Illness-related Distress: Does it Mean the Same for Men and Women?

Gender Aspects in Cancer Patients' Distress and Adjustment

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Gender differences were investigated in a sample of 149 married cancer patients (82 males, 67 females) undergoing outpatient chemotherapy. A cross-sectional design was used and evaluation included medical assessments and self-rating questionnaires. Tumour sites varied, and advanced stages of disease were predominant. Overall, the results suggest gender differences as well as some similarities. Although female patients reported symptoms and higher overall distress because of illness more frequently than male patients did, general satisfaction with life did not differ between genders, suggesting comparable adjustment. From the results of multivariate analyses physical impairment, such as older age, primarily explained female patients' distress, whereas men's distress was closely linked to their psychological condition. Men and women also differ in the way they make use of social support. Assessment of the distinctive aspects contributing to male and female cancer patients' distress could improve the provision of adequate support adapted to gender-specific requirements.

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Gender differences can affect health. In all developed countries the life expectancy for women exceeds that of men with an excess mortality predominantly in young and middle-aged men. Malignant neoplasms and diseases of the heart are the main causes of death (1). On the other hand, women's morbidity rates exceed those of men; most chronic and non-fatal diseases are more prevalent among women. As Nathanson stated: 'Women get sick and men die' (2).

Apart from biological and acquired risks of illness and injury, the hypothesis of sex-role differences in illness behaviour is generally considered to explain the gender differences in health. Women are more likely than men are to engage in illness behaviour. This includes perceiving and reporting symptoms, utilizing informal and healthcare services, and adopting the sick-role more easily (3). Psychosocial as well as cultural factors are believed to encourage women's awareness of physical symptoms, resulting in a more persistent monitoring of their symptoms (2). There is some evidence that the manner of reporting on health has an influence on the use of informal and professional help, and vice versa on the responses of the medical professions. Whereas doctors take men's reported symptoms more seriously, women's symptoms are frequently interpreted as 'psychological', with an ensuing higher frequency of prescriptions for psychotropic drugs (4).

Because women tend to seek care, they predominate in nearly all samples studied in medical and psychological institutions. Psychological distress might be overestimated in women, whereas men are at greater risk of being underestimated, as suggested by the higher frequency of successful suicides among men compared with women (4). Gender-specific attitudes in reporting on health partly account for the common belief that women are more vulnerable to psychological distress and disorder, particularly when confronted with stressful events. Yet, women's higher sensitivity towards physical and psychological symptoms and their propensity for communicating them are not convincing proof of their higher vulnerability.

Gender differences in health behaviour are believed to diminish with severe and life-threatening illness (1). Yet, Marshall and colleagues (1982) failed to confirm their expectation of a shorter delay in diagnosis in female cancer patients because of women's propensity for perceiving and reporting symptoms earlier than men (5).

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Gender differences in cancer patients are rarely addressed directly. Breast-cancer, in particular, has attracted researchers' interest, becoming paradigmatic for female cancer, whereas there is little knowledge on 'typical' male neoplasms, which affect male sexuality and reproduction, and even less knowledge on gender differences in the many malignancies affecting both men and women.

Results on the prevalence of psychosocial distress in cancer patients are inconclusive. Some studies yield evidence to suggest women's higher vulnerability, as assessed by the prevalence of adjustment disorder, depression, anxiety and side effects of treatment, while others fail to show gender differences in cancer patients' distress (6–8). Conversely, more favourable outcomes in female patients' adjustment have been reported, suggesting women's ability to adapt to the crisis of cancer (9). Variations in adjustment may be attributable to different styles of coping; while men are thought to prefer more active, problem-solving behaviour, women are assumed to prefer the use of social support and emotion-focused ways of coping (9–11).

Another concept frequently considered when explaining gender differences is social support. A striking difference, repeatedly found in epidemiological studies, reveals that social ties, although a prerequisite for human health irrespective of gender, exert a protective effect more often on men than on women (12, 13). Male morbidity and mortality seem more closely linked to their social network. In particular, marriage protects men more than women from all kinds of diseases and fatal outcome (12). Men experience an increased mortality during the first six months of bereavement of their wives, while women do so to a lesser degree (14, 15). Up until now, the pathways mediating the protective effects of social support are poorly understood. In addition to direct effects, e.g. maintaining a health-preserving lifestyle, psychoendocrinological and psychoimmunological pathways are now being discussed (16).

Little is known, however, about whether men and women share the same experience when confronted with cancer.

A more detailed knowledge of gender differences in experiencing illness and the process of adjustment might help not only to identify more appropriately male and female cancer patients at risk, but also to adapt psychosocial interventions according to gender-specific requirements.

Two primary research questions provided the focus for the study described in this article:

- Do men and women report different levels of distress and adjustment to cancer?
- Are there gender differences in the individual experience of illness, and what illness-related factors and those in the psychosocial context contribute to men's distress compared with that of women?

In addition, the results were expected to define risk factors in order to identify appropriately patients in need of psychosocial intervention.

METHODS

This study is part of a prospective research project conducted (1) to integrate psychosocial care into a medical setting and (2) to evaluate the medical and psychosocial impact of outpatient treatment on cancer patients and their families. For the questionnaire under research a cross-sectional design was chosen, using data from the initial assessment.

Subjects

As part of a large urban university hospital, a central outpatient chemotherapy unit was established, offering professional oncology services to all medical departments. Patients were referred to the unit for medical reasons, when outpatient treatment was considered appropriate and feasible.

Eligibility criteria included a performance status allowing outpatient treatment (Karnofsky $> 60\%$) and the physical and mental capability to complete the questionnaires. Patients whose treatment duration schedule was too short for follow-up (less than 3 months) were excluded.

During a three-year period, all patients newly admitted to the unit were consecutively recruited. Out of 296 patients admitted to the unit, 224 completed questionnaires at the initial assessment (T1), before the start of treatment (response 76%). Data gained from medical assessment and the initial psychosocial interview, conducted with every patient, revealed several significant differences ($p < 0.05$): non-responders were older, had a poorer performance status, poorer prognosis and communicated less openly on illness-related concerns compared with responders, but no gender differences were detected. Thus, in the study sample, patients with a more favourable disease status were likely to be overrepresented, resulting in some selection bias. When compared with in-patients, however, no substantial differences were shown, suggesting no major selection bias in the outpatient sample.

Since unmarried women were overrepresented in the sample, only patients who were married or living in a stable relationship and whose partners had completed questionnaires were included, to assure comparability of support resources. The final sample consisted of 149 patients (82 males and 67 females), all of them married or cohabitating with a partner.

Procedure

After an extensive psychosocial interview upon admission, patients were informed about the study and asked to participate. Written consent was obtained from all participants, and confidentiality in managing the data was as-

sured. The participants were given questionnaires for themselves and for their partners and were asked to complete them on their own. Physicians carried out a thorough medical assessment before treatment.

Evaluation included the physicians' assessment of the patients' medical condition, and patients' questionnaires. To ensure a sufficient response rate and quality of data the extent of the questionnaire was adapted to suit the patients' restricted capacity due to illness.

Patients' individual *experience of illness* was assessed within each of the following areas of life:

Physical subjective

- Physical functioning (ECOG performance scale)
- Change in physical performance since onset of illness
- Severity of physical/psychosomatic symptoms, assessed by Complaint List (BL, von Zerssen 1977) with proven psychometric properties (17).

Psychological

The following items, using a 5-point Likert-scale from 'much worse' (1) to 'much improved (5), were included:

- 'Has your mood/mental performance/self-esteem changed because of the illness?'
- 'How often do you feel lonely?' (1) Never… (5) Very often.

Partner relationship and communication

- 'Has your relationship changed due to illness?' (1) Much worse... (5) Much improved
- 'How satisfied are you with your relationship?' (1) Very unhappy... (5) Very happy
- 'How often do you talk with your partner about illness-related concerns?' (1) Very rarely... (5) Very often
- Can you communicate your concerns openly?' (1) Easily... (3) … With difficulty

Social support

- 'How much does the support from: your partner/your family/your friends/other people help you cope with the emotional burden caused by illness?'
- (5-point Likert-scale from (1) 'not at all' to (5) 'very much'
- 'Do you have people available to assist you with practical daily tasks?' (Yes – No)

These items served as independent variables to assess their relative contribution in explaining men's distress compared with women's distress.

Patients' *distress* was measured in two different ways: first, *overall* illness-related distress was assessed by a single self-rated item '*How much distress is actually due to your illness?*' Patients scored on a 5-point Likert-scale ranging from not at all (1) to very much (5). This item proved to be a reliable and quick measure of cancer patients' distress suitable for use in large studies (18, 19). Secondly, a 7-item score, derived from factor analysis indicating *psychological* distress (PDS), assessed patient-perceived psychological functioning and emotional state. Patients indicated on a 5-point scale to what extent psychological functioning had changed in various domains since the onset of illness, ranging from much improved (1) to much worse (5). Internal consistency (Cronbach alpha = 0.80) indicated satisfactory reliability. Content validity is assumed, because of the selection of items representing the concept of psychological distress. Correlation between the two distress measures was 0.60 for both genders.

Overall satisfaction with life was conceptualized as the result of adjustment to illness (20, 21) and was measured using the satisfaction with life inventory (FLZ^M, Fragen zur Lebenszufriedenheit, core questionnaire) with proven psychometric properties (21, 22). The 9-item inventory measures weighted satisfaction with life, by adding the subjective importance to the perceived satisfaction within each of eight areas of life. Data from a variety of samples—including physical and psychosomatic diseases—and from the general population allow comparisons to be made.

Statistic analysis was performed using SPSS 6 for Social Sciences (23) using a t-test and χ^2 test for comparison between genders. Multiple (grouped and gradual) regression analyses were performed (1) to assess the relative impact of illness experience in each area of life on overall distress, and (2) to identify indicators of male and female patients' distress, respectively. Missing data were replaced by mean values.

RESULTS

In order to avoid possible confounding effects, comparability between genders was examined with regard to sociodemographic and medical variables.

As shown in Table 1, age between genders was evenly distributed, when expressed as median values or when comparing age groups. Socioeconomic status, assessed by level of education, revealed a slight preponderance of higher educated men, while the percentage of the lower educated was evenly distributed. The level of education of the sample as a whole is representative of the German general population (24).

With regard to the medical characteristics, obvious dissimilarities were found for site of tumour, with breast cancer predominating in women and gastrointestinal cancer in men. Men also had a poorer prognosis and more frequently palliative treatment only, whereas stage of disease and physician-assessed performance status (Karnofsky) were equally distributed between genders. Though the

results indicate a slight bias with unfavourable prognosis being overrepresented among men, the genders appear largely comparable. This is explained by the stage of disease and performance status, which are most important for the individual impact of disease, being evenly distributed.

From the medical data, with advanced stage and unfavourable course of disease predominantly in the sample, an overall high risk of illness-related distress can be assumed.

Concerning the individual experience of illness (see Table 2), women reported on physical/psychosomatic symptoms more frequently than men. Patient-rated physical performance did not differ by gender, with only a tendency for women to perceive physical restriction more frequently compared with men.

Table 1

Medical and sociodemographic characteristics of the sample, by gender

	Male (%) (n = 82)	Female (%) (n = 67)	χ^2-test
Age (years)			
≤40	15	13	
41–50	17	27	
51–60	32	36	
61–70	32	18	
>70	5	6	n.s.
Education			
<High school	54	54	
High school	22	36	
College	24	10	6.5*
Married/cohabitating	100	100	n.s.
Tumour site			
Gastrointestinal	45	21	
Haematologic	29	30	
Breast	0	40	
Lung/respiratory	22	6	
Others	4	3	45.8***
Stage of disease			
Limited	13	27	
Metastatic	57	43	n.s.
Treatment aim			
Curative/adjuvant	23	45	
Palliative	77	55	7.8**
Prognosis			
Good/intermed	29	48	
Poor	71	52	5.4*
Karnofsky perform			
≤70	26	20	
80	17	12	
90	24	30	
100	33	38	n.s.

n.s = not significant; *** $p \leq 0.001$; ** $p \leq 0.010$; * $p \leq 0.050$.

Considerable conformity was found between genders when comparing the perceived changes attributable to the illness. This applies both for the physical changes and for the psychological area. Men reported on decreased physical strength, mental capacity, mood and self-esteem to the same extent as women, but with one exception: Women reported more frequently than men about feeling lonely (derived from the UCLA Loneliness Scale; (25). Loneliness is regarded as being widely unrelated to illness, as suggested by almost identical findings in a recent representative study on the German population (24). While women reported on symptoms more frequently than men, the perception of illness-related changes in both the physical and psychological areas did not differ. This suggests that men and women experience illness in a similar way.

Focusing on resources, gender differences became evident, particularly with the use of social support (Table 2). The results revealed divergent patterns: male patients tended to rely mainly on their wives, reporting more frequently on improved relationships since the onset of illness, and holding their wives' emotional support in higher esteem. Other sources of support (family, friends) were perceived as being less important. The female pattern, on the other hand, showed that women tended to rely less on the support of their husbands, instead relying much more on resources both within and outside the family.

Women perceived a higher degree of *overall* illness-related distress; 54% of women compared with 28% of men reported on a remarkable degree (values 4 and 5) of distress (Table 2). When comparing *psychological* distress, however, differences diminished, showing male patients to be as burdened psychologically as women. Taking the subjective satisfaction with life as a result of adjustment to illness, men's estimates were commensurate with those of women.

Up until now, the results suggest gender differences as well as similarities; while patients share to a remarkable degree the experience of illness, with comparable illness-related changes in the physical and psychological dimensions, they differ in their degree of reported symptoms and overall distress.

Subsequently, it was investigated whether men's and women's distress respectively was determined differently by gender. The individual's definition of perceived distress may be related to different attributions. To explore the impact of the experience of illness on men's and women's distress, the relative contribution of physical and psychological aspects, and of resources on overall distress, was assessed using multiple regression analysis.

As shown in Table 3 (with explained variance by area of life presented in percentages), varying patterns were shown

Table 2

Comparison of male vs. female patients' ratings of illness-related sequelae in various life domains

		Male (%) (n = 82)	Female (%) (n = 67)	χ^2/t-test
Medical subjective				
Restricted performance status		29	39	n.s.
Symptoms (BL)	Mean	22.6	27.0	
	S.D.	11.6	14.0	2.0*
Deteriorated performance		79	75	n.s.
Psychological				
Deterioration of				
Mental performance		24	18	n.s.
Self esteem		27	27	n.s.
Mood		51	48	n.s.
Loneliness		11	27	10.5*
Partner relationship				
Open communication relationship		91	80	n.s.
Improved		33	14	10.7*
High satisfaction		58	64	n.s.
High emotional support		83	57	18.2**
Social support				
High emotional support				
Family		70	78	n.s.
Friends		42	55	n.s.
Confidants available		82	90	2.7*
Tangible support		84	86	n.s.
Illness related distress				
High global distress		28	54	9.8**
Global distress	Mean	2.31	2.60	
	S.D.	0.82	0.92	2.0*
Psychological distress	Mean	1.71	1.85	
	S.D.	2.02	1.99	n.s.
Life satisfaction (FLZ^M)	Mean	48.0	50.4	
	S.D.	33.2	34.6	n.s.

n.s. = not significant; ** $p \leq 0.010$; * $p \leq 0.050$.

to emerge. Male patients' overall distress was predominantly explained by the perceived psychological impact of illness, and to a lesser degree by the physical condition. In addition, the partner relationship showed a marginal impact: men's distress diminishing with improved relationships and the emotional support of their wives. Support from family and friends was unrelated to male patients' distress. Men's distress was also related to changes occurring in the everyday life of their wives because of their illness.

Female patients' distress was related primarily to the physical experience of the illness. In addition, sociodemographic variables were indicative only of women's distress, which increased with older age. The psychological impact of illness, however, played a minor role in women's distress compared with that of men. In line with the results mentioned above, husbands' support apparently had no impact on women's distress, while help from family and friends was slightly more closely linked (though not significantly). Somewhat surprisingly, female patients made less beneficial use of the support that was available to them.

Patients' illness-related demands on the everyday life of their spouses were similarly related to female and male patients' distress. Furthermore, women's distress was even greater when their husbands were in poor health themselves. Irrespective of gender, the objective medical condition as assessed by physicians did not contribute toward explaining patients' distress.

The results of our study are shown graphically in Fig. 1, demonstrating the differential weight of the various areas of life in explaining men's and women's overall distress, respectively.

Since the explained variance of every area of life cannot be simply added and intercorrelations may occur, an additional gradual multiple regression analysis was calculated, using identical dependent and independent variables; in order to identify predictors of female and male patients at risk.

The results presented in Table 4 are consistent with the previous data: suggesting varying patterns indicative for men and women at risk. Overall, 39% of variance can be explained by four variables in men, whereas two items

explain 30% of variance in women. Again, male patients at risk are mainly characterized by the psychological impact of illness, with decreased mood and feelings of loneliness, particularly with older age and poor prognosis. Compared with the psychological impact, the physical impact of disease on distress seems less important.

Female patients at risk are more likely to be older and to experience a poor physical condition. They appear less vulnerable to the psychological consequences of the disease, possibly because they are more resilient to loss of self-esteem and poor emotional state.

Finally, regression analysis was repeated, using the psychological distress score (PDS) as the dependent variable, with identical independent variables.

The results shown in Table 5 reveal a more homogeneous pattern, with less variance between genders. Irrespective of gender, psychological distress is primarily related to the physical condition caused by illness, as experienced by the patients. Concerning the resources, the pattern shown already is further substantiated; with only men's psychological distress decreasing with a supportive partner relationship. Again the close relation between spouses' and patients' physical condition is confirmed, with the mutual influence of spouses' illness demands and patients' distress.

Contrary to the findings for overall illness-related distress, female patients' psychological distress did not increase with older age. A consistent pattern of gender differences shows that men's distress diminishes with their wives' emotional support, whereas women's distress increases even more when partners are in poor health themselves.

DISCUSSION

The aim of our study was to investigate gender differences that cancer patients experience in the course of their illness. In our sample, comprising mainly advanced-stage patients with varying tumour sites, female patients reported on physical and psychosomatic symptoms more frequently and estimated their overall illness-related distress higher than male patients. These findings are in line with results from several authors, suggesting an asssumption of women's higher vulnerability to the effects of stressful life events (1–3).

But can it be concluded from these results that female cancer patients are generally at high 'psychosocial risk'? Overall satisfaction with life, on the other hand, did not differ between genders, which suggests that women's adjustment to illness is not inferior to that of men. Possibly, a high distress level leads to more effective methods of coping, resulting in outcomes comparable to those of men. This view is endorsed by the results found by several authors, with initially high distress levels predicting a better adjustment outcome compared with a low degree of distress (26, 27). Awareness of one's distress can serve as a prerequisite to mobilizing resources from within and without. Particularly women's propensity for communicating symptoms and distress can be understood as an attempt to adjust, both by ventilating adverse feelings and initiating supportive actions (1). What is regarded as 'typical female' health behaviour could serve as an effective means of adjusting to critical life events. Male cancer patients, on the other hand, might be at risk because of their tendency to withhold and underreport symptoms, which is likely to result in underestimation of their psychosocial condition.

Our results only partly support the hypothesis stated by Verbrugge, claiming that gender differences in health behaviour would diminish with severe and life-threatening conditions (1). It appears plausible that health behaviour, developed early in life, is more an enduring trait of a person than a situative state, which may be moderated to some degree by severe illness, but not subdue to radical change.

Table 3

Multiple correlation analyses of illness experience in various life domains; dependent variables: male vs. female patients' overall distress (patient-rated global distress)

Domain	n vars	Male			Female		
		Mult. R	Sign.	R^2 (%)	Mult. R	Sign.	R^2 (%)
Sociodemographic	2	0.23	0.121	5	0.43	0.001	19
Medical							
Objective	10	0.33	0.498	11	0.37	0.536	14
Subjective	3	0.33	0.026	11	0.45	0.003	20
Psychological	4	0.54	0.000	30	0.36	0.067	13
Partner relationship	5	0.35	0.077	12	0.20	0.762	4
Social support	4	0.25	0.283	6	0.32	0.145	10
Partner							
Illness demands	3	0.33	0.029	11	0.38	0.019	14
Health status	1	0.03	0.810	0	0.38	0.002	14

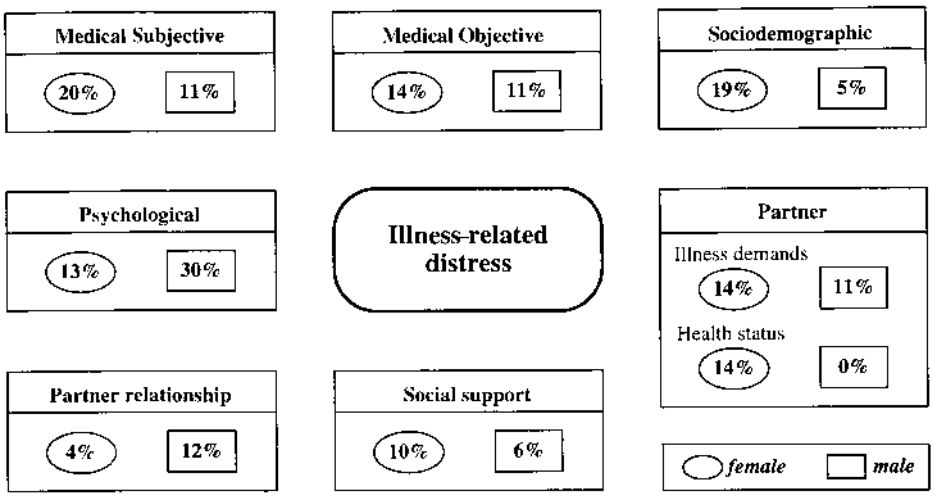

Fig. 1. Explained variance (percentages) of patients' overall distress (patient-rated global distress) by gender.

Apart from overall distress, the question is whether the experience of illness varies between genders. Our results suggest that male and female patients share a similar experience, with almost identical perceived changes in their physical and psychological functioning because of the illness.

However, the impact of these changes on patients' overall distress varies by gender; with women's distress closely related to their physical condition, while men's psychological condition largely accounts for their distress.

It can be concluded from the results that in fact, illness-related distress does not mean the same to men and women. In women, cancer attacks female gender roles, with physical impairment interfering with their role of care provider, and hindering them whilst carrying out their daily tasks. Distress caused by physical impairment may also indicate a lack of support and unsatisfied needs during everyday care, particularly in elderly women, even more so when the husbands are in poor health themselves. Similar results, where elderly women's needs were unfulfilled in receiving appropriate care, were reported by Wellisch (28).

Conversely, in men, cancer may be regarded as an attack on male identity, or an attack on man's self, as stated by Meerwein (29). Since male identity is believed to be built on strength and invulnerability, male cancer patients are likely to be at a greater risk of distress, the more they perceive illness as being associated with loss of self-esteem and decreased mood. Unlike women, physical impairment is less of an obstacle in their gender roles, since sick-leave status allows them to refrain from professional work. Moreover, unsatisfied needs in male patients are less common, since their wives usually provide them with appropriate care.

In our sample, the female cancer patient at risk of heightened distress can be best identified by estimating the degree of physical incapacity, considering the additional effect of age. The identification of men at risk should be accomplished by professionals' assessment of the patient's emotional state—with emphasis on mood and self-esteem.

In our sample, factors in the psychosocial context contributed only slightly in explaining patients' distress, suggesting little moderating impact, even when patients highly valued the support they received from varying sources. In advanced stages, the concrete burden of the disease, probably outweighs the relief of support, and may largely determine patients' distress and adjustment (30). Referring to the stress-buffer hypothesis, social support may be considered an aid to coping rather than as a means of actually reducing distress (31).

Moreover genders differ in the way they make use of social support: only men's distress was found to diminish with wives' support, whereas women's distress was unrelated to their husbands' aid. Furthermore, men valued their wives' support more highly than women valued their husbands' support. Male patients appear to rely primarily on their wives' support, whereas other sources of support are less important. These results are probably not confined to severe illness, since similar findings were reported on healthy men (14). Men are more likely to get what they need from their wives, and also make use of the support more effectively. Though women report on a higher number of supportive resources available, neither support from spouses nor from family or friends was found to be related to their distress.

Our results are in line with findings from several epidemiological studies, suggesting distinctive effects of social support on gender. In particular, marriage shows a more marked protective effect on men's health, compared with women's health (13–16).

Male patients receiving adequate support from their wives may account for the low rate of men initiating

Table 4

Stepwise multiple regression analysis; dependent variables: male vs. female patients' overall distress (patient-rated global distress)

Step	Male				Female			
	Variable	Beta	Sign.	R^2 (%)	Variable	Beta	Sign.	R^2 (%)
1.	Mood	−0.48	0.000		Performance status	0.44	0.002	
2.	Age	0.26	0.000		Age	0.34	0.003	
3.	Loneliness	0.23	0.000					
4.	Prognosis	0.21	0.000	39				30

Table 5

Multiple correlation analyses of illness experience in various life domains; dependent variables: male vs. female patients' psychological distress (PDS)

Domain	n vars	Male			Female		
		Mult. R	Sign.	R^2 (%)	Mult. R.	Sign.	R^2 (%)
Sociodemographic	2	0.19	0.234	4	0.18	0.328	3
Medical							
Objective	10	0.24	0.874	6	0.33	0.736	11
Subjective	3	0.54	0.000	29	0.58	0.000	34
Partner relationship	5	0.37	0.042	14	0.21	0.705	4
Social support	4	0.23	0.366	5	0.30	0.239	9
Partner							
Illness demands	3	0.40	0.003	16	0.41	0.007	17
Health status	1	0.05	0.652	0	0.40	0.001	16

psychosocial interventions. Male cancer patients without appropriate support from their wives probably bear an increased risk of heightened distress and impaired adjustment.

Though careful control for possible sources of bias largely assures that differences are in fact attributable to gender, some limitations of the study have to be mentioned. Since results represent a sample mainly consisting of patients with an unfavourable course of disease, they may not be generalized to all cancer patients, particularly those with favourable outcomes. Yet, comparable conditions can be found in many settings, therefore results may be applicable for quite a common sample in medical oncology. Furthermore, the use of instruments that are only partly standardized, such as a single-item measure assessing self-rated distress, may call reliability into question, and restrict replication. On the other hand, this seems to be a valid and feasible means of assessing specific cancer-related distress, as opposed to psychiatric morbidity, e.g. depression (32).

Though the study was able to shed some light on the impact gender aspects may have on cancer patients' distress and adjustment, gender effects probably are not the panacea providing an overall explanation for cancer patients' problems. The view on 'male' versus 'female' behaviour carries the risk of a simplistic view on patients' individual experience.

However, adding the gender perspective as one part of a comprehensive approach may contribute to appropriately identifying gender-specific concerns. Replications and further studies into aspects of gender are highly desirable, as are psychosocial interventions adapted to the specific requirements of men and women with cancer.

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