A diagnosis of colorectal cancer (CRC) in Poland, particularly in the northeastern regions of the country, often is delayed (Langenbach, Sauerland, Krobel, & Zirngibl, 2010). Some individuals are diagnosed primarily at an advanced stage of the illness, and a substantial percentage of patients undergoing radical treatment find themselves experiencing disease progression. Both subsets of patients may be suitable candidates for palliative chemotherapy based on the use of fluoropyrimidines and calcium leucovorin combined with oxaliplatin, irinotecan, and a targeted therapy (Goldberg et al., 2007).

As a nation, Poland belongs to the block of post-communist countries in which oncology care was substantially underfunded for decades. Published literature concerning the past and present state of oncology care in Poland is lacking. As such, psychological aspects of patient care in this population have not been emphasized and patients’ emotional demands have not been taken into account. Virtually no information regarding diagnosis, treatment, how to deal with the disease, and perspective was shared with patients in the past; only a handful of comprehensive cancer centers even existed. Those that did were characterized by an inadequate area-to-person ratio for inpatient rooms, one or two bathrooms per ward, and joint examination rooms. When available, the medical equipment was frequently out of date and no appropriate pre- and postgraduate oncology education was made available to the physician. Psychological aspects of care for patients with cancer were simply not part of the medical school curriculum. Attending an international oncology conference or visiting foreign cancer centers was limited, if not impossible. Since the 1990s, however, the political and economic situation in Poland has substantially changed, resulting in broader access to information. Consequently, health services in

Purpose/Objectives: To assess the psychological, physical, and social situations and needs of patients with colorectal cancer (CRC) diagnosed at an advanced stage of the disease.

Design: Quantitative, descriptive.

Setting: An urban comprehensive cancer center in northeastern Poland.

Sample: 50 patients undergoing first-line palliative chemotherapy.

Methods: Participants were asked to fill out an institution-developed questionnaire assessing personal, emotional, physical, and social data.

Main Research Variables: Psychological, physical, and social characteristics.

Findings: The most frequently reported side effects of chemotherapy were asthenia, loss of taste, and nausea and vomiting. In addition, about 54% of patients were unable to work during treatment. Chemotherapy administration resulted in severe or moderate impediment of activities of daily living in 74% of the patients and negatively influenced their financial situation. About 25% of the patients were reluctant to share the news of their disease with their coworkers; however, most revealed their diagnosis to friends and family. The majority (62%) of patients expected help from family members. Nurses provided emotional support to a much lesser extent than patients’ immediate relatives. The majority of patients (80%) needed to express their feelings by talking, but only about 30% considered a nurse to be the preferred person with whom to discuss their disease.

Conclusions: Patients with CRC diagnosed at an advanced stage require considerably more emotional, informative, and instrumental support from nurses, doctors, family, other patients, and priests than was anticipated by the authors.

Implications for Nursing: Extending routine history taking via the addition of questions to the proposed questionnaire may help to better recognize a particular patient’s situation and unique needs. An increasingly patient-focused approach could improve the individual nursing care in this region of Europe. Ultimately, a multidisciplinary team would be required to meet the needs of patients with CRC undergoing chemotherapy.
Poland have been and continue to be extensively reformed. In comparison to Western European countries, however, Polish health services still are substantially underfinanced (Coleman et al., 2003). One significant change is that patients are now fully informed of their diagnosis and disease progression.

During the course of treatment, patients with CRC face numerous biologic, emotional, and social issues, such as the effects of the long-term cytotoxic treatment and its complications. They also may struggle with feelings of insecurity that act only to worsen their situation. According to the World Health Organization Quality of Life Group (1998), adequate quality of life for patients with cancer is one of the main goals in the holistic approach of superior medical care and, as such, is of paramount importance when recognizing the complex situation of this particular subset of patients. Such a realization may allow medical staff to undertake optimal actions in comprehensively helping patients with CRC cope with their disease.

The goal of the study was to assess the psychological, physical, and social situation and needs of patients with CRC in Poland who were diagnosed at an advanced stage and who underwent cytotoxic treatment.

### Methods

#### Design

A descriptive, quantitative study was performed. Because the authors did not have access to a previously validated, free-of-charge questionnaire, an individualized measure was constructed and used to obtain the necessary information in a single cancer center. The questionnaire contained closed questions regarding personal, emotional, physical, and social data. Both single- and multiple-choice questions were included.

The study was performed in the Department of Clinical Oncology at Medical University in Bialystok, Poland. Fifty patients with advanced CRC undergoing first-line palliative chemotherapy were asked to fill out the questionnaire. All participants (who, for medical and logistic purposes, underwent a five-day IV 5-fluorouracil and calcium leucovorin treatment regimen) were hospitalized for a five to seven day period during each course of cytotoxic therapy.

The questionnaire was completed during the third or fourth course of chemotherapy and given to patients by a licensed nurse. To obtain unbiased information, patients remained anonymous. The patients were informed of the nature and goal of the study and asked to complete the questionnaire without the assistance of an investigator. Participation in the study was voluntary. Because of the small number of patients recruited for the study, the authors decided not to perform statistical analysis. The study protocol was approved by the ethics committee of Medical University, and informed consent was obtained from the patients.

Special attention was paid to characterizing the patients’ psychological, physical, and social situation. The questionnaire contained inquiries about age; sex; education; marital status; number of children; place of residence; relations with family members, friends, and coworkers; material and financial situation; and whether or not respondents encountered psychological or physical problems.

#### Findings

Demographic characteristics of the study sample are noted in Table 1. Asthenia, loss of taste, and nausea and vomiting were among the most often reported complaints (see Figure 1). Fifty-four percent of the patients were unable to work. About 26% were able to work part-time. Only 20% of patients performed their work without any difficulties. Chemotherapy administration made professional work difficult for 34% of patients and severely complicated professional work for 40%. Chemotherapy also was perceived as a significant influence on personal finances. Thirty-six percent of the patients reported financial issues.

### Table 1. Demographic Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31–40</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>41–50</td>
<td>10</td>
<td>20</td>
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<tr>
<td>51–60</td>
<td>21</td>
<td>42</td>
</tr>
<tr>
<td>61–70</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>Older than 70</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>Female</td>
<td>26</td>
<td>52</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>10</td>
<td>20</td>
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<tr>
<td>Vocational</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>Secondary</td>
<td>20</td>
<td>40</td>
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<tr>
<td>University or college</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td><strong>Place of residence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Town or city</td>
<td>32</td>
<td>64</td>
</tr>
<tr>
<td>Country</td>
<td>18</td>
<td>36</td>
</tr>
<tr>
<td><strong>Financial status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very good</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Good</td>
<td>31</td>
<td>62</td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>Bad</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Social situation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lives with children</td>
<td>26</td>
<td>52</td>
</tr>
<tr>
<td>Lives with spouse</td>
<td>18</td>
<td>36</td>
</tr>
<tr>
<td>Lives alone</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Totally alone (no family)</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Professional situation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>Retired or on pension</td>
<td>36</td>
<td>72</td>
</tr>
<tr>
<td>Unemployed</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

N = 50
Twenty-five percent of the patients diagnosed at an advanced stage were reluctant to share information about their illness with coworkers. An additional 19% entrusted only selected coworkers with the news. However, about 50% did not keep any element of their diagnosis a secret from anyone.

Most patients (74%) divulged their disease to their friends. Only 8% kept information about progression of their cancer to themselves; 18% confided the information exclusively to selected friends. Almost all patients (96%) shared their cancer diagnosis and information pertaining to its progression with their families. Just 4% decided to inform only selected family members.

Some patients required special care from a third party (e.g., spouse, children). Chemotherapy resulted in an absolute need for help from another person (i.e., a caregiver) for 6% of patients. Sixty-seven percent of the patients required at least partial assistance, with only 32% listing themselves as fully self-reliant. Of particular note, only 22% of the patients required help that resulted in the caregiver missing time at work.

The majority (62%) of patients experienced empathy (defined as fully understanding and sharing another person’s feelings) and the desire to help as part of the support they had garnered from family members. Eighteen participants (36%) felt as though they received compassion (defined as feeling for the suffering of others, prompting one to give help); however, one patient reported experiencing indifference from family members. No one denoted any subjective, negative emotions toward family members. Family, as a unit, appeared to play a dominant role with respect to the emotional support received by 90% of the patients. Friends, doctors, and nurses provided emotional support to a much lesser extent by comparison at 28%, 24%, and 22%, respectively. Only 10% of the patients experienced support from clergy and other patients.

The decision of whom to confide in elicited a myriad of responses from the patients. The majority (80%) needed to express their feelings by talking, whereas 20% did not reveal such a need. Sixty-six percent of patients expressed a desire to talk about the disease with their doctors, whereas only 40% turned to their spouses. Nurses and other patients were selected by 28% and 22% of the patients, respectively. A minority of the participants wanted to talk about the disease with their friends (8%) or a priest (6%).

In the course of providing care, the nurses were able to discuss and describe the purpose of the upcoming palliative chemotherapy prior to its first course. They also were able to explain possible side effects, prophylaxis, and treatment, as well as ways of communicating during the actual administration of chemotherapy. Because of these efforts, 76% of the patients were well prepared, whereas the other 24% were partly prepared to undergo chemotherapy in accordance with their self-reports. In addition, the explanation eliminated the fear of the cytotoxic treatment completely in 62% of patients, 32% of patients stated the fear was reduced, and 6% of patients continued to exhibit fear of chemotherapy.

### Discussion

Government investment in health services is influenced by political factors as well as scientific and health-oriented economic evidence (i.e., budget impact, cost-effectiveness analysis, and the patient’s quality of life) (Coleman et al., 2003). From the perspective of a patient with CRC, treatment decisions should be based predominantly on the effectiveness and the optimal quality of life of the individual affected (Ward et al., 1999). Therefore, recognizing the underlying emotional,
physical, and social factors that influence the patient’s well-being, is of crucial importance (Jocham, Dassen, Widdershoven, & Halfens, 2006). A diagnosis can induce feelings of anxiety (Sanson-Fischer et al., 2000), changing needs as the treatment progresses (Foot & Sanson-Fischer, 1995), and restrictions on activities of daily living and work (Lin & Bauer-Wu, 2003; Madden, 2006; Podmore et al., 2009; Sanson-Fisher et al., 2000). Patients’ adaptation to these factors also depends on a variety of factors, such as attitude toward life and level of education (Spiegel, 1994).

The majority of participants (68%) received only vocational or secondary school education, which may indicate the possibility that they suffered from insufficient knowledge and understanding of the disease. This also may be a reflection of the medical team’s oversight about use of language appropriate for the patient’s education level.

Most ailments (e.g., asthenia, loss of taste, diarrhea, alopecia, weight loss) reported in this study appeared to stem from the administration of chemotherapy. Therefore, the fact that 76% of the patients were informed about the possible side effects of the medication they were about to receive is of particular interest. Explanations provided by nurses resulted in the complete elimination of fear of cytotoxic treatment in 62% of patients; however, 32% said the explanation only reduced the subjective discomfort associated with treatment administration. The remaining 6% of participants, for whom anxiety persisted, indicated a need for extended discussions with other medical staff, such as doctors and psychologists. Thorne, Hislop, Stajduhar, and Oglov (2009) argued that lack of time is responsible for the unmet needs of most patients with cancer. Clinician time-related attitudes and behaviors are deemed to be significant factors in shaping the perception of clinical encounters in the psychosocial cancer experience of the patients (Thorne et al., 2009).

The patients frequently wanted to communicate with a doctor, which was not surprising. A doctor would be expected not only to share information regarding the most likely course of chemotherapy (i.e., its efficacy, side effects, and methods of prophylaxis and control), but also be presumed to give a realistic assessment of ongoing treatment effectiveness in addition to providing reassurance about the best possible medical care being provided. Twenty-seven percent of patients in Sanson-Fischer et al. (2000) reported having unmet needs related to being informed about the status of their disease, test results being shared as soon as they were available, and the receipt of additional advice on what individuals were able to autonomously accomplish in their healing process.

**Family Support**

Strong family ties are greatly valued in a number of regions around the world, with the northeastern part of Poland being no exception. Eighty-nine percent of the participants in this study lived with their family (a spouse or children) and, of those, 40% wanted to discuss their disease and its treatment with their significant other. However, concern with whether a family member is able to cope with the burden of their disease is an issue with patients (Sanson-Fischer et al., 2000). Most family caregivers actually turn to nurses for ways to reduce strain and burden placed on their loved ones (Glajchen, 2004; Honea et al., 2008; McDowell, Occhipinti, Ferguson, Dunn, & Chambers, 2010; Mystakidou, Tsilika, Prpa, Galanos, & Vlahos, 2007; Papastavrou, Charalambous, & Tsangari, 2009).

Discussing the expected cytotoxic treatment with other patients was chosen by 22% of the respondents. Patient-to-patient relation of the chemotherapy experience may, in fact, be more informative and comforting than the objective facts and figures delivered by a doctor or a nurse.

Poland has established itself as a religious nation. The faith most professed in this country is Christianity (e.g., Catholicism, Orthodox). Therefore, religious behavior frequently exerts a strong impact on everyday life. The current study revealed, however, that priests were not the most frequently chosen confidants when dealing with the fear of cancer and its subsequent treatment (6%), nor did they provide the best emotional support in the opinion of the participants (10%). As many as 30% of patients preferred to discuss their health situation with a nurse. As a member of the medical team who communicates with a patient at great frequency, the role of a nurse remains irreplaceable (Moore, 2005; Surobone et al., 2010). The nurse may serve as a source of information and be deemed as more approachable by a patient than a doctor would. In addition, the nurse has more of an opportunity, developed through perhaps more frequent and lengthy encounters than those of a doctor, to fully recognize the patient’s personality, life philosophy, and religious, economic, and social background factors that all influence the patient’s emotional and adaptive response to the disease (Lin & Bauer-Wu, 2003). All of these aspects may then be deemed as prerequisite items for good communication between patients with CRC and the medical staff.

Although the family unit has an undeniably strong impact on the emotional support system from which patients with cancer draw their strength, doctors, nurses, and friends also are deemed helpful in this circumstance, albeit to a much lesser extent. This perception may be caused by the shortage of patient-allotted time in the case of doctors and nurses (Thorne et al., 2009), crowded working conditions, or underfunded public health care. However, Mattioli, Repinski, and Chappy (2008) stressed that hope and social support (garnered from family, friends, and healthcare providers) are multidimensional notions with individualized
meanings largely dependent on the individuals engaged. Of interest, the current study revealed that, although patients talked more often with other patients than with their friends, the emotional support they received was provided more frequently by their friends than other patients. This finding may point to the importance of an emotional aspect of friendship that would subsequently be used in overcoming negative emotions. Despite the fact that patients frequently spend whole days together during their hospital stays, the bond forged between them may simply not be as strong as that between family members or long-time friends.

In addition, in the current study, the analyzed group of patients had undergone only the initial steps of palliative systemic treatment. The battle with the disease typically continues for some time after the first line of chemotherapy. A long struggle with a fatal disease then may influence caregiver attitudes; after being initially sympathetic and attentive, both family and friends, with the passage of time, may drift off to attend to their own lives, resulting in the subsequent isolation of the patient (McDowell et al., 2010; Sanson-Fischer et al., 2000; Surbone et al., 2010). Because of this, the role of a professionally trained, cooperative, and multidisciplinary medical staff cannot be overestimated (Moore, 2005). The results of this study reveal that such a role, in the context of the provided medical care and support, was insufficient.

Patient Needs

Unmet needs of patients with CRC are not unique to the Polish healthcare providers; investigators in other countries report similar difficulties expressed by patients with cancer (McDowell et al., 2010). This could be the result of inadequate pre- and postgraduate training of medical staff related to developing and maintaining open lines of communication with patients. Hospital workers (e.g., doctors, nurses) also may fear that open expressions of emotion could exacerbate or even create new sources of anxiety (Loomis, 2009; McDowell et al., 2010; Surbone et al., 2009). In addition, staff themselves may be afraid of the patient becoming angry, sad (with severely decreased mood), or tearful (crying). In such a situation, the staff may not always know how to react or manage the situation (Loomis, 2009; McDowell et al., 2010; Surbone et al., 2009). However, persistent and exclusive focus by the healthcare providers on physical and diagnostic tasks only further facilitates personal contact avoidance and awkward social situations between themselves and their patients (Loomis, 2009).

The consistent complaint of inadequate time allotment in providing everyday medical care to this subset of patients may well be the stumbling block in achieving optimal communication among doctors, nurses, and patients (Thorne et al., 2009). Of particular interest, therefore, is the finding that the vast majority of patients with metastatic CRC exhibited a desire to talk about their disease. This would dispel the common perception that patients who do not discuss their illness are doing well and are in control of their emotional responses. In fact, Sanson-Fisher et al. (2000) postulated that most patients want to know as much as possible about their illness and its severity in addition to being acquainted with the proposed treatment before its commencement; they also wish to participate in the decision-making process related to their treatment (Lin & Bauer-Wu, 2003; Moore, 2005).

Societal Changes

During the communist government era, Polish citizens were able to largely avoid unemployment despite being afflicted in a myriad of other ways because social protection in the form of medical and personal insurance was widely available. Employees received full salary even if they were not able to work because of long-term sick leaves. Today’s free market economy precludes such a situation. Even “retired” citizens often work part-time to improve their financial situation. A definite diagnosis of cancer, particularly an advanced stage of the disease, is likely to induce anxiety about losing independence and financial difficulties stemming from the possible loss of work (Campora et al., 1992; Loomis, 2009; Malone, Harris, & Luscombe, 1994; Podmore et al., 2009; Sanson-Fischer et al., 2000). The results of this study further support the notion that a cancer diagnosis may include a withdrawal from previously engaged-in activities.

The diagnosis of an advanced stage of CRC is traumatic not only for the patients, but for their families as well (Surbone et al., 2010). Close relatives may identify with a patient’s attitude toward the disease and, therefore, upset the emotional balance of the home. Given the prevalence of multigenerational households in Poland, the vast majority of these patients freely shared their diagnosis with multiple family members. Such close interpersonal relations are of particular interest because patients often are dependent on their relatives. They periodically experience weakness, asthenia, and fatigue as a result of their palliative care, resulting in the need for help with everyday activities from other people (more than 60% of the surveyed patients required assistance or full care). The necessity of such care and recurring hospitalizations (complete with responsibilities such as transportation to and from treatment) require additional support from family members. This may precipitate additional financial strain in the form of close relatives taking time off from work (as reported by 20% of the respondents).

Although expressed empathy and the willingness to provide help characterized most of the families, 62% of the respondents felt themselves to be the objects of compassion, and that feeling only worsened their
already fragile emotional states. Although patients seemed to welcome help and emotional support, compassion interpreted as pity may have led them toward feelings of insecurity, inferiority, and overt dependence on others. Such a perceived loss of autonomy could possibly decrease personal confidence and belief in the efficacy of the treatment as well as the competence of the staff responsible for it. Such a notion certainly touches on an interesting area for future studies to investigate.

Conclusions

Patients with CRC diagnosed at the advanced stage of their disease require emotional, informative, and instrumental support from their doctors, nurses, and those closest to them. Multidisciplinary teams are, therefore, needed to meet the ever-evolving needs of this patient population. In such a context, nurses may play an even greater role in the process of reassuring and educating Polish patients than previously considered. A well-rounded biopsychosocial approach may alleviate a number of present complaints with which such patients struggle, including but not limited to anxiety, fear, helplessness, and a number of unmet needs that should be recognized individually.

Implications for Nursing

A greater effort should be made to improve the psychological skills of the medical staff caring for patients undergoing palliative chemotherapy. Because of the numerous limitations of this study (only one treatment center, small pool of participants, a nonvalidated questionnaire, and the lack of single- or double-blind administrative measures), carrying out such an analysis across the country would likely yield more reliable and accurate data. Verified results could then be used to bring about additional improvements in the current healthcare system. Despite its shortcomings and relatively small scale, this study is of great importance because it provides a regional picture that may then be incorporated into a greater whole. Simple measures, such as extending routine history taking via the addition of some of the questions from the proposed questionnaire, may help to better identify a particular patient’s situation and his or her unique needs. An increasingly patient-focused approach could, therefore, improve the individual nursing care in this region of Europe. Ultimately, a multidisciplinary team would be required to meet the needs of patients with CRC undergoing chemotherapy.

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