J Psychosoc Oncol. Author manuscript; available in PMC 2018 March 05.

Published in final edited form as:

J Psychosoc Oncol. 2011 ; 29(3): 242–253. doi:10.1080/07347332.2011.563346.

Use of Psychosocial Support Services Among Male Veterans Affairs Colorectal Cancer Patients

Natia S. Hamilton, MA,
Center for Health Services Research in Primary Care, Durham Veterans Affairs Medical Center, Durham, NC, USA, and Department of Psychology, Virginia State University, Petersburg, VA, USA

George L. Jackson, PhD, MHA,
Center for Health Services Research in Primary Care, Durham Veterans Affairs Medical Center and Division of General Internal Medicine, Duke University Medical Center, Durham, NC, USA

David H. Abbott, MCS, MS,
Center for Health Services Research in Primary Care, Durham Veterans Affairs Medical, Center, Durham, NC, USA

Leah L. Zullig, MPH, and
Center for Health Services Research in Primary Care, Durham Veterans Affairs Medical, Center, Durham, NC, USA, and Department of Health Policy and Management, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

Dawn Provenzale, MD, MS
Center for Health Services Research in Primary Care, Durham Veterans Affairs Medical Center and Division of Gastroenterology, Duke University Medical Center, Durham, NC, USA

Abstract

The authors describe use of psychosocial services within +/− 3 months of diagnosis among male colorectal cancer (CRC) patients treated within the Veterans Affairs (VA) health care system. Analysis included 1,199 patients with CRC treated at 27 VA medical centers primarily diagnosed between the periods 2005 to 2007. Of the patients, 78.6% received some form of psychosocial support, including 50.5% social work, 58.9% chaplain, 6.2% psychologist, 7.1% psychiatry, 3.5% mental health nurse, and 4.4% other. Logistic regression results indicate that rectal cancer patients were less likely to receive psychosocial services (odds ratio = .65, 95% confidence interval [0.43, 0.97]). The majority of patients in the VA receive some type of psychosocial service at the time of CRC diagnosis.

Keywords

psychosocial support; Veteran Affairs; colorectal cancer; psycho-oncology; quality of life

---

Address correspondence to George L. Jackson, PhD, MHA, Durham Veteran Affairs Medical Center/Duke University Medical Center, Center for Health Services Research in Primary Care, 411 W. Chapel Hill Street, Durham, NC 27701, george.l.jackson@duke.edu.

Colorectal cancer is the third most common cancer and cause of cancer-related deaths among men and women in the United States (Jemal et al., 2009). Psychosocial support has been documented as an instrumental tool in the overall treatment of colorectal (Dunn et al., 2006; Sultan et al., 2004) and other cancers (Arving et al., 2007; Kroenke, Kubzansky, Schernhammer, Holmes, & Kawachi, 2006; Maeda, Hagihara, Kobori, & Nakayama, 2006; Pascoe, Neal, Allgar, Selby, & Wright, 2004). The National Comprehensive Cancer Network (NCCCN: 2010) clinical practice guidelines define *psychosocial* as the combination of psychological or mental health with social conditions or aspects of a person's life. Psychosocial support has been identified as a contributing factor in patients' ability to cope and has been attributed to improved survival (Adler & Page, 2008; Kroenke et al., 2006; Kuchler, Bestmann, Rappat, Henne-Bruns, & Wood-Dauphinee, 2007). As a result, improving the provision of psychosocial support to patients with cancer has been a major focus of the Institute of Medicine (Kuchler et al., 2007) and the NCCN (2010).

Each cancer patient experiences a range of practical issues ranging from physical, psychological, and lifestyle challenges as a result of their diagnosis and the adverse effects of treatment regimens. Patients with colorectal cancer (CRC) report physical symptoms such as frequent bowel movements, sexual dysfunction, flatus issues, diarrhea, and/or constipation (Bazensky, Shoobridge-Moran, & Yoder, 2007; NCCN, 2009a, 2009b). In addition, the physical symptoms and psychological deficiencies experienced can include adverse effects that have an impact on social functioning, including work and productivity, relationships with significant others, and other social activities and interests (Adler & Page, 2008; Pascoe et al., 2004). Financial burdens can also cause psychological distress among CRC patients as they struggle with employment and medical costs (Arndt, Merx, Stegmaier, Ziegler, & Brenner, 2004; Soothill et al., 2001). It is estimated that among patients with cancer, up to 25% develop symptoms of anxiety and up to 50% develop depression (Simon, Thompson, Flashman, & Wardle, 2009). Furthermore, the data indicate that of the estimated 10% to 20% of patients diagnosed with cancer, a similar proportion are likely to be diagnosed with anxiety, further affecting long-term survival rates (Spiegel, 1994).

Although there is significant evidence of the utility of providing psychosocial support to patients with cancer (Arving et al., 2007; Goodwin et al., 2001; Helgeson & Cohen, 1996; Meyer & Mark, 1995; Sultan et al., 2004), limited research exists on the degree to which patients with CRC receive such care. The objective of the current study is to examine the use of psychosocial support among male CRC patients in the Veteran Affairs (VA) health care system. We describe psychosocial support in the form of services from health care professionals and examine patient characteristics potentially associated with receipt of psychosocial support.

Method

A retrospective chart abstraction was performed as part of a Veterans Affairs health care system quality improvement collaborative to examine the quality of colorectal cancer care provided to men by participating facilities. These data have been used to determine the utilization of psychosocial services within three months of the diagnosis of CRC. In addition to calculating the percentage of patients receiving care, multivariable logistic regression was utilized to examine patient characteristics associated with receipt of psychosocial services. This analysis was conducted under the approval of the Institutional Review Board of the Durham, NC Veterans Affairs Medical Center.

Data Source

Patients were treated at one of the 27 VA medical centers participating in the VA Colorectal Cancer Care Treatment Improvement Collaborative, between March 2007 and May 2008 (Chao et al., 2009; Jackson et al., 2010). Data were abstracted by staff of the participating facilities from the VA electronic health record into a computerized Cancer Care Quality Measurement System (CCQMS) that was developed for the quality improvement collaborative. The CCQMS included the question "Within (plus or minus) three months of (before/after) diagnosis did the patient receive services from any of the following? (Check all that apply)." Possible answers included "social worker, chaplain, psychologist, psychiatrist, mental health nurse, other, and none of the above." The question asked about before and after the diagnosis because the definitive diagnosis date for CRC typically comes after a pathologist has examined a surgical resection and lymph nodes from the colon or rectum. The patient would know that the reason for the surgery is suspected cancer and may have received some presurgical treatment. As a result, the patient may have received psychosocial care during this time "before" the date of definitive diagnosis. Further, the question was designed to assess whether the patient received psychosocial services from a VA health care professional, not whether such services were offered to the patient. It is possible therefore that a patient not receiving psychosocial services may have declined an offer for such care.

Patients

Seventeen of the 27 facilities contributing data to the analysis utilized local VA Central Cancer Registry processes for identifying patients with CRC. VA Central Cancer Registry case finding methods adhere to the standards established by the American College of Surgeons' Commission on Cancer (2004) *Facility Oncology Registry Data Standards (FORDS)* manual for data collection and definitions. Other facilities utilized clinic lists to identify patients.

Inclusion in the CCQMS measurement system was based on the following criteria: (1) histological or cytological confirmed diagnosis of colon or rectal cancer, (2) invasive cancer (in-situ diagnoses excluded), (3) primary tumor of the colon or rectum (metastases to colorectal sites from other primaries were excluded), (4) no prior invasive cancer of the colon or rectum (recurrences excluded), (5) ≥18 years of age at diagnosis, and (6) male. Only male veterans were included in this analysis because only 25 women whom met inclusion criteria were available in the CCQMS, significantly reducing the ability to draw meaningful conclusions about services provided for them.

It was suggested to facilities that they not include patients with a simultaneous diagnosis of cancer within two months of the diagnosis of CRC. Simultaneous diagnoses are defined as two separate primary tumors, of the same or different sites, diagnosed within a two-month period (based on Surveillance Epidemiology and End Results [SEER] definition). However, there was no recommendation to exclude patients with more than one primary tumor of the same site (i.e., two colon primaries) within two months. Patients were primarily diagnosed between 2005 and 2007 (distribution of diagnosis dates summarized in Table 1).

Data Analysis

We calculated proportions of veterans receiving psychosocial care (i.e., chaplain, mental health nurse, psychiatrist, psychologist, social worker, and other services) within (plus or minus) three months of CRC diagnosis. For a patient to be considered to have received care categorized as "other," the specific type of care had to be entered by the abstractor. The "other" category included behavioral/community health nurse, mental health physician assistant or nurse practitioner, behavioral health/mental health outpatient team, palliative care/hospice professional, recreation therapist, readjustment counselor, or rehabilitation planner.

Multivariable logistic regression was then used to examine the association between receipt of psychosocial support (dependent variable) and (1) race/ethnicity (African American, missing race/ethnicity, other race/ethnicity vs. White, non-Hispanic [referent]), (2) marital status (married, missing marital status vs. not married [referent]), (3) cancer stage at diagnosis (stage IV, stage II/III vs. stage I [referent]), (4) cancer type (rectal vs. colon [referent]), and (5) age (≥ 65 years vs. < 65 years [referent]). This age category also represents that age at which most adults in the United States become eligible for Medicare. Because patients were clustered within treating facilities, we performed the logistic regression model with the Huber-White estimate of variance, which provides an unbiased variance estimate for linear statistics arising from cluster-correlated data (Williams, 2000). All analyses were conducted using SAS version 9.2.

Results

We identified 1,308 patients who met the inclusion criteria for the study. Approximately 8.3% of patients (*n* = 109) were removed from the analysis because the question on the receipt of psychosocial service was not answered, leaving a total of 1,199 patients. The mean age was 69.0 (standard deviation [*SD*] = 10.6, range = 25–93. Patients were distributed among five categories: African American/Black (13.8%, *n* = 166), White, non-Hispanic (78.3.0%, *n* = 939), White, Hispanic (2.8%, *n* = 33), other (1.8%, *n* = 21), and missing race/ethnicity (3.34%, *n* = 40). At diagnosis, 72.7% (*n* = 872) had colon cancer and 27.3% (*n* = 376) had rectal cancer. Patient characteristics are described in Table 1.

Overall, 78.6% (*n* = 943) received some form of psychosocial support (social work, chaplain, psychologist, psychiatrist, mental health nurse, or other). Services provided by a chaplain (provided to 58.9% of patients, *n* = 706) or social worker (provided to 50.5% of patients, *n* = 606) were by far the most common type of psychosocial service provided. Only 6.2% (*n* = 74) of patients were seen by a psychologist and 7.1% (*n* = 85) seen by a psychiatrist. Of patients, 3.5% of patients were seen by a mental health nurse (*n* = 42) and 4.4% received some other type of psychosocial service (*n* = 53). A significant proportion of patients received more than one of the above types of service (40.8%, *n* = 489). These results are summarized in Table 2.

A logistic regression model was used to examine the association between patient characteristics and receipt of some type of psychosocial service (dependent variable). Rectal cancer patients appeared less likely than colon cancer patients to have received psychosocial care (odds ratio [OR] = 0.65, 95% confidence interval [CI] [0.43, 0.97], $p = .04$). When compared to White, non-Hispanic patients, the odds of receiving psychosocial care were essentially not different for African Americans or individuals of other race/ethnicity. The data suggest that patients with more advanced cancer (stage >1) were more likely to receive psychosocial care, with an OR for Stage II/III patients compared to Stage I patients (OR = 1.49, 95% CI [0.98, 2.25], $p = .06$). Patient characteristics associated with receipt of psychosocial services are summarized in Table 3. Although the OR of Stage IV patients compared to Stage I patients did not show a strong association, the point estimate (1.49) is in the direction of greater odds. Before correcting for clustering, the overall effect of stage was statistically significant ($p = .03$). However, after clustering is accounted for, the strength of the association is reduced ($p = .17$). Finally, there was not a significant relationship between marital status and the receipt of psychosocial care.

Discussion

Our results indicate that the majority of male patients who are treated for CRC in the VA receive some type of psychosocial support services. By far the most common types of services were provided by chaplains and social workers. Many patients facing a cancer diagnosis question mortality and spirituality (Mytko & Knight, 1999; Stefanek, McDonald, & Hess, 2005). The VA has a comprehensive health care chaplaincy program that provides services including to those who have questions about how their spirituality may affect coping with cancer and issues of potential death and dying (Steinhauser et al., 2000; Veterans Health Administration-National Chaplain Center, 2010). Further, there are many issues that affect a cancer patient's daily living that may be aided by consultation with a social worker (Buddeberg, 1994; Cwikel & Behar, 1999). Examples of the social issues that affect cancer patients are financial stress, reduced employment and income, and lack of insurance (Adler & Page, 2008; Spelten, Sprangers, & Verbeek, 2002; Steiner, Cavender, Main, & Bradley, 2004).

Despite the research that indicates the high levels of depression and distress among CRC patients (Simon et al., 2009; Zabora, BrintzenhofeSzoc, Curbow, Hooker, & Piantadosi, 2001), psychologists and psychiatrists provided only a small proportion of psychosocial support services among the veterans. In the case of counseling, these services may be provided by chaplains and social workers. Based on the comorbidity of psychological factors that are often present along with chronic illnesses, it is suggested that psychologist and psychiatrist should become more active within the primary care settings. There are many factors that may suggest the underuse of psychologist and psychiatrist in primary care settings (i.e., stereotypes of mental health workers, primary care doctors attending to all the patients’ needs, or the primary care doctors’ inability to recognize psychological deficits; Haley et al., 2004).

We found that patients diagnosed with rectal cancer were less likely than patients with colon cancer to report receipt of psychosocial support. This was counter to our hypothesis. We would not have expected this result because rectal cancer patients who undergo invasive therapies such as radiation and surgery with permanent colostomies (NCCN 2009b; Wickham & Lassere, 2007) may have greater social (e.g., odor, diarrhea, sexual dysfunction, nausea) (Holzer & Rosen, 2005) and psychological dysfunction (e.g., depression, anxiety, feelings of loss and control) (Adler & Page, 2008; Wickham & Lassere, 2007). A lesser level of reported psychosocial services among rectal cancer patients could possibly be the result of different treatment patterns than for patients with colon cancer. Unlike colon cancer, treatment of nonmetastatic rectal cancer often does not start with surgery (NCCN, 2009b). This may lead to different referral patterns for patients with rectal cancer.

CRC patients are often confused, seeking understanding, reviewing life, looking to others for answers, and seeking faith and other forms of social support (Dunn et al., 2006; Pugliese et al., 2006). Being diagnosed with a life-threatening disease presents high levels of psychological distress due to its pervasive and potential lethal nature (Adler & Page, 2008; Strain, 1979). Psychological distress occurs at all levels of the CRC process (diagnosis, treatment, and surviving or palliative care) (Adler & Page, 2008; Goodwin et al., 2001; Simon et al., 2009). Psychosocial support is instrumental in aiding cancer patients with the overall treatment process and improving measures of quality of life (NCCN, 2010; Turner et al., 2005). Existing literature indicates the importance of integrating psychosocial support in the totality of one's treatment regimen. By engaging in psychosocial support, research indicates patients are more likely to survive longer and report a higher quality of life (Kuchler et al., 2007). Receiving psychosocial support allows patients to better cope and adapt to treatment (Arving et al., 2007; Pugliese et al., 2006). Further evaluating its role in improving the quality of life among CRC patients will lead to a greater understanding of the disease and its influence on the patient, family, and environment (Dunn et al., 2006; Sultan et al., 2004) as well as outcome measures such as increased survival rates (Kuchler et al., 2007).

The current study has important limitations and considerations. Data came from only 27 of the 153 VA Medical Centers. These facilities were participating in a quality improvement collaborative. However, facilities were from 20 of the regional Veterans Integrated Service Networks, an indication of the wide geographic distribution of the facilities. In addition, facilities had a variety of levels of organizational complexity: highest (12 facilities), medium-high (4 facilities), low-high (4 facilities), medium (3 facilities), and low (4 facilities) as defined by the Veterans Health Administration. Finally, we recognize that services provided by health care professionals are not the only type of psychosocial support that is important to cancer patients. However, we did not examine the other types of support factors (e.g., religious membership, support groups, and family support).

Acknowledgments

Development of the Cancer Care Quality Measurement System was provided by the VA Health Services Research & Development Service (HSR&D Grant CRT-05-338). Additional funding for C4 measurement activities was obtained through core funding of the HSR&D Colorectal Cancer Care Quality Enhancement Research Initiative (QUERI) and National Cancer Institute (IAA Y1-PC-8218-01; IAA V246S-00054 and HHSN261200800504P). Dr. Jackson was funded by a VA HSR&D Merit Review Entry Program award (MRP 05-312). Dr. Provenzale was funded in part by a K-24 career development award from the National Institute of Diabetes and Digestive and Kidney Diseases (5 K24 DK002926). Data for this study were collected as part of the Veterans Health

Administration Colorectal Cancer Care Collaborative involved teams of dedicated VA employees from 28 facilities participating in the treatment improvement collaborative. The authors thank all of them for their hard work and dedication to improving the care provided to veterans. The authors also thank Tracy K. Gosselin, RN, MSN, AOCN, Steven C. Grambow, PhD, and Diana L. Ordin, MD, MPH for reviewing a draft of this paper and providing helpful suggestions. Preliminary results were presented at the University of North Carolina at Chapel Hill 30th Annual Minority Health Conference on February 27, 2009 in Chapel Hill, NC. The views expressed in this article are those of the authors and do not necessarily reflect the position or policy of the Department of Veterans Affairs or the United States government.

References

Adler, NE., Page, AEK., editors. Cancer care for the whole patient: Meeting psychosocial health needs. Washington, DC: National Academies Press; 2008.

American College of Surgeons-Commission on Cancer. Facility Oncology Registry Data Standards (FORDS) Revised for 2004. Chicago, IL: Author; 2004. Retrieved from http://www.facs.org/cancer/coc/fordsmanual.html

Arndt V, Merx H, Stegmaier C, Ziegler H, Brenner H. Quality of life in patients with colorectal cancer 1 year after diagnosis compared with the general population: A population-based study. Journal of Clinical Oncology. 2004; 22(23):4829–4836. [PubMed: 15570086]

Arving C, Sjoden PO, Bergh J, Hellbom M, Johansson B, Glimelius B, Brandberg Y. Individual psychosocial support for breast cancer patients: A randomized study of nurse versus psychologist interventions and standard care. Cancer Nursing. 2007; 30(3):E10–19. [PubMed: 17510577]

Bazensky I, Shoobridge-Moran C, Yoder LH. Colorectal cancer: An overview of the epidemiology, risk factors, symptoms, and screening guidelines. MedSurg Nursing. 2007; 16(1):46–51. [PubMed: 17441631]

Buddeberg C. Psychosocial support and problems in cancer patients. Support Care Cancer. 1994; 2(4): 209. [PubMed: 8087438]

Chao HH, Schwartz AR, Hersh J, Hunnibell L, Jackson GL, Provenzale DT, Rose MG, et al. Improving colorectal cancer screening and care in the Veterans Affairs healthcare system. Clinical Colorectal Cancer. 2009; 8(1):22–28. [PubMed: 19203893]

Cwikel JG, Behar LC. Organizing social work services with adult cancer patients: Integrating empirical research. Social Work in Health Care. 1999; 28(3):55–76. [PubMed: 10457981]

Dunn J, Lynch B, Rinaldis M, Pakenham K, McPherson L, Owen N, Aitken J, et al. Dimensions of quality of life and psychosocial variables most salient to colorectal cancer patients. Psycho-Oncology. 2006; 15(1):20–30. [PubMed: 15929055]

Goodwin PJ, Leszcz M, Ennis M, Koopmans J, Vincent L, Guther H, Hunter J, et al. The effect of group psychosocial support on survival in metastatic breast cancer. New England Journal of Medicine. 2001; 345(24):1719–1726. [PubMed: 11742045]

Haley, WE., McDaniel, SH., Bray, JH., Frank, RG., Heldring, M., Johnson, SB., Wiggins, J., et al. Psychological practice in primary care settings: Practical tips for clinicians. In: Frank, RG.McDaniel, SH.Bray, JH., Heldring, M., editors. Primary care psychology. Washington, DC: American Psychological Association; 2004. p. 95-113.

Helgeson VS, Cohen S. Social support and adjustment to cancer: Reconciling descriptive, correlational, and intervention research. Health Psychology. 1996; 15(2):135–148. [PubMed: 8681922]

Holzer, B., Rosen, H. Quality of life with a permanent colostomy. In: Becker, H.Stenzl, A.Wallwiener, D., Zittel, T., editors. Urinary and fecal incontinence. Vol. VIII. Heidelberg: Springer-Berlin; 2005. p. 429-438.

Jackson GL, Powell AA, Ordin DL, Schlosser JE, Murawsky J, Hersh J, et al. Colorectal Cancer Care Planning Committee Members. Developing and sustaining quality improvement partnerships in the VA: The Colorectal Cancer Care Collaborative. Journal of General Internal Medicine. 2010; 25(Suppl 1):S38–S43.

Jemal A, Siegel R, Ward E, Hao Y, Xu J, Thun MJ. Cancer statistics, 2009. CA: A Cancer Journal for Clinicians. 2009; 59(4):225–249. [PubMed: 19474385]

Kroenke CH, Kubzansky LD, Schernhammer ES, Holmes MD, Kawachi I. Social networks, social support, and survival after breast cancer diagnosis. Journal of Clinical Oncology. 2006; 24(7): 1105–1111. [PubMed: 16505430]

Kuchler T, Bestmann B, Rappat S, Henne-Bruns D, Wood-Dauphinee S. Impact of psychotherapeutic support for patients with gastrointestinal cancer undergoing surgery: 10-year survival results of a randomized trial. Journal of Clinical Oncology. 2007; 25(19):2702–2708. [PubMed: 17602075]

Maeda Y, Hagihara A, Kobori E, Nakayama T. Psychological process from hospitalization to death among uninformed terminal liver cancer patients in Japan. BMC Palliative Care. 2006; 5:1–6. [PubMed: 16472392]

Meyer TJ, Mark MM. Effects of psychosocial interventions with adult cancer patients: A meta-analysis of randomized experiments. Health Psychology. 1995; 14(2):101–108. [PubMed: 7789344]

Mytko JJ, Knight SJ. Body, mind and spirit: Towards the integration of religiosity and spirituality in cancer quality of life research. Psycho-Oncology. 1999; 8(5):439–450. [PubMed: 10559803]

National Comprehensive Cancer Network. NCCN clinical practice guidelines in oncology [2009]: Colon cancer. Vol. 2009-2. Fort Washington, PA: Author; 2009a. 1, Trans

National Comprehensive Cancer Network. NCCN Clinical practice guidelines in oncology [2009]: Rectal cancer. Vol. 2009-2. Fort Washington, PA: Author; 2009b. 2, Trans

National Comprehensive Cancer Network. NCCN clinical practice guidelines in oncology [2010]: Distress management. Vol. 2010. Fort Washington, PA: Author; 2010.

Pascoe SW, Neal RD, Allgar VL, Selby PJ, Wright EP. Psychoso-cial care for cancer patients in primary care? Recognition of opportunities for cancer care. Family Practice. 2004; 21(4):437–442. [PubMed: 15249534]

Pugliese P, Perrone M, Nisi E, Garufi C, Giannarelli D, Bottomley A, Terzoli E. An integrated psychological strategy for advanced colorectal cancer patients. Health and Quality of Life Outcomes. 2006; 4:1–9. [PubMed: 16393335]

Simon AE, Thompson MR, Flashman K, Wardle J. Disease stage and psychosocial outcomes in colorectal cancer. Colorectal Disease. 2009; 11(1):19–25. [PubMed: 18355377]

Soothill K, Morris SM, Harman J, Francis B, Thomas C, McIllmurray MB. The significant unmet needs of cancer patients: Probing psychosocial concerns. Supportive Care in Cancer. 2001; 9(8): 597–605. [PubMed: 11762970]

Spelten ER, Sprangers MA, Verbeek JH. Factors reported to influence the return to work of cancer survivors: A literature review. Psycho-Oncology. 2002; 11(2):124–131. [PubMed: 11921328]

Spiegel D. Health caring. Psychosocial support for patients with cancer. Cancer. 1994; 74(4 Suppl): 1453–1457. [PubMed: 8062175]

Stefanek M, McDonald PG, Hess SA. Religion, spirituality and cancer: Current status and methodological challenges. Psycho-Oncology. 2005; 14(6):450–463. [PubMed: 15376283]

Steiner JF, Cavender TA, Main DS, Bradley CJ. Assessing the impact of cancer on work outcomes: What are the research needs? Cancer. 2004; 101(8):1703–1711. [PubMed: 15386303]

Steinhauser KE, Christakis NA, Clipp EC, McNeilly M, McIntyre L, Tulsky JA. Factors considered important at the end of life by patients, family, physicians, and other care providers. Journal of the American Medical Association. 2000; 284(19):2476–2482. [PubMed: 11074777]

Strain JJ. Psychological reactions to chronic medical illness. Psychiatric Quarterly. 1979; 51(3):173–183. [PubMed: 493427]

Sultan S, Fisher DA, Voils CI, Kinney AY, Sandler RS, Provenzale D. Impact of functional support on health-related quality of life in patients with colorectal cancer. Cancer. 2004; 101(12):2737–2743. [PubMed: 15536617]

Turner J, Zapart S, Pedersen K, Rankin N, Luxford K, Fletcher J. Clinical practice guidelines for the psychosocial care of adults with cancer. Psycho-Oncology. 2005; 14(3):159–173. [PubMed: 15669019]

Veterans Health Administration-National Chaplain Center. National Chaplain Center. 2010. Retrieved from http://www1.va.gov/chaplain/

Wickham R, Lassere Y. The ABCs of colorectal cancer. Seminars in Oncology Nursing. 2007; 23(Suppl 1):1–8.

Williams RL. A note on robust variance estimation for cluster-correlated data. Biometrics. 2000; 56(2): 645–646. [PubMed: 10877330]

Zabora J, BrintzenhofeSzoc K, Curbow B, Hooker C, Piantadosi S. The prevalence of psychological distress by cancer site. Psycho-Oncology. 2001; 10(1):19–28. [PubMed: 11180574]

Clinical Implications

A diagnosis of cancer is among the most difficult life experiences one can endure. In addition to the physical challenges, patients are at increased risks of debilitating issues such as anxiety, depression, and difficulty performing social roles (Adler & Page, 2008; Simon et al., 2009). The VA, one of the largest providers of cancer care in the United States, provides a variety of psychosocial service to the majority (72%) of patients who are diagnosed with CRC. However, the provision of services by psychiatrists and psychologists was quite low. The VA should continue to work to expand the availability of the variety of psychosocial services available to cancer patients. Special attention should be also given to rectal cancer patients as they are less likely to receive psychosocial services.

Table 1

Patient Characteristics, *N* = 1,199 Males

Characteristic	n	Mean (*SD*) or %
Age		
Range 25–93	1,197	68.9 (10.6)
Age < 65 years	483	40.4
Age ≥ 65 years	714	59.6
Race/ethnicity		
African American	166	13.8
White, Non-Hispanic	939	78.3
White, Hispanic	33	2.8
Other[a]	21	1.8
Missing race/ethnicity	40	3.3
Marital status		
Married	581	48.5
Not married	471	39.3
Missing	147	12.3
Cancer type		
Colon	872	72.7
Rectal	327	27.3
Stage at diagnosis		
Stage I	305	25.4
Stage II	341	28.4
Stage III	316	26.4
Stage IV	237	19.8
Year of diagnosis		
Before 2005	26	2.2

[a] Other race/ethnicity includes Asian, Hispanic, White, and, American Indian.

Table 2

Receipt of Psychosocial Services Among Male Patients of the Veterans Affairs Health Care System Within 3 Months of Diagnosis with Colorectal Cancer, *N* = 1,199

Psychosocial Service	Frequency	Percentage
Received any service	943	78.6
Chaplain	706	58.9
Social work	606	50.5
Psychology	74	6.2
Psychiatry	85	7.1
Mental health nurse	42	3.5
Other service	53	4.4

Note: Percentages are not additive because a person may have received multiple types of psychosocial services. 40.8% (*n* = 489) of patients received services classified in multiple categories.

[a] Other services include behavioral/mental health nurse, physician assistant, or outpatient team; palliative care/hospice nursing; and rehabilitation planner or counselor.

Table 3

Patient Characteristics Associated with Receipt of Psychosocial Services Among Patients of the Veterans Affairs Health Care System Within 3 Months of Diagnosis with Colorectal Cancer, *N* = 1,199

Category of Odds Ratio	Odds Ratio [95% Confidence Interval]	*p* value	Wald χ^2
Race/ethnicity		0.14	
White, Non-Hispanic	Referent [N/A]		
African American	1.03 [0.60, 1.80]	0.91	0.01
Other	1.44 [0.90, 2.31]	0.12	2.37
Missing	2.78 [0.95, 8.08]$^{\#}$	0.06	3.48
Cancer type		0.04	
Colon	Referent [N/A]		
Rectal	0.65 [0.43, 0.97]**	.04	4.36
Marital status		0.40	
Nonmarried	Referent [N/A]		
Married	0.71 [0.43, 1.17]	0.18	1.81
Missing	0.73 [0.37, 1.42]	0.35	0.88
Stage at diagnosis		0.17	
Stage I	Referent[N/A]		
Stage II/III	1.49 [0.98, 2.25]$^{\#}$	0.06	3.54
Stage IV	1.58 [0.78, 3.19]	0.21	1.60

[#] $p < 0.10$,

[*] $p < 0.05$.