapy-Induced Peripheral Neuropathy - Modality for Optimal Cooling Type: Scientific research Year: 2020	Quantitative, experimental, randomized, field study.	Recent studies have suggested the clinical utility of limb hypothermia to reduce induced peripheral neuropathy. Local cooling pack care is a non-pharmacotherapeutic approach that is low cost and has no side effects. Therefore, further research is recommended to verify the effects of cooling pack care (Bandla, et al, 2020).
13	Theme: Constructing a Predictive Model of Depression in Chemotherapy Patients with Non-Hodgkin's Lymphoma to Improve Medical Staffs' Psychiatric Care Type: Scientific research Year: 2021	Quantitative, descriptive, field study	The application of a risk prediction model of depressive symptomatology for chemotherapy patients with good predictive power and clinical utility facilitates the work of nurses in the psychological approach to oncology patients (Hu, et al, 2021).
14	Theme: Need and demand for nutritional counselling and their association with quality of life, nutritional status and eating-related distress among patients with cancer receiving outpatient chemotherapy: a cross-sectional study Type: Scientific research Year: 2019	Quantitative analytical descriptive field study	Medical staff caring for cancer patients, such as general practitioners, dietitians, nurses, clinical psycho-oncologists, social workers and psychiatric oncologists, should collaborate and share information to provide nutritional counselling (Koshimoto, et al, 2019).
15	Theme: A feasibility study of a peer discussion group intervention for patients with pancreaticobiliary cancer and their caregivers Type: Scientific research Year: 2022	Quantitative pre-post comparison study	Data from 42 patients and 27 caregivers who joined the salon for the first time were analysed, both patients and caregivers had significantly lower psychological distress as assessed after the application of group therapy (Yanai, et al, 2022).
16	Theme: Calidad de vida en mujeres con cáncer de mama sometidas a	Observational and cross-sectional analytical study	The quality of life of breast cancer patients undergoing chemotherapy is affected by the side effects of the treatment (Mejía, Contreras and

	<p>quimioterapia en Cali, Colombia Type: Scientific research Year: 2020</p>		<p>Hernández, 2020).</p>
17	<p>Theme: Proceso de atención de enfermería en un paciente oncológico Type: Scientific research Year: 2020</p>	<p>Case study applying the nursing care process</p>	<p>The oncology patient has several unmet needs, which nurses can help to address. The promotion of activities at home is recommended to help them prevent complications and cope with the disease (Goyzueta, 2020).</p>
18	<p>Theme: Administración de Citostáticos en el marco de calidad del cuidado de enfermería oncológica. Type: Scientific research Year: 2022</p>	<p>Quantitative, descriptive, non-experimental, cross-sectional study.</p>	<p>Prevention of extravasation is the best measure to reduce tissue damage, and there are also treatments that nurses must master in order to be able to apply them in the event of such an event (Pereda and Meneses, 2022).</p>
19	<p>Theme: Experiencia de vivir el proceso de enfermar de cáncer y recibir quimioterapia, siendo acompañado por una enfermera. Type: Scientific research Year: 2022</p>	<p>Qualitative descriptive phenomeno-logical study</p>	<p>The complexity of caring for a patient receiving chemotherapy requires nurses to be constantly trained and competent in providing care to patients, while maintaining patient and self-safety parameters (Palma and Doran, 2020).</p>
20	<p>Theme: La vivencia de los pacientes con cáncer y el cuidado de enfermería Type: Scientific research Year: 2020</p>	<p>Qualitative meta-study analysis</p>	<p>The cancer patient's experience is complex and changing; the cancer patient needs to have the capacity to adapt and help to rediscover his or her emotions (Hermosilla and Sanhueza, 2020).</p>
21	<p>Theme: Intervención lúdica de enfermería en pacientes oncológicos con quimioterapia en hospital clínico quirúrgico, enero - abril, 2018 Type: Scientific research Year: 2020</p>	<p>Prospective, descriptive, cross-sectional study.</p>	<p>A nurse who is well versed in communication and active listening can create a better relationship with their patient and help decrease symptoms of stress and depression in them (Font, Fernandez and Galban 2020).</p>
22	<p>Theme: Diagnóstico de enfermería relacionadas con los posibles efectos adversos de la quimioterapia antineoplásica Type: Scientific research Year: 2021</p>	<p>Quantitative, observational, descriptive, cross-sectional study.</p>	<p>Cancer patients experience many acute and chronic pain syndromes, the identification of which can be useful in the assessment and management of pain, for which the Diagnostico de enfermería was implemented (Almeida, et al, 2021).</p>
23	<p>Theme: La mujer con quimioterapia: percepción sobre cuidado recibido. Type: Scientific research Year: 2021</p>	<p>Qualitative study with case study design</p>	<p>In the different scenarios, nurses should develop a care plan, outlining goals that help to improve mood and support the disease process (Collazos, et al, 2021).</p>
24	<p>Theme: Adopción del rol y calidad de vida de cuidadores de pacientes oncológicos en Medellín, Colombia Type: Scientific research Year: 2022</p>	<p>Cross-sectional descriptive study</p>	<p>Nursing care should address the patient in all spheres in a holistic manner with the aim of facilitating psychosocial adjustment and minimising the risk of depression and anxiety (Escalante, Montoya and Arias, 2022).</p>
25	<p>Theme: Percepciones sobre la gestión, exposición bioseguridad de citostáticos en el personal de enfermería de una institución de salud privada de la Ciudad Autónoma de Buenos Aires. Type: Scientific research Year: 2022</p>	<p>Observational, retrospective descriptive cross-sectional study.</p>	<p>Nursing staff do not comply with the different standardized protocols and activities are not planned, it is recommended that staff design their care plans to improve management (Rivero and Gozales,2022).</p>
26	<p>Theme: Percepción de las enfermeras frente al manejo del dolor en niños en una Servicio Oncológico Hospitalario e Chile. Type: Scientific research Year: 2020</p>	<p>Cross-sectional descriptive study</p>	<p>The care of oncology patients in pain has ethical implications, and communication is one of the strategies that help to improve patient care (Parra, et al, 2020).</p>
27	<p>Theme: Afrontamiento y adaptación del adulto con cáncer: el arte del cuidado de enfermería Type: Scientific research Year: 2022</p>	<p>Quantitative and descriptive cross-sectional study.</p>	<p>The accompaniment provided to these patients must be continuous, for the nursing staff to know the experience of the patients helps to provide holistic care (Cepeda, et al, 2022).</p>

Currently, researchers highlight the importance of nursing care in patients receiving chemotherapy at different stages of treatment, either during the administration of the drug or the psychological implications of its side effects and how these nursing interventions influence their recovery.

Cancer is a public health problem, which has a high mortality rate and incapacitates those who suffer from it, giving treatment implies a great expense for the health system and the family nucleus, oncology patients live really complex situations that challenge them on a daily basis (Hermosilla and Sanhueza, 2020), and it is thought that in older adults it is more complicated as caregivers are not able to report their needs well and cannot do their job well because they have multiple needs, associated with treatment and adverse effects (Ayvat y Atli, 2021).

Therefore, the Nursing Process for oncology patients undergoing chemotherapy was implemented, allowing the construction of nursing care plans based on scientific evidence and is reliable to the needs of the patient, focusing on helping in a humanized, holistic, qualified and competent manner. In this process, the nursing diagnoses are fundamental, as they are listed based on the clinical reasoning of the nurse and from them the care will be guided in an adequate and individualized manner (Almeida, et al, 2021)

Thus, the nurse educates and accompanies the patient during chemotherapy, offers a support system that prepares them to start treatment, facilitating access to health care, according to the needs that they suggest. It also detects and carries out the initial management of complications. To provide treatment for the pathology, chemotherapy is the procedure of choice in most neoplasms, either alone or in combination with some other type of treatment (Palma, Luchini and Doren,2022).

In general, the most common signs and symptoms associated with cytostatic treatment are hair loss, decreased sleep quality, insomnia, fatigue, nausea and vomiting (Mejía, Contreras y Hernández, 2020). The pain associated with this pathology and its treatment is also an important factor to keep in mind as it disables the patient and prevents them from carrying on with their daily activities (Almeida, et al, 2021). The nursing staff must have a broad knowledge of the care that can be applied to patients undergoing chemotherapy cycles, the design and application of the nursing care process is carried out based on the patient's assessment and adapted to the patient's context and reality (Collazos, et al, 2021). Some studies recommend implementing interventions to improve quality of life without neglecting the emotional sphere of the patient and family (Mejía, Contreras y Hernández, 2020).

The application of the nursing care process is immersed in each of the activities that staff carry out in their work (Escalante, Montoya and Arias, 2022), the role of nurses in caring for cancer patients is integrative and essential in order to maintain good adherence to treatment and meet the patient's needs (Hermosilla and Sanhueza, 2020), for this purpose, the study of McKinnon, et al (2019) provides a guideline for integrating unpleasant symptom theory into the intervention of the cancers patient.

Once the patient is assessed holistically, activities are prioritized according to the most affected needs and therefore require greater care. In a 2019 study, it was found that the sphere with the greatest need for intervention was the psychological and emotional sphere; lack of motivation, emotional support and poor communication were detrimental to the patient's recovery process, and that the lack of motivation, emotional support and poor communication were detrimental to the patient's recovery process, as well as to the patient's ability to recover (Escalante, Montoya and Arias, 2022), which is related to Yanai's research, in which support groups were created to socialize the problems of cancer patients undergoing treatment and their families, after the creation of these circles, an improvement in the patient's mood and better management of the disease was noted (Yanai, et al, 2022).

Oncology nursing plays perhaps the most important role in the patient's recovery and therapeutic journey, the care it provides is based on pre-planned and individualized goals (Boucher, 2021), the interaction that staff have with the patient and their environment helps to maintain the patient's wellbeing, facilitating emotional support and promoting communication are strategies that nurses can adopt (Chua, et al, 2022), A 2020 study states that in order to create a good therapeutic relationship, it is important for staff to be aware of communication techniques that facilitate the relationship with patients and encourage them to express their needs (Font, Fernandez y Galban 2020). In addition, nurses have an obligation to listen to the patient's feelings and educate the patient on issues related to their treatment, all of which helps to detect psychological problems such as anxiety and depression at an early stage (Rivero and Gozales,2022).

That is why, according to Collazos, et al (2021) state that nursing staff should develop care before and after treatment. Comprehensive nursing care and emotional support leads to a higher success rate and decreased side effects of cytostatic treatment, and decreases treatment costs (Hoeng, et al, 2019), This is related to an experimental study in which patients and their family were intervened, after this intervention patients had a better coping with the side effects of chemotherapy, also the family relationship was strengthened (Ling, et al, 2022).

Prior to the administration of chemotherapy, the nursing staff must take into account the following care, such as taking weight and height, as chemotherapy can cause the person to gain weight due to fluid retention, decrease their metabolism and cause problems in the digestive system, therefore, another nursing care is to inform the patient about the treatment and the protocol. It is also important that before treatment, the vascular access is properly selected to avoid skin

lesions. About the onset of nausea, it is important to inform the patient of the onset of nausea, which may occur 2-3 hours after administration, and antiemetics should be administered before, during and after treatment.

Among the nursing care provided to patients during chemotherapy treatment is the preparation of chemotherapy drugs, for which the staff must use safe preparation areas, the preparation of the medication is sterile and seeks to reduce the greatest number of adverse events associated with the use of cytotoxic drugs, It is important to point out that personnel who are in contact with this type of drug should take appropriate biosafety measures, and by the end of the assistance, the leftover medication should be inactivated with chlorine and in a well-labelled red container (Karius and Colvin, 2021).

Similarly, during the administration of cytostatics, nausea and vomiting must be controlled, so, if vomiting occurs during treatment, dehydration and electrolyte balance must be monitored, and if vomiting is repetitive, the doctor must be informed so that nutritional intake can be evaluated.

Preventing extravasation during drug administration is the most important because when cytostatics extravasate they cause serious harm to patients and nurses working with cancer patients (Karius and Colvin, 2021), this extravasation is considered an emergency because it can cause irreparable tissue damage, the main interventions that are implemented in the event of such a situation are immediate detection of the infusion, aspiration of the drug and administration of the appropriate antidote (Pereda and Meneses, 2022), This can be compared with Vokurka, et al, (2020) in their study in which they indicate that the application of hyaluronidase and dexrazoxane, as well as the application of heat or cold depending on the cytostatic helps to decrease the negative effects of extravasation.

The oncology patient is at risk of suffering nutritional disorders, which with the progression of the disease and the treatment can compromise the patient's life, so the nursing staff must monitor the patient's nutritional intake (Koshimoto, et al, 2019). Chemotherapy also causes skin and mucosal toxicity reactions (Bandla, et al, 2020), however, these needs are the most overlooked by direct care staff. (Pai, Ongole and Banerjee, 2019), This generates the need to protocolize nursing activities in relation to this type of user, highlighting the importance of constant updating of personnel to provide holistic nursing care of quality and warmth (Parra, et al ,2020).

CONCLUSIONS

In conclusion, the role of nurses in patients undergoing cancer treatment is multifaceted and vitally important, valuing the patient being benefits recovery by identifying the patient's needs and addressing all affected areas. Empathy and communication with patients improve the patient's emotional situation and increases the positive results of treatment, holistic nursing care helps to develop greater adherence to pharmacological treatment and emotionally helps patients and their families to better manage the situation (Karius and Colvin, 2021).

During chemotherapy cycles, there are some precautions that the staff must take, for example, during the preparation of the medication they must take into consideration that the infrastructure where the drug is prepared must comply with specific isolation characteristics, and for the preparation and administration the staff must have the appropriate clothing. The most common adverse effect is extravasation, which must be prevented in every possible way; however, if such an event should occur, the staff must be trained to solve the problem by applying the protocol (Hoeng, et al, 2019).

Before, during and after the administration of the treatment, the main emphasis of nursing action should be on the psychological state of the patient, assessing the patient allows the diagnosis of their needs and how these affect or limit their ability to recover, these patients require a lot of emotional support, motivating the users helps to improve their mood and in turn, this helps to reduce the side effects that occur in relation to the treatment, the care of the patient's mental health is just as important as the care of physical health (Gimeno, 2021).

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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%
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