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REVIEW

THE ROLE OF THE CLINICAL PSYCHOLOGIST IN GYNECOLOGICAL CANCER

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Abstract—Gynecological cancers, which account for a substantial proportion of cancer cases in women, can precipitate a wide range of psychological difficulties including affective disturbances, sexual problems, certain somatic symptoms, and family issues. The clinical psychologist has a unique contribution to make in the assessment and treatment of the psychological needs of gynecological cancer patients, while also conducting research and providing training for health professionals regarding the psychological issues associated with gynecological cancer. Although the gynecological cancer setting affords the clinical psychologist multiple personal benefits, strategies must usually be implemented to minimize any negative impact arising from working in an area of considerable psychological stress. © 1998 Elsevier Science Inc.

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INTRODUCTION

Gynecological cancer and its treatment entail the possibility of altered goals, disrupted relationships, body disfigurement, impaired physical functioning, and death [1]. The diverse and potentially immense psychological problems that can emerge in the context of gynecological cancer highlight the importance of psychological interventions as an essential component of comprehensive patient care, particularly given the fact that emotional needs are among the most frequently cited unmet needs of cancer patients [2]. This article aims to illustrate the clinical psychologist's unique contribution to optimal psychological care in the gynecological cancer setting.

TYPES OF GYNECOLOGICAL CANCER

Gynecological cancers account for approximately 16% of new cancer cases and about 11% of cancer deaths in American women [3]. The most common gynecological cancers are, in order, those of the endometrium, ovary, and cervix. Less common types are cancers of the vulva and vagina.

Although the incidence of endometrial cancer is relatively high (at around 7% of new cancer cases in women), the mortality rate is low (less than 2% of cancer deaths in women) [4]. Early diagnosis is the major factor accounting for the low mortality rate in endometrial cancer, with nearly 80% of cases diagnosed while the tumor is

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confined to the uterus. In contrast, while the incidence of ovarian cancer is less than that of endometrial cancer, the mortality rate is higher. Ovarian cancer is the leading cause of death from gynecological cancer, and is the fifth leading cause of all cancer deaths in American women, following cancer of the lung, breast, colon, and pancreas [5]. The generally poor prognosis of ovarian cancer is largely due to the fact that approximately 70% of patients have advanced disease at the time of diagnosis. Unlike endometrial cancer—which has the clearly recognizable symptom of abnormal uterine bleeding—ovarian cancer is a disease with no specific early symptoms. Consequently, there will frequently be months of delay in detecting the disease, with the vague symptoms of dyspepsia, abdominal discomfort, pelvic pressure, urinary frequency, and other digestive symptoms dismissed as unimportant and possibly attributed to life stressors.

Concerning age-specific incidence rates, invasive cervical cancer constitutes the most common form of gynecological cancer in premenopausal women, but is later exceeded by endometrial and ovarian cancers, which demonstrate a sharp increase in the perimenopausal years [3]. Concerning age-specific mortality rates, death from ovarian cancer tends to be the highest at all ages, followed by cervical, endometrial, vulvar, and vaginal cancer. The differing profiles of gynecological cancers in terms of age of incidence and mortality rates result in differing psychological challenges associated with these various malignancies (e.g., issues of fertility tend to be more pronounced among cervical cancer patients given their generally younger age at diagnosis and more positive prognosis compared with ovarian cancer patients).

Longitudinal trends in cancer mortality indicate that mortality from cervical cancer has been declining in recent decades with the introduction of Pap smears as a method of early detection [6]. However, due to the absence of any known means of early detection, mortality from ovarian cancer has remained virtually static since the 1950s and has become one of the major challenges in gynecological cancer [5]. The prophylactic removal of both ovaries as a method of primary prevention in cases of suspected familial ovarian cancer itself raises complex psychological issues (e.g., underdeveloped protocols for assessing the soundness of the decision-making process upon which requests for prophylactic surgery are based) [7–9].

TREATMENT OF GYNECOLOGICAL CANCER

The treatment of gynecological cancer entails integrated multimodality therapy, with patients often receiving a combination of surgery, radiotherapy, and/or chemotherapy. Each of these treatment modalities comprises interventions that differ considerably in terms of the structural and functional deficits—and hence the range of psychological reactions—induced.

Surgery

Hysterectomy combined with removal of the ovaries constitutes a common surgical procedure for gynecological malignancies, raising issues of loss of child-bearing capacity and the management of surgically induced menopausal symptoms, in addition to the psychological reactions associated with cancer surgery in general (e.g., fear of anesthesia or separation from the home environment) [10–12]. Surgical procedures that involve a marked challenge to body image include pelvic exenteration

(i.e., removal of the vagina, uterus, bladder and/or rectum, and the creation of a stoma) and radical vulvectomy (i.e., removal of the entire vulva including the clitoris) [12]. The latter procedure is usually accompanied by removal of the groin lymph nodes, with the disruption in lymphatic drainage possibly resulting in varying degrees of chronic leg edema, and consequently, curtailed activities.

Radiotherapy

Radiotherapy also features prominently in the treatment of gynecological cancers, with an estimated 60% of patients receiving external and/or internal radiation therapy [13]. External radiation therapy involves brief (10–15 minutes), daily treatments of the pelvic region extending over 5–6 weeks, whereas internal radiation therapy involves prolonged treatments (up to 48–96 hours) with patients possibly requiring more than one treatment. In the latter radiotherapy modality, a metal device designed to contain radioactive material is implanted in the vagina (and uterus if a hysterectomy has not been performed) during which time mobility and access to others is highly restricted. Emotional distress is frequently elevated preceding, during and after internal radiation therapy given the multiple inconveniences and challenges associated with this treatment (e.g., prolonged isolation, pain, boredom, limited personal hygiene and mobility, difficulty eating, and reliance on others) [13]. Thus, undergoing treatment may itself present psychological demands, in addition to possible treatment-induced side effects, whether immediate (e.g., diarrhea, fatigue, and menopausal symptoms) or delayed (e.g., cystitis and fistulas) [13].

Chemotherapy

Depending on the specific cytotoxic agents employed, significant side effects (e.g., nausea and vomiting, fatigue, anorexia, alopecia, and peripheral neuropathy) may also occur following chemotherapy [14]. Common misconceptions regarding the predominance of side effects over therapeutic effectiveness may result in issues of treatment acceptance and continued compliance assuming particular importance in chemotherapy.

PSYCHOLOGICAL AND PHYSICAL SEQUELAE OF GYNECOLOGICAL CANCER

The main difficulties experienced by gynecological cancer patients that are within the clinical psychologist's purview include affective disturbances, sexual problems, certain somatic symptoms, and family issues.

Affective disturbance

Depression and anxiety are the most frequent types of affective disturbance in gynecological cancer patients, although anger, confusion, and guilt are also common [15]. A study by Derogatis et al. [16] investigated the prevalence of psychiatric disorders among 215 patients with cancer of all types. Half of the patients were judged to be experiencing normal responses in coping with cancer, with these normal responses involving elevated levels of anxiety and depression at crisis points in relation to their disease and/or treatment [17]. The remaining half of the patients were shown to have a psychiatric disorder, the most common of which (occurring in 32%

of patients) were adjustment disorders with depressed, anxious, or mixed mood. Although only 6% of patients in the Derogatis et al. [16] study met criteria for major depression, the prevalence of major depression among gynecological cancer patients may be higher, with one study reporting a prevalence rate of 23% [18].

Sexual difficulties

Elevated rates of sexual morbidity have been well documented among gynecological cancer patients (see refs. [19–21] for reviews). An estimated 20–90% of gynecological cancer patients experience significant sexual difficulties, with much of this variability in outcome due to the extent of disease and treatment [21].

Difficulties may occur in any of the phases of the sexual response cycle. For instance, a study by Andersen et al. [22] examined the frequency of sexual dysfunction among women with clinical stage I or II gynecological cancer compared to women with benign gynecological disease and healthy women. Elevated rates of sexual dysfunction were found among the cancer patients in the areas of desire, excitement, orgasm, and dyspareunia, which were still evident at 12 months post-treatment.

The mechanisms underlying the female sexual response may be impaired by surgery, radiotherapy, and chemotherapy. These treatment modalities may result in atrophy of the vaginal mucosa, inadequate lubrication, vaginal irritation, the formation of vaginal adhesions, or an alteration in the depth of the vagina, each of which may result in dyspareunia [23]. A change in cortical sensory input may occur, resulting in reduced genital or pelvic sensitivity, while anorgasmia may result following a radical vulvectomy [23, 24]. Although controversial, diminished desire may be a consequence of hormonal changes following the loss of ovarian functioning produced by illness or treatment [25]. Physical changes not specific to genital or reproductive functioning (e.g., fatigue, leg edema, the presence of an ostomy or hot flushes) may also result in sexual difficulties [25].

In addition to physical mechanisms, psychological factors may have an adverse effect on sexual functioning. Psychological reactions contributing to sexual difficulties include disturbances of gender identity (e.g., following a loss of child-bearing capacity); poor body image (e.g., following disfiguring surgical procedures or alopecia resulting from chemotherapy); impaired intimacy (e.g., following a disintegration of established patterns for achieving physical pleasure or misinformation about sexual behaviour in relation to the disease such as the belief that radiation may be contagious); or affective disturbances (e.g., anxiety, depression, or anger) [23].

Somatic symptoms

The clinical psychologist can also contribute to the management of certain somatic symptoms experienced by cancer patients such as pain and anticipatory nausea and vomiting. Acute or chronic pain may occur as a result of the disease and/or its treatment, with up to 85% of cervical cancer patients estimated to experience marked pain [26]. Anticipatory nausea and vomiting—where the patient becomes conditioned to respond with nausea and vomiting to previously neutral cues associated with treatment-induced side effects—has been conservatively estimated to affect one third of chemotherapy patients [27]. However, the prevalence rate is even greater among patients receiving highly emetic chemotherapeutic agents such as

cisplatin, which is commonly used in the management of gynecological malignancies, and is estimated to produce anticipatory nausea and vomiting in 65% of patients [27].

Family issues

Family members have been described as “second-order patients” [28] (p. 587), with the experience of cancer extending beyond the individual patient to impact on the family as a whole [29, 30]. For example, spouses of cancer patients have been found to experience levels of distress equivalent to those of patients [31]. Moreover, such distress may extend from 1 to 2 years after the diagnosis as spouses attempt to support their partners, deal with their own emotional reactions, and manage disruptions to daily routines [31]. The importance of providing assistance to family members in general and spouses in particular is emphasized by the fact that, first, social support has been found to be associated with cancer patients’ psychological adjustment and, possibly, length of survival [32, 33] and, second, spouses are often the preferred source of emotional support for cancer patients [33] even though it has been proposed that the masculine gender role may render male spouses ill-equipped in the provision of emotional support [31].

ASSESSMENT

Assessment of risk factors for poor psychosexual outcome

In identifying patients who may require psychological intervention, several risk factors for poor psychosexual adjustment to cancer have been documented and thus should form part of the comprehensive assessment of the gynecological cancer patient. These risk factors include medical factors such as the stage of disease and type of treatment, as well as the patient’s developmental stage, intrapersonal resources, interpersonal resources, and recent or concurrent stressful life events.

Stage of disease. Regarding stage of disease, the prevalence of depression in cancer patients has been found to increase as the severity of illness increases [34, 35]. Each clinical course (i.e., complete cure; a disease-free interval followed by recurrence and progressive disease; or no disease-free interval characterized by progressive disease and death) is associated with distinct psychological challenges [36]. For instance, concerning the patient who will eventually be cured, the immediate post-treatment period may be dominated by anxiety related to the possibility of a cancer recurrence [37]. For the patient who initially responds well to treatment followed by a recurrence, the emotional turmoil tends to be even greater than at the time of the initial diagnosis, with higher levels of depression and anger [15]. Here, in the context of treatment aimed at disease control rather than cure, the patient faces the prospect of dying and death. For patients in which there is no disease-free interval, the rapid onset of illness, aggressive treatment, and physical deterioration—arising as a sudden deviation from usual health—is typically emotionally overwhelming [36].

Treatment. The type and extent of treatment also mediates psychosexual outcome. For example, two surgical procedures that have a particularly negative prognosis concerning sexual morbidity are radical vulvectomy and pelvic exenteration, with level of sexual activity at the third and second percentiles for vulvectomy and exenteration patients, respectively, and body image at the fourth and fifth percen-

tiles [24, 38]. Even though vaginal reconstruction following pelvic exenteration offers the possibility of intercourse, it is by no means a panacea (e.g., the cavity may be too large, too small, or associated with a chronic discharge) [19].

Developmental stage. As a risk factor, developmental stage refers to the fact that the impact of cancer is partially dependent on the point at which the patient is in relation to the life cycle and to what extent specific developmental tasks are threatened by illness [39]. In the case of the younger patient, for example, one of the major challenges of gynecological cancer and its treatment may relate to its feared or actual association with diminished attractiveness or loss of child-bearing capacity and hence the ability to establish or maintain a sexual relationship [40].

Intrapersonal resources. Several intrapersonal variables have been found to predict poor adjustment to cancer, including a psychiatric history, substance abuse, and certain coping styles [41]. Although research on the effectiveness of various coping styles has yielded contradictory results, a robust relationship appears to exist between a helpless, pessimistic coping style and poor psychological health [41, 42].

Interpersonal resources. Limited interpersonal resources also feature as a risk factor given the association between social support and better adjustment to cancer [33].

Stressful life events. Finally, it has been suggested that adjustment to cancer may be compromised when intra- and interpersonal resources are already taxed by the existence of other stressful life events [41]. One life event that is particularly implicated in cancer patients' perception of their disease and ultimate psychological adjustment is previous personal experience with cancer (e.g., the patient who has experienced the death of a relative from cancer may be more vulnerable to a depressive response following their diagnosis) [39].

Methods of assessment

Tovian [43] aptly describes the clinical interview as the core method of assessment for cancer patients, not only as a means of eliciting information regarding the patient's risk factors for poor psychosexual outcome and present psychosexual functioning, but also as a means of establishing a strong therapeutic alliance with the patient and significant others. The latter function is especially important among cancer patients who, in contrast to psychiatric patients, may not have sought or expected contact with a mental health professional and may have misconceptions regarding such contact (e.g., fearing that such contact confirms the patient's belief that he/she is going crazy) [1].

Questionnaires comprise useful adjuncts in assessing gynecological cancer patients and can be employed to screen patients for referral to psychological services or to provide additional information about patients identified as requiring psychological intervention on clinical interview [44]. There are, however, certain caveats regarding the utilization of questionnaires among gynecological cancer patients. First, both time and physical limitations may render the administration of lengthy questionnaires inappropriate, although more concise instruments (such as the Hospital Anxiety and Depression Scale [45]) have been constructed in an attempt to circumvent this problem. Second, instruments developed on nonmedical psychiatric patients may result in artificially elevated scores when used with cancer patients due to a confounding of psychological and cancer-related symptoms (e.g., somatic items such as weight loss and fatigue in the assessment of depressive symptomatology us-

ing the Beck Depression Inventory) [46]. Instruments devoid of somatic items (e.g., Profile of Mood States [47]) assist in minimizing any confounding of symptoms. A third limitation in the use of questionnaires with gynecological cancer patients is the lack of instruments constructed and/or normed specifically on this population. One exception is the Sexual Function after Gynecological Illness Scale [48], although the psychometric properties of this instrument have received only minimal investigation.

PSYCHOLOGICAL INTERVENTIONS

A diverse range of psychological interventions has been employed among cancer patients, with interventions varying in terms of the number and duration of sessions (e.g., from a single session to open-ended treatment lasting more than 1 year), the timing of intervention (e.g., preceding, during, or following medical treatment), the therapy format (e.g., individual versus group therapy), the type of therapist (e.g., clinical psychologist, psychiatrist, or social worker), and the type of therapy (e.g., educational, supportive counseling or cognitive behavior therapy) (see refs. 49–51 for reviews). The diverse and changing psychological needs of gynecological cancer patients and their families necessitate flexibility in selecting the mode of intervention.

In contrast to interventions with nonmedical patients, psychological interventions with cancer patients may involve frequent interruptions both within and between sessions (e.g., due to fluctuations in physical status or treatment demands) and changes in the intervention goals as the patient's needs change (e.g., a temporary or permanent cessation of sex therapy following a cancer recurrence). Tovian [43] suggests that the psychologist working with cancer patients may also need to deviate from more traditional approaches in terms of demonstrating greater support and self-disclosure, offering physical assistance (e.g., assisting a patient in and out of bed), and being prepared for rapid alterations in patients' appearance (e.g., alopecia following chemotherapy). In working with gynecological cancer patients, a pilot survey undertaken in our unit suggested that the gender of the psychologist may be important (with patients tending to report a preference for female therapists), although this requires formal investigation (as does the impact of other therapist variables, such as age, on the therapeutic relationship).

Cognitive behavior therapy

Expertise in the implementation of cognitive behavioral interventions is typically in the domain of clinical psychologists and serves in part to distinguish psychologists from other health professionals in the gynecological cancer setting [50]. Cognitive behavioral techniques have a role in each of the areas of disturbance experienced by gynecological cancer patients; that is, affective disturbances, sexual difficulties, somatic symptoms and family issues.

Affective disturbance. Various behavioral interventions have been successfully employed to reduce affective disturbances among cancer patients including relaxation techniques, pleasant activity scheduling, problem solving, assertiveness and communication training, goal setting, imaginal rehearsal, graduated exposure, and systematic desensitization [49–57]. Research suggests that, at least for brief inter-

ventions, treatment entailing instruction in these coping skills may be more effective in the reduction of negative affect among cancer patients than unstructured supportive therapy involving the discussion of feelings and concerns [57]. In contrast to behavioral techniques, the efficacy of cognitive interventions designed to ameliorate emotional distress in cancer patients requires further investigation with preliminary research yielding mixed results [53]. Because cognitive restructuring aims to modify irrational cognitions [58, 59], it will not be applicable to those patients experiencing realistic cognitions and emotional distress in response to traumatic events [60].

Sexual difficulties. Cognitive behavioral interventions have been found to be effective in the treatment of sexual dysfunction (see refs. 61 and 62 for reviews). Applied to medical patients, these interventions typically include various combinations of education (to assist couples in understanding the impact of cancer and its treatment on sexual functioning and to offer practical suggestions as a means of reducing this impact); cognitive restructuring of negative beliefs about the self, partner, or relationship that impair sexual functioning (e.g., “No man would want a woman with an ostomy”); graduated sexual task assignment such as sensate focus exercises (e.g., to provide a gradual, unpressured return to sexual activity disrupted by cancer and its treatment); enhancing couple communication skills (e.g., when temporary or permanent alterations in the couple’s sexual relationship necessitate the exploration of new modes of obtaining sexual satisfaction); and the use of fantasy and attention-focusing skills (e.g., to minimize the tendency for negative beliefs to distract the patient from attending to sexual cues and body sensations) [25, 62]. Because relationship difficulties are one of the most significant predictors of failure in sex therapy [62], interventions designed to enhance the general relationship may need to be implemented prior to the instigation of sex therapy [63–65].

Somatic symptoms. Cognitive behavioral techniques can also facilitate the management of pain and anticipatory nausea and vomiting in conjunction with pharmacological, surgical, and/or radiological treatments [26, 66]. The specific interventions that aim to modify these somatic symptoms and the circumscribed lifestyle constructed in response to somatic distress include pain diaries, relaxation and imagery techniques, distraction, coping statements, cognitive restructuring of dysphoric thoughts that exacerbate the pain experience (e.g., thoughts that associate pain with death), systematic desensitization, graded exposure, management of social contingencies, and graded task assignment [27, 66]. There is, however, evidence to suggest that the efficacy of psychological interventions in the management of somatic symptoms may be more limited in cases of severe pain and postchemotherapy (as opposed to anticipatory) nausea and vomiting [27, 67].

Family issues. Cognitive behavioral interventions for families remain underdeveloped, with the field of family therapy dominated by alternative approaches (e.g., Minuchin’s [68] structural family therapy). Cognitive behavioral therapy is distinguished from many other family therapy approaches by its brevity and skills-training structure. Generalizing from the application of cognitive behavioral therapy in other patient populations (e.g., the work of Kavanagh et al. [69] with the families of individuals with schizophrenia), such an approach with gynecological cancer patients and their families might include education about cancer and its treatment (to reduce uncertainty and establish realistic expectations), goal setting and problem

solving (to minimize the disruptive effects of cancer on family functioning), and communication training (given the unique challenges to effective communication posed by cancer such as avoidance of open discussion) [70]. Cognitive behavioral interventions for bereavement have also been proposed, with an emphasis on graduated involvement in roles and activities, cognitive restructuring of excessively negative cognitions (e.g., related to guilt or personal worthlessness), maximizing social support and controlling drug and alcohol use (e.g., teaching alternative methods to manage distress and sleeping difficulties such as relaxation training) [71]. While promising, the efficacy of cognitive behavioral interventions in managing the problems experienced by the families of cancer patients remains to be evaluated.

RESEARCH AND TRAINING

Research

In addition to working in a clinical capacity, training in the scientist-practitioner model provides the psychologist with the critical, methodological and statistical expertise to perform sound research [43]. These skills enable the psychologist to overcome common limitations in psycho-oncology research (e.g., the use of instruments with questionable reliability and/or validity, heterogeneous samples, and inadequate control groups) and thus assist in elucidating the biopsychosocial determinants of cancer risk and early detection, the biopsychosocial mechanisms mediating adjustment and survival in gynecological cancer, and the effective components of both medical and psychological treatment services [72].

Training and support

The clinical psychologist may also contribute to the training and professional development of students and staff from various disciplines including psychology, medicine, and nursing regarding the psychological concomitants of gynecological cancer and their management. For instance, psychologists have contributed to the development of teaching programs to enhance the communication skills of medical students [73–76]. The need for improved doctor communication skills when breaking bad news is supported by research indicating that misperceptions by doctors in relation to the informational and emotional needs of cancer patients are not uncommon [77–80], even though aspects of doctor–patient communication are associated with important outcomes in cancer patient care such as emotional distress [81] and the adoption of unproven cancer treatments [82]. The psychologist can provide training in general communication skills (e.g., techniques for effective information gathering, emotion management, and information transfer to maximize patient recall and compliance) as well as skills specific to breaking bad news (e.g., how much information to disclose and techniques for enhancing patients' hopefulness) [83–85].

Closely aligned with the provision of educational input is the clinical psychologist's role in providing support for staff confronted with the multiple stresses entailed in working with cancer patients such as the task of breaking bad news. Lederberg [86] recommends regular staff support groups (ranging from highly structured educational sessions to flexible meetings for the expression of concerns and support) to reduce the negative impact of such tasks. In facilitating groups or conducting individual sessions, Lederberg [86] further suggests that a psychologist

actively involved in a particular cancer unit will be in a position to offer greater staff support as compared with an outside consultant, due to a more thorough understanding of the unit's operation.

MODELS OF SERVICE PROVISION

At least two models of service provision are available to the clinical psychologist working with gynecological cancer patients. Specifically, the psychologist may be an integral member of the gynecological cancer team who routinely sees all patients, or act in a liaison capacity on the basis of referrals made by other health professionals. The advantages associated with the former model include greater facilitation in normalizing psychological difficulties in the context of cancer (because all patients are routinely seen by a psychologist), the potential to prevent or minimize psychological morbidity (because interventions are implemented prior to the development of marked psychological deterioration), a reduction in the possibility of other health professionals underdiagnosing psychological morbidity, and increased opportunity to educate team members regarding psychological issues in gynecological cancer. This model, however, may prove to be disadvantageous if the psychologist's presence is perceived by medical staff as obsolescing them of their own role in addressing the psychological needs of patients. This tendency will be minimized by conducting educational sessions designed to, first, highlight the complementary roles of all health professionals in meeting the psychological needs of patients and, second, to provide skills in meeting these needs.

Minimal research has been conducted to evaluate the relative effectiveness of alternative models of service provision in meeting the psychological needs of gynecological cancer patients, although Cull et al. [77] found that a reliance on the liaison psychology model was associated with a substantial proportion of undetected psychological problems in cancer patients. That is, 30% of cancer patients had undetected anxiety and 23% had undetected depression warranting further assessment.

CONCLUSION

The diverse psychological issues raised by gynecological cancer present the clinical psychologist with the opportunity for much variety in clinical practice, while working in a multidisciplinary format provides frequent exchange of information from other fields. Gynecological cancer also invites innovation from psychologists in clinical management and research, especially given the relatively recent integration of clinical psychologists into medical settings [87], including cancer [88].

This recency, however, also presents difficulties in that psychologists, traditionally trained to have a central role in the treatment of physically healthy individuals with psychological problems, may be faced in cancer with the lack of a well-defined role, an absence of psychologically oriented peers and a sense that "one is an outsider working in someone else's specialty" [88] (p. 679). One particularly potent stressor faced by clinical psychologists working in cancer is a sense of helplessness stemming from repeated exposure to the losses of patients and their families, a vulnerability often heightened for psychologists compared with other cancer health

professionals due to the level of involvement entailed in the therapeutic relationship [88].

Several factors assist in mitigating the difficulties experienced by psychologists in gynecological cancer. These include a cohesive team approach entailing mutual respect and support between members of different disciplines, engaging in research to counterbalance the clinical demands, increased training for intern clinical psychologists in medical settings, and opportunities for regular supervision and/or peer review.

REFERENCES

- Callahan EJ, Pawlicki RE, Nicholas DR, Hamilton SA. Psychological aspects of gynecologic cancer. In: Knapp RC, Berkowitz RS, eds. *Gynecologic oncology*. New York: Macmillan 1986:617–640.
- Houts PS, Yasko, JM, Benham K, Schezel GW, Marconi K. Unmet psychological, social, and economic needs of persons with cancer in Pennsylvania. *Cancer* 1986;58:2355–2361.
- Cramer DW. Epidemiological and statistical aspects of gynecologic oncology. In: Knapp RC, Berkowitz RS, eds. *Gynecologic oncology*. New York: Macmillan 1986:201–222.
- Hubbard JL, Holcombe JK. Cancer of the endometrium. *Semin Oncol Nurs* 1990;6:206–213.
- Griffiths CT, Parker L. Cancer of the ovary. In: Knapp RC, Berkowitz RS, eds. *Gynecologic oncology*. New York: Macmillan 1986:313–375.
- Goodman HM, Bowling MC, Nelson JH. Cervical malignancies. In: Knapp RC, Berkowitz RS, eds. *Gynecologic oncology*. New York: Macmillan 1986:225–273.
- Black WC, Nease RF, Tosteson ANA. Perceptions of breast cancer risk and screening effectiveness in women younger than 50 years of age. *J Natl Cancer Inst* 1995;87:720–731.
- Lerman C, Daly M, Masny A, Balslem A. Attitudes about genetic testing for breast–ovarian cancer susceptibility. *J Clin Oncol* 1994;12:843–850.
- Lerman C, Lustbader E, Rimer B, Daly M, Miller S, Sounds C, Balslem A. Effects of individualized breast cancer risk counselling: a randomized trial. *J Natl Cancer Inst* 1995;87:286–292.
- Farrell E, Westmore A. *The HRT handbook: how to decide if hormone replacement therapy is right for you*. South Yarra, Australia: Anne O'Donovan 1993.
- Jacobsen P, Holland JC. Psychological reactions to cancer surgery. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:117–133.
- Knapp RC, Berkowitz RS, eds. *Gynecologic oncology*. New York: Macmillan 1986.
- Karlsson JA, Andersen BL. Radiation therapy and psychological distress in gynecologic cancer patients: outcomes and recommendations for enhancing adjustment. *J Psychosom Obstet Gynaecol* 1986;5:283–294.
- Holland JC, Lesko LM. Chemotherapy, endocrine therapy, and immunotherapy. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:146–162.
- Andersen BL, Turnquist DC. Psychological issues. In: Berek JS, Hacker NF, eds. *Practical gynecologic oncology*. Baltimore, Maryland: Williams & Wilkins 1989:631–656.
- Derogatis LR, Morrow GR, Fetting J, Penman S, Piasetsky S, Schmale AM, Henrichs M, Carnicke CLM. The prevalence of psychiatric disorders among cancer patients. *JAMA* 1983;249:751–757.
- Massie MJ, Holland JC. Overview of normal reactions and prevalence of psychiatric disorders. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:273–282.
- Evans DL, McCartney CF, Nemeroff CB, Raft D, Quade D, Golden RN, Haggerty JJ, Holmes V, Simon JS, Droba M, Mason GA, Fowler WC. Depression in women treated for gynecological cancer: clinical and neuroendocrine assessment. *Am J Psychiatry* 1986;143:447–452.
- Andersen BL, van der Does J. Surviving gynecologic cancer and coping with sexual morbidity: an international problem. *Int J Gynecol Cancer* 1994;4:225–240.
- Weijmar Schultz WCM, Bransfield DD, van de Wiel HBM, Bouma J. Sexual outcome following female genital cancer treatment: a critical review of methods of investigation and results. *Sex Marit Ther* 1992;7:29–62.
- Andersen BL. Predicting sexual and psychologic morbidity and improving the quality of life for women with gynecologic cancer. *Cancer* 1993;71(suppl.):1678–1690.

22. Andersen BL, Anderson B, deProse C. Controlled prospective longitudinal study of women with cancer: sexual functioning outcomes. *J Consult Clin Psychol* 1989;57:683–691.
23. Weijmar Schultz WCM, van de Wiel HBM, Hahn BEE, Bouma J. Psychosexual functioning after treatment for gynecological cancer: an integrative model, review of determinant factors and clinical guidelines. *Int J Gynecol Cancer* 1992;2:281–290.
24. Andersen BL, Hacker NF. Psychosexual adjustment after vulvar surgery. *Obstet Gynecol* 1983;62:457–462.
25. Schover LR, Jensen SB. *Sexuality and chronic illness: a comprehensive approach*. New York: Guilford Press 1988.
26. Portenoy RK, Foley KM. Management of cancer pain. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:369–382.
27. Redd WH. Management of anticipatory nausea and vomiting. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:423–433.
28. Rait D, Lederberg M. The family of the cancer patient. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:585–597.
29. Germino BB, Funk SG. Impact of a parent's cancer on adult children: role and relationship issues. *Semin Oncol Nurs* 1993;9:101–106.
30. Lewis FM. Psychosocial transitions and the family's work in adjusting to cancer. *Semin Oncol Nurs* 1993;9:127–129.
31. Northouse LL, Peters-Golden H. Cancer and the family: strategies to assist spouses. *Semin Oncol Nurs* 1993;9:74–82.
32. Blanchard CG, Albrecht TL, Ruckdeschel JC, Grant CH, Hemmick RM. The role of social support in adaptation to cancer and to survival. *J Psychosoc Oncol* 1995;13:75–95.
33. Rowland JH. Interpersonal resources: social support. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:58–71.
34. Massie MJ. Depression. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:283–290.
35. McDaniel JS, Musselman DL, Porter MR, Reed DA, Nemeroff CB. Depression in patients with cancer: diagnosis, biology, and treatment. *Arch Gen Psychiatry* 1995;52:89–99.
36. Holland JC. Clinical course of cancer. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:75–100.
37. Tross S, Holland JC. Psychological sequelae in cancer survivors. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:101–116.
38. Andersen BL, Hacker NF. Psychosexual adjustment following pelvic exenteration. *Obstet Gynecol* 1983;61:331–338.
39. Rowland JH. Developmental stage and adaptation: adult model. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:25–43.
40. Brock C, Perry D. Report on the social and emotional impact of cancer diagnosis on young adults. *Austral Soc Work* 1995;48:29–32.
41. Rowland JH. Intrapersonal resources: coping. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:44–57.
42. Parle M, Maguire P. Exploring relationships between cancer, coping, and mental health. *J Psychosoc Oncol* 1995;13:27–50.
43. Tovian SM. Integration of clinical psychology into adult and pediatric oncology programs. In: Sweet JJ, Rozensky RH, Tovian SM, eds. *Handbook of clinical psychology in medical settings*. New York: Plenum Press 1991:331–352.
44. Ford S, Lewis S, Fallowfield L. Psychological morbidity in newly referred patients with cancer. *J Psychosom Res* 1995;39:193–202.
45. Zigmond AS, Snaith RP. The Hospital Anxiety and Depression Scale. *Acta Psychiatrica Scand* 1983;67:361–370.
46. Beck AT, Ward CH, Mendelson M, Mock J, Erbaugh J. An inventory for measuring depression. *Arch Gen Psychiatry* 1961;4:561–571.
47. McNair DM, Lorr M, Droppleman LF. *Manual for the Profile of Mood States — revised*. San Diego, California: Educational and Industrial Testing Service 1992.
48. Bransfield DD, Horiot JC, Nabid A. Development of a scale for assessing sexual function after treatment for gynecologic cancer. *J Psychosoc Oncol* 1984;2:3–19.

49. Fawzy FI, Fawzy NW, Arndt LA, Pasnau RO. Critical review of psychosocial interventions in cancer care. *Arch Gen Psychiatry* 1995;52:100-113.
50. Massie MJ, Holland JC, Straker N. Psychotherapeutic interventions. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:455-469.
51. Trijsburg RW, van Knippenberg FCE, Rijpma SE. Effects of psychological treatment on cancer patients: a critical review. *Psychosom Med* 1992;54:489-517.
52. Burish TG, Snyder SL, Jenkins RA. Preparing patients for cancer chemotherapy: effect of coping preparation and relaxation interventions. *J Consul Clin Psychol* 1991;59:518-525.
53. Cocker KI, Bell DR, Kidman AD. Cognitive behaviour therapy with advanced breast cancer patients: a brief report of a pilot study. *Psycho-Oncology* 1994;3:233-237.
54. Fawzy FI, Cousins N, Fawzy NW, Kemeny ME, Elashoff R, Morton D. A structured psychiatric intervention for cancer patients. *Arch Gen Psychiatry* 1990;47:720-725.
55. Massie MJ. Anxiety, panic, and phobias. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989: 300-309.
56. Mastrovito R. Behavioral techniques: progressive relaxation and self regulatory therapies. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:492-501.
57. Telch CF, Telch MJ. Group coping skills instruction and supportive group therapy for cancer patients: a comparison of strategies. *J Consult Clin Psychol* 1986;54:802-808.
58. Beck AT. *Cognitive therapy and emotional disorders*. New York: Meridan 1976.
59. Ellis A. *Reason and emotion in psychotherapy*. Secaucus, New Jersey: Lyle Stuart 1962.
60. Spiegel D, Spira J. Supportive-expressive group therapy: a treatment manual of psychosocial intervention for women with recurrent breast cancer. Unpublished manuscript, Stanford University 1991.
61. Friedman JM, Weiler SJ, LoPiccolo J, Hagan DR. Sexual dysfunctions and their treatment: current status. In: Bellack AS, Hersen M, Kazdin AE, eds. *International handbook of behavior modification and therapy*. New York: Plenum Press 1982:653-681.
62. Spence SH. *Psychosexual therapy: a cognitive-behavioural approach*. Melbourne: Chapman & Hall 1991.
63. Behrens BC, Halford WK, Sanders MR. Behavioural marital therapy: an overview. *Behav Change* 1989;6:112-123.
64. Jacobson NS. Behavioral couple therapy: a new beginning. *Behav Ther* 1992;23:493-506.
65. Truax P, Jacobson N. Cognitive processes and marital satisfaction: research, theories and clinical implications. *Behav Change* 1989;6:137-152.
66. Loscalzo M, Jacobsen PB. Practical behavioral approaches to the effective management of pain and distress. *J Psychosoc Oncol* 1990;8:139-169.
67. Blew AF, Patterson DR, Questad KA. Frequency of use and rated effectiveness of cognitive and behavioural coping responses to burn pain. *Burns* 1989;15:20-22.
68. Minuchin S. *Families and family therapy*. London: Tavistock 1974.
69. Kavanagh DJ, Piatkowska O, Manicavasagar V, O'Halloran P, Clark D. Living with schizophrenia: a cognitive-behavioural intervention for individuals and families. Unpublished manuscript, University of Sydney 1991.
70. Wortman CB, Dunkel-Schetter C. Interpersonal relationships and cancer: a theoretical analysis. *J Soc Issues* 1979;35:120-155.
71. Kavanagh DJ. Towards a cognitive-behavioural intervention for adult grief reactions. *Br J Psychiatry* 1990;157:373-383.
72. Cella DF, Jacobsen PB, Lesko LM. Research methods in psychooncology. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:737-749.
73. Carney SL, Mitchell KR, Brinsmead MW, Sanson-Fisher RW, Floate DA. The way we teach medical students professional skills. *Med Teacher* 1985;7:37-44.
74. Gordon JJ, Saunders NA, Henrikus D, Sanson-Fisher RW. Interns' performances with simulated patients at the beginning and the end of the intern year. *J Gen Intern Med* 1992;7:57-62.
75. Sanson-Fisher RW, Redman S, Walsh R, Mitchell K, Reid ALA, Perkins JJ. Training medical practitioners in information transfer skills: the new challenge. *Med Educ* 1991;25:322-333.
76. Schofield MJ, Walsh RA, Sanson-Fisher RW. Training medical students in behavioural and cognitive strategies. *Behav Change* 1994;11:6-18.
77. Cull A, Stewart M, Altman DG. Assessment of and intervention for psychosocial problems in routine oncology practice. *Br J Cancer* 1995;72:229-235.
78. Faden RR, Becker C, Lewis C, Freeman J, Faden AI. Disclosure of information to patients in medical care. *Med Care* 1981;19:718-733.

79. Goldberg R, Guadagnoli E, Silliman RA, Glicksman A. Cancer patients' concerns: congruence between patients and primary care physicians. *J Cancer Educ* 1990;5:193-199.
80. Maguire P. Improving the detection of psychiatric problems in cancer patients. *Soc Sci Med* 1985;20:819-823.
81. Molleman E, Krabbendam PJ, Annyas AA, Koops HS, Sleijfer DT, Vermey A. The significance of the doctor-patient relationship in coping with cancer. *Soc Sci Med* 1984;18:475-480.
82. Pruyt JFA, Rijkman KM, van Brunscot CJM, van den Borne HW. Cancer patients' personality characteristics, physician-patient communication and adoption of the Moerman diet. *Soc Sci Med* 1985;20:841-847.
83. Lipkin M. The medical interview and related skills. In: Branch WT, ed. *Office practice of medicine*. Philadelphia: Saunders 1987:1287-1306.
84. Reynolds PM, Sanson-Fisher RW, Poole AD, Harker J, Byrne MJ. Cancer and communication: information-giving in an oncology clinic. *BMJ* 1981;282:1449-1451.
85. Sardell AN, Trierweiler SJ. Disclosing the cancer diagnosis: procedures that influence patient hopefulness. *Cancer* 1993;72:3355-3365.
86. Lederberg M. Psychological problems of staff and their management. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:631-646.
87. Touyz S, Blaszczyński A, Digiusto E, Byrne D. The emergence of clinical psychology departments in Australian teaching hospitals. *Aust NZ J Psychiatry* 1992;26:554-559.
88. Holland JC. Stresses on mental health professionals. In: Holland JC, Rowland JH, eds. *Handbook of psychooncology: psychological care of the patient with cancer*. New York: Oxford University Press 1989:678-682.