

The stigmatization of colorectal cancer in society



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Ana Luiza Normanha Ribeiro de Almeida

PhD

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LATTES: <http://lattes.cnpq.br/9534419185679348>

E-mail: alalmeida@unaerp.br

Lívia de Simoni

Graduating student

LATTES: <http://lattes.cnpq.br/7497014383728544>

E-mail: livia_simoni@hotmail.com

ABSTRACT

Introduction: Although CRC is the main malignant neoplasm of the gastrointestinal tract and the third most typical type of cancer in the world, little is

discussed about its morbidity and mortality. Because the lack of visibility does not provide an adequate budget for preventive health policies, most diagnoses do not occur in the early stages of the disease, which not only makes it more expensive but also makes the therapeutic process difficult for the patient for the health team. To analyze the insufficient prevention of colorectal cancer. Objectives: to identify CRC mortality and relate it to the lack of prevention and information about the disease. Methodology: a literature review that will be carried out through already published material made at the University of Ribeirão Preto. It will be an observational study that will establish correlations between the social and scientific aspects of colorectal cancer.

Keywords: Colorectal cancer, Mortality, Prevention.

1 INTRODUCTION

Colorectal cancer is one of the main types of neoplasms that kill around the world. There are numerous diagnosed cases that, in Brazil, tend to increase. It turns out that most of the time that this disease is diagnosed, it is in advanced stages. The prognosis of RCC is good only in early stages, which are diagnosed by prevention methods such as colonoscopy or detection of fecal occult blood. Such methods are indicated, above all, for the senile portion of the population, but there are few public incentives directed to health to better inform and encourage the search for means to diagnose and treat the carriers of the disease when it is still in the process of emergence. Although there are references that investigate all determinations of RCC, they are still insufficient to have a good understanding of how to predict possible carriers and treatment for those in advanced stages. Given the scarcity of data and information, the indicators do not bring real parameters of the proportion of the effect of the disease in Brazil. This means that it is necessary to deepen epidemiological studies in the country, with the effect of elucidating the gaps in public health management regarding the high incidence and mortality of the neoplasm in question. Thus, the little information known by people increases a stigma created by common sense that hinders access to existing knowledge that has contributed to increase a network of prevention-treatment of RCC.



2 THEORETICAL FRAMEWORK

RCC (colorectal cancer) is the main malignant neoplasm of GIT and the third most typical type of cancer in the world. Given this, little is addressed about its aggressiveness and how ordinary and routine it can be (MACHADO et al., 2016). Many of the deaths could be prevented.

Studies on molecular biology hold the greatest promise for new ways of knowing and remedying the problem of colorectal cancer. Such studies ensured a cluster of materials capable of identifying and manipulating biomolecules through biotechnology (PINHO, 2008). Even though more than 90% of RCC carriers are sporadic, some inherit the mutation (KATSAOUNOU, et al. 2023). To improve the diagnosis, prognosis and clinical treatment of patients with RCC, molecular research studies the disease by markers. Colorectal cancer was the pioneer in molecular biology studies in the field of carcinogenesis by sequential gene expression of adenocarcinoma, which demonstrated that cancer formation occurs by altering proteins that act on the cell cycle. This reveals that a healthy set of cells generates cancer from a sum of gene mutations. Following the proliferative disorder, angiogenesis, tissue invasion, and metastases occur as subsequent stages of carcinogenesis. To better determine the histological basis of the pathology, there are tools for identification such as the "Microarrays" method, which discriminates through the messenger RNA molecules which genes are activated in the tumor tissues, the "immunohistochemistry," which discriminates through the labeling and addition of monoclonal antibodies in proteins of the affected tissue, or the "SELDI" and "MALDI" methods, which are based on the condition that tumors will release fragments of proteins that will be compatible in a similar way to the proteins of individuals with the same diseases, thus emerging patterns that suggest a diagnosis (PINHO, 2008). MicroRNAs as molecular markers demonstrated that miR-125b and miR-137 make up the majority of the tumors in question since the former is crucial for the cell cycle and the latter is associated with advanced stages of RCC. (ANDREOLI et al., 2014) Such studies guide the direction of the singular treatment of the patient's tumor. In addition to molecular markers, most cancers of this type arise from pre-existing adenomatous or serrated polyps, which makes it easier to screen for the disease.

Based on epidemiological studies, in Brazil, the number of deaths due to colorectal cancer has increased, especially for males. Inappropriate lifestyle habits are relevant in the prevalence of RCC since they indicate a higher incidence. In addition, another factor that stands out is social inequality since disparities between Brazilian states is a predominant factor in CRC mortality. In 2012 the RCC was in fourth place among the cancers that killed the most men and third among those that killed the most women in the country, and third and second, respectively, about the world. The socioeconomic condition is closely linked to the lifestyle of the individual and conditions such as obesity, smoking, alcoholism, sedentary lifestyle, inadequate diet increase the risk of emergence and evidence the increase in cases of RCC related to the places that have reduced social disparity (OLIVEIRA, et al.



2018). What fundamentally reduces mortality rates is early diagnosis, but prevention can reduce by 60%. In addition to prevention, increasing the supply of tests, endoscopic resection of adenomatous polyps and better treatments are essential. Better epidemiological indicators regarding CRC cases will raise more capital for the area that, despite having many cases and deaths, is so little discussed collectively. Becoming, then, the increase in CRC mortality in Brazil is evidence of discrepancies in the Brazilian health infrastructure, which shows the link between better results of prevention, diagnosis, and treatment in more developed areas (OLIVEIRA, et al. 2018).

One should, from the age of 50, annually look for occult blood in the feces, every 5 years by rectosigmoidoscopy to screen for any tissue modification and from the age of 60, colonoscopy every decade. Colonoscopy is the best way to reduce mortality, as those who underwent the test showed less incidence. The identification of irregularities by direct visualization exams allows them to be repaired during the procedure before they progress. Although early diagnosis of RCC has a favorable prognosis, for the most part the tumor has already invaded neighboring tissues or metastasized. The incidence of RCC increases along with age, mainly above 50 years; however, encouraged by the westernized lifestyle that increases the risks for the disease, there has been an alarming increase in cases among younger people (KATSAOUNOU, et al. 2023). Among the risks, diabetes mellitus is a comorbidity that increases the risks of neoplasia by 20 to 30%. The screening of adults of medium risk is centered between 50 and 75 years of age, above this range, the demand is singularized by the patient's health condition. There is also evidence that aspirin, NSAIDs, COX-2 inhibitors, hormone, calcium supplementation and increased metabolic activity as elements that decrease the risk of the onset of the disease. Aspirin, for example, decreases new cases of RCC by 40%, especially in the proximal colon (WILKINS, McMECHAN, TALUKDER, 2018). The incidence of RCC has decreased in developed countries due to greater attention to prevention and diagnosis, in contrast, half of the origin of new cases in 25 years are from less developed areas. Due to the lack of visibility and not providing an adequate budget for preventive health policies, most diagnoses do not occur in the early stages of the disease, which not only makes it more expensive but also hinders the therapeutic process for the patient for the health team.

3 OBJECTIVES

3.1 GENERAL (PRIMARY)

Analyze the insufficient prevention of colorectal cancer.

3.2 SPECIFIC (SECONDARY)

Identify the high mortality rate of RCC;

Relate the lack of prevention with the incidence of cases;



Analyze the need to address the RCC with the lack of public policies;

4 HYPOTHESIS AND JUSTIFICATION

The level of information about colonoscopy as a method of prevention of RCC is still scarce; colorectal cancer is the main malignant neoplasm of the gastrointestinal tract; 1.4 million new cases were estimated around the world in 2012 and accounted for 50,000 deaths annually.

5 MAIN SCIENTIFIC CONTRIBUTIONS

The project highlights the importance of producing knowledge about colorectal cancer to bring to light greater discussions about the mortality and incidence of RCC in the social body and generate greater investments for public policies that prioritize discovering and treating patients with the disease still in its initial stage in a more simplified way. Bring visibility to the importance of preventive methods and the population at higher risk with the effect of ending stigmatization related to the disease.

Exploratory research is a way to encourage debate on RCC, a way to know and reflect on the way the disease affects the population and increase the scientific accumulation of the theme.

6 MATERIALS AND METHODS (METHODOLOGY)

The project is a bibliographic review that will be executed through material already published at the University of Ribeirão Preto. It will be an observational study that will establish correlations between the social and scientific aspects of colorectal cancer.



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