

# CONSIDERATIONS REGARDING THE QUALITY OF LIFE IN ELDERLY PATIENTS WITH COLORECTAL CANCER – A LITERATURE REVIEW

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**Abstract:** At global level, demographic transition has generated morbidity and mortality transition.(2 3) Lung, colorectal and breast cancer rates are increasing, as a result of demographic and industrial changes. Colorectal cancer ranks among the top five cancer locations in both genders.(1) According to publications focusing on the study of the quality of life in elderly patients with colorectal cancer pathology, multiple socio-cultural, medical aspects, types of treatment used, as well as financial aspects including both the standard of living of the affected persons and treatment costs, may contribute to a decrease in the quality of life of this population category. Studies demonstrate that a multidisciplinary approach of these issues in elderly patients with colorectal cancer pathology can provide relevant information for optimizing their quality of life.

## INTRODUCTION

In developing countries, seven types of cancer (cervical, liver, stomach, esophageal, lung, colorectal and breast cancers) cause 60% of new cancer cases and deaths from cancer pathology.(1) Of these types, cervical, liver, stomach and esophageal cancers also have high incidence and mortality rates in developed countries. Colorectal cancer ranks among the top five locations both in women and men.(1)

In the elderly, in addition to chronic diseases common to all body systems, digestive cancer, including colorectal cancer, represents one of the most frequent causes of disease and impairment of quality of life.(2,3)

The particular demographic transition witnessed over the past decades in some European countries including Romania is a process influenced by many complex socioeconomic, medical, demographic and political factors.(2,3,4)

As a consequence of demographic transition and of an increase in the number of patients who survive cancer treatment at advanced ages, as well as due to economic and social costs for new treatments recommended at global level, the problems related to the quality of life of patients with colorectal cancer require increased attention from health care and social services.

## PURPOSE

The purpose of this study is to assess the current state of knowledge regarding the influence of colorectal cancer pathology on the quality of life of the elderly population.

## MATERIALS AND METHODS

A literature review was conducted which focused on peer-reviewed journals with articles concerning the influence of colorectal cancer pathology on the quality of life in the elderly population.

English and Romanian language reports were included. The searches were performed using PubMed, by

typing in the subject field a combination of terms such as: demographic transition, colorectal cancer, quality of life, elderly population. The reviewed articles were published after 2013.

We included the results of studies addressing the quality of life in the elderly population with colorectal pathology.

## RESULTS AND DISCUSSIONS

Skeps R. et al. aimed at examining the association between the body mass index (BMI) of colorectal cancer survivors and problems related to colostomy, in the long term (>5 years post-diagnosis).(5) The study concluded that an alteration of the body mass index was associated with colostomy related problems among colorectal cancer survivors. Health care equipment and practices should be adapted to abdominal shape changes. The suppliers of these products must take into account the fact that an increase or a reduction of BMI may cause problems related to the functioning of the stoma.(5)

Wong CK. et al. assessed health and quality of life preferences in patients with colorectal neoplasms and determined the clinical correlations that significantly influence the patients' quality of life.(6) The conclusion of this study was that colorectal neoplasms in more advanced stages are associated with lower scores of quality of life. Despite potentially negative effects of the disease on physical quality of life, mental quality of life in patients with colon neoplasms was better compared to the general Chinese population.(6)

Färkkilä N. et al. conducted a study in which they estimated the quality of life in several health states, in colorectal cancer, and they investigated the factors influencing it.(7) The conclusion was the following: the mean scores of quality of life in patients with colorectal cancer varied considerably depending on the investigation instrument (HRQoL) used, but they remained surprisingly good up to the palliative stage. In addition, compared to age and cancer

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related symptoms, financial difficulties had an obvious negative impact on quality of life and should be considered when supporting the quality of life of a patient.(7)

In the study carried out by Mols F. et al., the authors aimed at obtaining a perspective on the prevalence and severity of neuropathy induced by chemotherapy and its influence on quality of life, in a population sample of rectal cancer survivors, between 2 and 11 years after diagnosis.(8) The study concluded that within 2 to 11 years from colorectal cancer diagnosis, neuropathy symptoms, particularly sensory symptoms in the lower limbs of patients treated with oxaliplatin, were still reported. Since neuropathy symptoms have a negative influence on quality of life, they should be monitored and improved. Future studies should focus on the prevention and improvement of chemotherapy-induced neuropathy.(8)

Knowles G. et al. attempted in their study to define the long-term prevalence of pelvic dysfunction, as a result of colorectal cancer surgery (+/- radiotherapy), in the context of overall quality of life.(9) In conclusion, this study quantified the extension of late adverse effects in some patients with rectal cancer, reporting persistent intestinal function problems. These should be assessed depending on the existing monitoring services and the elaboration of new evaluation models and comprehensive interventions, in patients with a risk to develop adverse treatment effects.(9)

In their study, Wong C.K. et al. aimed at examining the association of quality of life (QoL) with overall survival (OS) and recurrence after colorectal cancer (CRC) diagnosis (10), and concluded that although self-reported quality of life was not a significant prognostic factor for colorectal cancer recurrence, quality of life measured by SF-12 (short form health survey) had an independent prognostic value regarding the mortality of patients with advanced colorectal cancer.(10)

Short-term preoperative radiotherapy (PRT) combined with total mesorectal excision (TME) improves rectal cancer treatment, but without benefits for survival and morbidity. The authors, Wiltink LM, Chen TY, Nout RA, Kranenbarg EM, Fiocco M, Laurberg S, Van de Velde CJ, Marijnen CA, investigated long-term quality of life, 14 years after treatment, in the Dutch TME trial.(11) In the TME trial (1996-1999), 1530 patients with rectal cancer were treated by TME and randomized for PRT (5x5 Gy). In 2012, quality of life was assessed in survivors (n=606), using a combined questionnaire, EORTC QLQ-C30, EORTC QLQ-CR29 (European Organization for Research and Treatment of Cancer), with additional questions.(11) The evaluation of long-term quality of life showed that symptoms induced by treatment persisted after 14 years in rectal cancer. Radiotherapy aggravated intestinal dysfunctions in patients without colostomy. Sexual dysfunctions were more severe compared to the general population. Despite treatment-induced symptoms, there were no differences in general functioning and health between patients with total mesorectal excision and those with total mesorectal excision + preoperative radiotherapy.(11) Radiotherapy increases morbidity, which is why patients diagnosed with rectal cancer should be correctly informed about consequences, in order to allow them to make a correct choice.(11)

In the article published by Lewis C. et al., the aim of the cohort study was to investigate the association between adjuvant chemotherapy and quality of life among survivors and recurrence more than 24 months after diagnosis of patients with colorectal cancer, stage II.(12) The conclusion of this study was that patients with stage II colon cancer who received chemotherapy were more susceptible to have reduced quality

of life, recurrence and all-cause mortality after 24 months, compared to those who did not receive chemotherapy. The authors recommend that future research focus on subtypes of chemotherapy, as well as on a longer follow-up period.(12)

The aim of the study conducted by Tan WJ, et al. was to assess quality of life after palliative surgery among patients with metastatic colorectal cancer.(25) The study concluded that surgery improved the quality of life in patients with metastatic colorectal cancer.(13)

## CONCLUSIONS

In the literature, there are studies that address different aspects of the causes that may change the perception of elderly patients with colorectal pathology about quality of life.

In colorectal cancer pathology, the effects of the treatments of choice can alter the perception of quality of life.

The financial aspects generated by colorectal cancer pathology are perceived by elderly persons as having a greater influence on quality of life than physical and mental suffering due to cancer disease.

The results of studies regarding quality of life depend on the research instruments used, on the socio-cultural level of the investigated population, on the disease stage, the type of medical intervention, the adverse effects of the treatments performed.

In elderly patients with colorectal cancer pathology, a multidisciplinary approach is recommended in order to provide relevant information for optimizing the quality of life of these patients.

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