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# Quality of nursing care of colorectal cancer patients undergoing first line palliative chemotherapy — a questionnaire study in a single institution in Poland

### **Abstract**

**Background.** The diagnosis of colorectal cancer initiates a process of dealing with the disease and various treatments. An effective psycho-social help from a specialized nurse can alleviate suffering and improve the quality of a patient's life. The purpose of the study was to evaluate the quality of nursing care provided to patients undergoing first line cytotoxic treatment for metastatic colorectal cancer (mCRC).

Material and methods. The study group consisted of 50 mCRC patients diagnosed at an advanced stage of the disease, who underwent first line palliative chemotherapy at the Department of Clinical Oncology in Comprehensive Cancer Centre in Bialystok, Poland. The method of survey was a diagnostic poll with a questionnaire prepared especially for the study.

**Results.** The nursing care was assessed as efficient. Metastatic CRC patients consider nurses as trustworthy, highly qualified, supportive, informative and communicative. The patients experienced psychological comfort and emotional support during the treatment.

Conclusions. The study exhibited that changes in medical care model are crucial to further improve the quality of nursing care at the Department of Clinical Oncology. One of the concepts is to increase the number of nurses working (employed) int the ward which would give them opportunities and time to pay more attention to particular mCRC patients and, a possibility to create good, positive atmosphere in the ward to make the patients more willing to ask for help.

Key words: colorectal cancer, metastatic disease, nursing care, quality of nursing care, palliative chemotherapy

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## Introduction

Colorectal cancer (CRC) is the second most often diagnosed cancer worldwide and its incidence is still growing. Despite advances in surgery and chemotherapy, many patients suffer from progression of the disease, while others are diagnosed at an advanced stage of the disease. Nevertheless, efficient multidrug chemotherapy combined with targeted therapy and resection of metastases leads to significant prolongation of patients' life. One of the main goals of modern oncology care is to ensure the best possible quality of patients' life.

Information regarding diagnosis of an advanced stage of CRC is an emotional blow for the patients. They need some period of time to re-evaluate their life and adapt to the poor prognosis. The patients also suffer from physical disturbances inexperienced before. It is thus of particular importance to deliver the optimal support for the group of patients. Successful emotional and physical help is a process. The antineoplastic treatment of choice in this group of patients is based on chemotherapy given frequently at hospital departments, where the patients have to spend several days. Medical team taking care of the patients consists of doctors, nurses, psychologists, rehabilitants, physical workers, etc.

Importantly, the nurses are the ones who spend the longest time with the patients during their stay at a hospital ward while receiving chemotherapy. They must work in collaboration with other members of the interdisciplinary team to provide the best possible palliative care. Oncology nursing is distinctively different from other subspecialties. The nurses have the advantage to see a patient during the whole treatment, so they have a possibility to make emotional connection with patients. Despite helping to manage nausea, vomiting and other side-effects resulting from chemotherapy administration, they should keep patients fully informed. To make it possible, oncology nurses have to be accurately prepared to fulfil the needs of patients who are facing a life-threatening illness. Many studies show that oncology nurses are well trained in patients' care and have a tremendous knowledge about cancer, its treatment and side effects [1, 2]. Becoming educated is crucial, because it gives nurses a possibility to share their knowledge with patients, but also to provide them with psychological and emotional support when they are facing a difficult situation — cancer diagnosis. It is important for a nurses to have reliable information about neoplastic disease because a lot of studies have shown that patients take nurses' competency for granted [1, 3]. Provided knowledge makes patients feel safe, secure during palliative chemotherapy and alleviates psychological suffering. It prevents insecurity and suffering, relieving bothersome side-effects caused by the treatment and symptoms caused by the disease. Because of the effort of oncology nurses patients may receive many elements of palliative care including alleviation of pain and other physical and psychological symptoms, help with making ethical decision and emotional support.

Inadequate pre- and postgraduate training of medical staff results in difficulties with communication between nurses and patients. Nurses make unsuccessful attempts to help patients deal with their negative emotions. A fear of a possibility to have an adverse impact on them discourage nurses from supporting patients with psychological help. In this situation not all of the patients' needs can be met. All factors mentioned above diminish cancer patients' quality of life [4, 5].

The aim of the study was to evaluate the quality of nursing care of colorectal cancer patients diagnosed at an advanced stage of the disease, who undergo the first line cytotoxic palliative treatment. The results of the study allow introducing appropriate innovations and interventions in the nursing care to meet the patients' needs.

# Material and methods

The study was performed at the Department of Clinical Oncology in Comprehensive Cancer Centre in Bialystok, Poland. Fifty colorectal cancer patients who were diagnosed at an advanced stage of the disease and underwent the first line palliative chemotherapy were enrolled to the study. The patients were informed as to the goal of the study and asked to fill out a questionnaire, which was especially created to obtain necessary information. Participation in the study was voluntary. The study protocol was approved by the local Ethics Committee of the Medical University in Białystok, Poland, and informed consent was obtained from the patients. The questionnaire contained closed, both single- and multiple choice questions regarding personal and social data such as age, sex, education, marital status, number of children, place of residence (Table 1), as well as regarding the quality of entire nursing care from the patients' point of view.

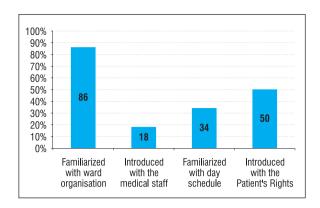
Table 1. Demographic and social characteristics of metastatic colorectal cancer patients undergoing first line of palliative treatment

Patients' characteristics	Number (percentage) of patients	
Age		
31–40 years	1 (2%)	
41–50 years	10 (20%)	
51–60 years	21 (42%)	
61–70 years	14 (28%)	
Over 70 years	4 (8%)	
Sex		
Male	24 (48%)	
Female	26 (52%)	
Education		
Elementary	10 (20%)	
Vocational	14 (28%)	
Secondary	20 (40%)	
Higher	6 (12%)	
Place of residence		
Town/city	32 (64%)	
Country	18 (36%)	
Social situation		
Lives with children	26 (52%)	
Lives with spouse	18 (36%)	
Lives alone	5 (10%)	
Totally alone	1 (2%)	
Professional situation		
Active	13 (26%)	
Retired or on pension	36 (72%)	
Unemployed	1 (2%)	
Material status		
Very good	1 (2%)	
Good	31 (62%)	
Unsatisfactory	16 (32%)	
Bad	2 (4%)	

# Results

Majority of metastatic colon cancer (mCRC) patients (86%) were introduced by nurses to the organization of the ward. However, only one-third of them were familiarized with the day schedule, and less than 20% patients with the nursing staff. Only half of the patients were informed about the Patient's Rights (Figure 1).

The most common nurses' activities depicted by the patients were making beds and changing bed-



**Figure 1.** Frequency of obtaining particular information from nurses by metastatic colorectal cancer patients undergoing first line of palliative chemotherapy

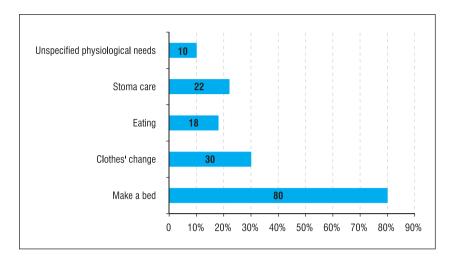
clothes (approximately 80%). The nurses also helped one-third of the patients with changing clothes. One-fifth of the respondents required assistance with stoma care (22%). Some of the patients needed help with eating (18%). Only 10% of mCRC patients had difficulties with physiological needs that required nurses' help (Figure 2).

During chemotherapy administration almost half of the mCRC patients (40%) reported they were fully informed and supervised. One-fourth of respondents received psychological support (25%) during chemotherapeutics' infusion. Moreover, 18/50 patients felt that nurses had tried to cooperate with them to prevent possible occurrence of treatment-related side–effects (35%).

Of great importance is the information that among different needs, the patients mainly expected friendly atmosphere (88%), empathy and psychological support (58%). More than half of them desired to talk with nurses about their problems (60%). Almost 50% of the patients exhibited a need for professional physical nursing care (46%), whereas only a few of them (5 persons) — explanation regarding the disease (Figure 3).

As many as approximately 70% of the patients required nurses' help. However, of interest is the observation that only 32% of patients turned to nurses asking for help. It depended on the actual situation or they chose exclusively selected nurses. One third of the patients communicated with nurses only with the regard of some problems (28%). Few mCRC patients did not turn to nurses for any help (4%) (Figure 4).

Only approximately one-third of the participants (30%) asked nurses for additional information about the treatment process and less than



**Figure 2.** Frequency of providing help with casual activities by nurses in metastatic colorectal cancer patients undergoing first line of palliative chemotherapy (multiple-choice)

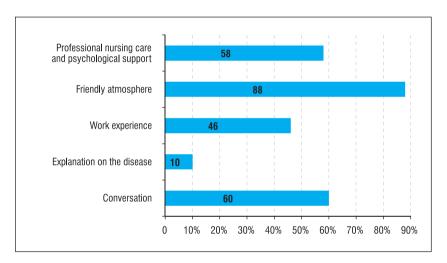
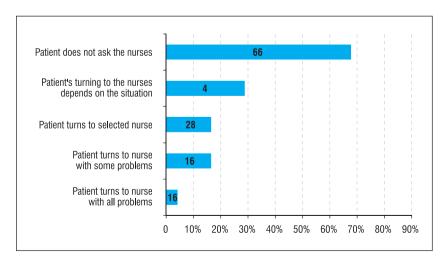


Figure 3. Metastatic colorectal cancer patients' expectation from nurses' work (multiple-choice)



**Figure 4.** The circumstances and frequency of asking nurses for help by metastatic colorectal cancer patients undergoing first line of palliative chemotherapy (multiple-choice)

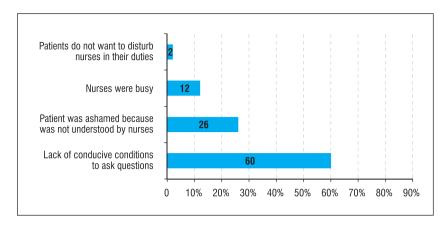


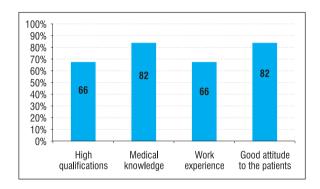
Figure 5. Reasons for not asking nurses for help by metastatic colorectal cancer patients undergoing first line of palliative chemotherapy

half of them turned to the nurses to obtain some explanation (44%). One-third of the patients did not ask nurses about extra information (26%). The most common reason was patients' wish not to disturb them during their regular duties since they were continuously busy with other activities (60%). Twelve percent of mCRC patients felt ashamed of not understanding or not possessing knowledge on some aspects of cancer and the treatment, and thus withdrew from asking questions. Just 1 out of 50 respondents reported that nurses did not create conducive conditions to ask questions (Figure 5). Of note, approximately 90% of patients were satisfied with the information provided by the nurses. For some patients (16%) obtained information was too general, whereas individual respondents considered it to be overly precise or, on the contrary, insufficient (4%).

The nurses provided patients with information mostly from their own initiative (54%). One-third of respondents reported they obtained information exclusively on evident request (32%) whereas some of them were deprived of any information. Almost all the information provided by nurses was understandable (96%). Some respondents (4%) reported that information obtained from nurses was partly intelligible.

A vast majority of the patients (96%) claim that nurses understand their needs. All nurses kept respondents' privacy and gained their full trust.

Patients appreciated nurses' work and considered them as professional (82%), work experienced (66%), highly qualified (66%) with great communication skills (82%). In general nursing care provided at the Department of Clinical Oncology of Comprehensive Cancer Centre in Bialystok was assessed as excellent (64%) and fully satisfying (36%) (Figure 6).



**Figure 6.** Nurses' attitudes and skills which were admired by metastatic colorectal cancer patients undergoing first line palliative chemotherapy

# **Discussion**

During the process of anticancer treatment patients experience various physical, social, psychological and spiritual problems, such as the effects of the long-term cytotoxic treatment, its complications, depression, loss of job etc. The literature provides evidence that specialised nurses can contribute to improve patients' quality of life during their stay at the in-patient department. It is important to highlight that each patient is unique and experiences various affects in different way, so there is a need to have individual, sensitive and compassionate attitude towards the patients [6-10]. Conducted research showed that most of the patients anticipated friendly atmosphere, conversation, professional nursing care, additional information about cancer disease and treatment-related problems from medical stuff. To a smaller extent patients expected medical skills and work experience from nurses.

Patients appreciated nurses' solicitude about them. The results suggest that nursing physical activities (making beds, changing bedclothes, helping patients with stoma care, eating and physiological needs) were efficient, adequate to requirement and were assessed by most of the respondents as excellent.

The results of the study indicate enormous demand among mCRC patients for additional information and a desire to talk about their disease and problems. In fact, Sanson-Fisher et al [11] postulate that most patients want to know as much as possible about their illness and its severity. Frequently, they also wish to participate in the decision-making process when it comes to their treatment. As previously mentioned, it proves that in spite of doctor's effort to explain problems associated with cancer disease, their treatment and side-effects, patients still feel they have insufficient information [5, 12-14]. It could be caused by emotional shock, which accompanies patients at the moment of diagnosis of metastatic cancer disease, when patients are often unable to properly understand received information. It seems that delivering information in partial manner and making sure that patients comprehend obtained data is of crucial importance. More than half of the patients were satisfied with information provided by nurses. It is worth to mention that nurses' work was perceived as excellent and adequate to patients' needs. Explanations provided by nurses were fully understandable for most of the patients and resulted in complete elimination of fear of the cytotoxic treatment and reduction of subjective discomfort associated with its administration.

Interestingly, the present study revealed that patients not always ask nurses for additional information about the treatment, self-care, side-effects and ways to alleviate it. According to available data the reasons for patients' withdrawal were various. Most of the patients did not want to disturb nurses during their work or were too ashamed to ask questions. Similarly Moore et al [7] reported nurses' difficulties to find enough time to satisfy patients' demands. There was not a case when a nurse would not impart an answer. A good assessment of their work is disturbed by the fact that nurses not always give extra information on their own initiative. Some of the patients declare compulsion to turn to the nurses for explanation.

It seems to be essential for nurses to gain patients trust. It makes patients feel more willing to request help, ask an additional question and comply with nurses' recommendations associated with cancer and its treatment [16]. The data from

our study revealed that all respondents assessed nurses as trustworthy and worth to confide own problems and ailments associated with the mCRC disease.

The vast majority of the participants in this study highly appreciated nurses' work, their respect for patients' privacy, qualifications, work experience in providing nursing care and involvement in giving additional information and emotional support. The results of this study further sustain the notion that nurses perfectly comprehended their needs and provided explanation was fully understandable. Nurses' actions allow minimizing apprehension about cytotoxic treatment and preventing or alleviating its side-effects. To summarise, nurses gained patients' full trust, appreciation of their work, knowledge and medical skills. It resulted in good evaluation of nurses' work. However a more precise analysis showed a flaw in nurses work. Only half of the mCRC patients had psychological comfort during treatment, so there is a continuous necessity to deliver more intensive psychological involvement in care of the patients by nurses. Delivering information to the patients exclusively on their request is unacceptable behaviour since mCRC patients themselves are not always courageous enough to ask for help. Moreover, there is a need to overcome unfriendly atmosphere at the Department, which inhibits patients' turning to nurses for assistance.

Studies performed by Halldorsdittir [17] revealed that nurses usually assert patients feeling of security, treat them with respect and their work is assessed as competent. The author depicted a need for further investigation to establish problems which oncology nurses have to cope with and give a possibility for them to obtain significant information to improve quality of cancer patients' life. Nevertheless, it seems to be necessary to create specific guidelines for oncology nurses about proper cancer patients' care and instructions how to help a particular patient to deal with cancer disease and anticancer treatment in the best possible way. Careful recruitment and specific training of the nurses may guarantee providing excellent care for cancer patients [10, 18].

# Conclusions

Metastatic colorectal cancer patients treated with first line of palliative chemotherapy due to an advanced stage of the disease deserve emotional, informative and instrumental support from nurses. An effort should be undertaken to improve psychological skills of medical staff taking care of cancer

patients and create friendly atmosphere to exclude any psychological barrier between a patient and a nurse. Nevertheless, the nursing care was assessed as efficient, patients considered nurses as trustworthy, highly qualified and communicative. The study showed that change in medical care model is crucial to further improve the quality of nursing care at the Department of Clinical Oncology. One of the concepts is to increase the number of nurses at the ward which would give them opportunities and time of high quality to pay more attention to particular mCRC patients and a possibility to create a good, positive atmosphere at the ward to make the patients more willing to ask for help.

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