

# Surgery and Nutrition. Predetermining Categorical Binomial in the Surgical Treatment of Cancer Patients: Mini Review

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**Abstract:** The dialectical contradictions constitute the driving force for the development of the training activity, in particular for the training of Oncological Surgery. The previous idea reveals the negative result of malnutrition in cancer patients and its association with high rates of postoperative morbidity and mortality; therefore, the scientific divergences related to the nutritional support of the malnourished oncological patient leads to an individualized approach during the clinical-surgical follow-up of these complex cases. In addition to the establishment of guidelines that identify the type of tumor and evolutionary stage based on the development of nutrition in recent years and the advances derived from the epistemological deepening of immunology, molecular biology and other sciences. The objective of this study was to consider the importance of the categorical relationship between nutrition and surgery in cancer patients to improve the nutritional approach of these patients in clinical-surgical practice and training dynamics. Finally, the identification of the categorical binomial surgery and nutrition is unavoidable in the surgical treatment of cancer patients because it allows recognizing the negative impact on the health of these patients by revealing the high possibility of complications and death. Likewise, the relationship between the nutritional situation prior to the intervention and the subsequent evolution of the cancer patient.

**Keywords:** Categorical Binomial, Surgical Treatment, Cancer Patients, Nutritional Support

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## 1. Introduction

The conception that objects, phenomena of nature, society and thought constitute complex processes, dialectical as well as holistic, sustained on the basis of logical processes, highlights the need to presuppose scientific knowledge of natural, historical, social processes and cultural. Hence, the dialectical contradictions constitute the driving force for the development of the training activity [1], in particular for the training of Oncological Surgery.

This being the case, the process of building certified, medical-training qualities, with philosophical support, and flexibility for competent and transcendent professional performance is called a categorical binomial. Which explains the possibility of contextualizing them to enrich the teaching-

learning process in the specialty of General Surgery and Oncology.

It is important to point out that the particular sciences and specifically in the medical sciences very little is investigated related to this subject. This transcends the medical sciences of surgery, oncology and others related to this matter and reveals the need to visualize ontological, logical, epistemological and praxiological processes from the perspective of building scientific knowledge to favor social development; specifically in cancer patients. [1-3]

Consequently, the authors of the research consider the categorical binomial unified to the dialectical contradictions that are synthesized in the law of unity and struggle of opposites, argued in the materialist dialectic. Currently, studies related to professional training acquire greater

relevance every day in a world dominated by scientific research and technological innovations. The training dynamics of the health professional in complex diseases has acquired a relevant social and scientific impact; Therefore, it is important to emphasize that the progressive advance in the training of Oncology and Surgery specialists has been modifying the system with the aim of guaranteeing the quality of professional training. Consequently, we feel motivated to carry out this short review related to design clinical-nutritional care flowcharts in patients operated on for cancer.

## 2. Developing

The result of the abstraction-concretion of this categorical binomial (Surgery and nutrition) within the training process of Oncological Surgery allows to evaluate the incidence and correlation of nutritional deficiencies frequently identified in cancer patients, which consecutively disturbs their quality of life. This shows the proportion of patients who, at the time of diagnosis, have weight loss, which represents between 15 and 40% depending on the type of cancer. [3-5]

However, the incidence of malnutrition increases as the disease progresses, affecting 80% of patients. The presence of malnutrition in cancer patients who require surgery negatively affects the evolution of cancer patients, which brings with it an increased incidence of infections, an increase in hospital stay and the risk of death.

Patient-focused information on the nutritional recommendations to be implemented is limited, so there are still a number of doubts regarding the nutritional approach to cancer patients in clinical-surgical practice. Cancer patients who require surgical intervention require a holistic, non-fragmented and transdisciplinary evaluation. [5-6]

Aimed at responding to the nutritional guidance of cancer patients and establishing recommendations based on consensus to provide specialists responsible for the treatment of cancer patients with a reference framework based on the available scientific evidence.

The scientific-clinical experience of the multidisciplinary group made up of specialists from the areas of Medical Oncology, Surgery, Pharmacy and Nutrition should protocolize the treatments of the nutritional status of the cancer patient.

Specifically in the preoperative, intraoperative and postoperative. In general, this topic is insufficiently focused by the experts. The type of tumor and stage is important in the nutrition process, the authors of this research consider that the surgical specialists involved in the process have to identify the nutritional status in these patients in order to later compensate it and guarantee the quality of life of this individual. [6-7]

Some bibliographies identified an association between malnutrition and cancer, they also found a reactive emotional situation, anorexia, complementary examinations, restrictive diets imposed by the disease, surgery, chemotherapy/radiotherapy treatments and, lastly, with diet.

Other research has shown that malnutrition affects Some bibliographies identified an association between malnutrition and cancer, they also found a reactive emotional situation, anorexia, complementary examinations, restrictive diets imposed by the disease, surgery, chemotherapy/radiotherapy treatments and, lastly, with diet.

Supplementary investigations showed that malnutrition had repercussions on hospital stay and costs, with an increase in stay of 3-4 days for malnourished patients compared to well-nourished patients and an increase in costs associated with hospitalization of 20-25%. [8-11]

The recognition of the multiplicity of diseases that coexist in the same individual, in this case cancer and malnutrition, requires that health personnel face this patient as a whole and this is nurtured with independent study, scientific research, review of the literature, using as a way the formative systematization of clinical judgment that intends to achieve the culture of medical clinical autonomy through the development of the capacities of this professional as a specialist. [12-15]

The clinical and surgical approach to the malnourished cancer patient requires not only appropriating the accumulated culture, for the scientific construction of the therapeutic process. This team of researchers proposes the theoretical and methodological assumptions for the effective surgical treatment of cancer patients. The diagnosis of these diseases in a patient causes deterioration of body image, functional status and quality of life, malnutrition becomes a factor of risk for toxicity due to oncological treatments.

Likewise, loss of muscle mass with risk of cardiac and respiratory insufficiency and decubitus ulcers, delayed healing that favors fistulas and dehiscences, a decrease in the immune system that favors infections and decreased digestive enzymes with risk of malabsorption. [16-19]

## 3. Conclusion

The categorical binomial surgery and nutrition is unavoidable in the surgical treatment of cancer patients because it allows recognizing the negative impact on the health of these patients by revealing the high possibility of complications and death. It is necessary to normalize the management of the nutritional status of cancer patients in clinical practice, and to establish therapeutic action protocols to improve the clinical course of the disease based on the dialectical interrelationship established between surgical treatment and the impact on the nutritional status of the patient.

## Conflicts of Interest

The authors declare no conflicts of interest.

## Authors Contribution

Dr María de Jesus George Bell: Conception of the idea and preparation of the article. Data collection as well as analysis

and interpretation. Contribution with the design, Search and review of bibliography; review and approval of the final version of the manuscript.

Dr. C. Josefa Bell Castillo: Preparation of the article. Data collection as well as analysis and interpretation. Contribution with the design, Search and review of bibliography; review and approval of the final version of the manuscript.

Dr. C. Wilberto George Carrión: Preparation of the article. Data collection as well as analysis and interpretation. Contribution with the analysis and interpretation of the data; Search and review of bibliography.

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