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Original Paper

Communicating with and Treating Cancer Patients: How Does the Use of Non-proven Therapies and Patients' Feeling of Mental Distress Influence the Interaction Between the Patient and the Hospital Staff

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A questionnaire-based study was carried out at the Department of Oncology, University Hospital of Tromsø, during the period July 1990–October 1991. The 252 participating patients received a questionnaire at arrival at the oncology unit and the surviving patients a follow-up questionnaire at home 4 months later. The aim of the study was to assess whether patients' attitudes to information about their malignant disease and satisfaction with the given treatment correlated to their use of non-proven therapies (NPTs) and reported mental distress. Patients under 45 years of age significantly more often preferred comprehensive medical information than older patients (83% versus 52%, $P = 0.001$). Better educated patients were more satisfied with the information given by their general practitioner (GP) ($P = 0.05$) and at their local hospital ($P = 0.02$) than other patients. Of all responders, 81% of the patients treated in the department were completely satisfied with the opportunities to ask questions while 87% reported being given comprehensive information. Only 2% of the patients reported to have received unwanted information. Better educated patients expressed less satisfaction with the information given and the possibility of influencing their own treatment at the Department of Oncology ($P = 0.02$). Patients expressing mental distress wanted less information ($P = 0.05$) and expressed less satisfaction with the quality of the perceived information in the oncology unit ($P = 0.004$). They were also less satisfied with the treatment given ($P = 0.05$) and their own influence on the treatment decision ($P = 0.02$). Users of NPT did not feel the received treatment to be the best possible ($P = 0.04$). © 1997 Elsevier Science Ltd.

Key words: Norway, alternative medicine, mental distress, information, communication, cancer patients

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INTRODUCTION

THE CONCEPT of the patient as a passive receiver of medical information has dramatically changed during the last decades. Recent studies [1] have shown that both patients and their physicians prefer open communication and frankness about disease-related matters. Oken [2] reported 35 years ago that the majority of physicians (90%) preferred to conceal the diagnosis of cancer from their patients. Eighteen years later, Novack and associates [3] documented a complete change in American doctors' attitudes concerning patient information. Several studies have shown that chronically ill patients, and especially cancer patients, often prefer full discloser of diagnosis and prognosis. Despite being told "bad news", correct information may provide patients with emotional support, reducing psychological morbidity and enhancing their hopefulness [4–8]. The opinion that the patients should be told the truth has been accompanied by

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an emphasis on involvement of the patients in the decision-making with regard to treatment of the disease. However, a substantial number of patients prefer to receive less than full information and are reserved with regard to partaking in decisions concerning their own treatment [9].

Cassileth and associates [9] described that young and better educated patients more often prefer open communication and full disclosure, and prefer to participate in their own care, compared to older and less educated patients. She found that more optimistic patients often wanted full disclosure of both good and bad news.

One aspect of active participation may be the patients' use of non-proven therapies (NPT). In order to avoid helplessness and depression when told that they suffer from a potentially life-threatening disease, patients may try to assert control over their own health by turning to alternative therapies. Whether the patients' use of NPT influences their preferences regarding information about their disease is largely unknown. As reported by Cassileth [9], patients' feeling of hope, related to their treatment and prognosis, influence their preferences of disclosure with regard to diagnosis and prognosis. In a recent study [10], we presented data demonstrating that cancer patients expressing little hope of beneficial treatment results more often were older, had metastatic disease, received palliative treatment, had known their diagnosis for a longer period of time and were users of NPT. Mental distress may be associated with lack of hope. It is, therefore, possible that mental distress may predict patients who prefer to be less extensively informed than more optimistic and less distressed patients.

The aim of this study was to examine attitudes towards information and active participation in the treatment discussion process among Norwegian cancer patients. Thus, we have assessed both quantity and quality of disease-related information from general practitioners, local hospital and cancer clinics, as viewed by the patients. Furthermore, the impact of mental distress and use of NPT on patients, preferences regarding information and participation in the treatment process were investigated.

PATIENTS AND METHODS

Questionnaires

A longitudinal questionnaire-based study was carried out at the Department of Oncology, University Hospital of Tromsø, during the period July 1990–June 1991. The questionnaires were based on multiple choice questions, but patients also had the possibility of giving open comments.

The two questionnaires dealt with in this paper were part of a larger longitudinal study over 5 years (5 questionnaires). The first questionnaire, presented to the cancer patients on arrival at our oncology unit, was designed to assess patients' attitudes to information about their malignant disease and their use of NPTs prior to admittance to our hospital. This questionnaire also addressed patients' mental distress. Psychological distress was measured using a five-item modification of the 20-item General Health Questionnaire [11].

Four months after discharge from the hospital, patients included in the study received a follow-up questionnaire by mail. This questionnaire focused on possible changes in their use of NPT, mental distress, satisfaction/dissatisfaction with disease and treatment-related information and communication during the hospital stay. Furthermore, they were asked to state their opinion on the quality of the treatment they had received and to indicate whether they took part in the decision-making process regarding their own treatment.

At inclusion in the study, the physician responsible for the patient completed a questionnaire concerning patient diagnosis, time since diagnosis, stage of disease, performance status and aim of treatment (palliative/curative).

Patients

Eligible for the study were all cancer patients who had been referred to the Department of Oncology for the first time. The ability to read and understand the questionnaire were criteria for inclusion in the study. Patients with poor performance status (ECOG = 4) were not eligible.

Table 1. *Characteristics of* 252 *cancer patients answering the first questionnaire and* 180 *evaluable patients answering the second questionnaire*

	Patient population			
	Start of study		Follow-up (4 months)	
	n	(%)	*n*	(%)
Sex				
Female	122	(48)	92	(51)
Male	130	(52)	88	(49)
Mean age (range)	58 (17–89) years		58 (19–87) years	
Age groups in years				
17–29	11	(4)	7	(4)
30–44	37	(15)	27	(15)
45–59	71	(28)	48	(27)
60–75	110	(44)	83	(46)
75–91	23	(9)	15	(8)
Education				
Primary school	184	(73)	130	(72)
Secondary school	29	(12)	22	(12)
University degree	34	(13)	24	(13)
Unknown	5	(2)	4	(2)
Family life				
Living alone	45	(18)	26	(14)
Living with others	207	82	154	(86)

Table 2. Prevalence of diagnoses in the study group and in the remaining patients after 4 months

Malignancy	Population at study start *n*	(%)	Population after 4 months *n*	(%)
Breast cancer	52	(20)	42	(23)
Lung cancer	40	(16)	23	(13)
Urogenital cancer	40	(16)	28	(16)
Malignant lymphomas	30	(12)	25	(14)
Gastrointestinal cancer	30	(12)	18	(10)
Head and neck cancer	15	(6)	11	(6)
Gynaecological cancer	13	(5)	11	(6)
Smaller diagnostic groups	32	(13)	22	(12)
Total	252	(100)	180	(100)

Demographic characteristics of the participating patients at the start of the survey compared to the characteristics of the surviving/responding patients 4 months later are shown in Table 1. Of all eligible patients, 95.8% ($n = 252$) filled out the first questionnaire. 180 patients filled out the follow-up questionnaire. Of the 72 cancer patients who did not respond to the follow-up study, 37 were non-responders and 35 had deceased during the 4 months period. Table 2 shows the distribution of malignant diagnoses among patients responding initially and after 4 months.

69% of the patients had, at the start of the study, been aware of their cancer for less than 3 months. 58% of the patients had localised/regional disease while the rest had locally advanced or metastatic disease. Most patients were in good physical condition. 50% of the patients were classified as ECOG 0 and 39% as ECOG 1. The treatment was given with a curative intention in 45% of the cases. A detailed description of disease-related patient characteristics are described in an earlier published paper [12].

In the group of patients not responding to the follow-up questionnaire, significantly more patients had poor performance status [1–3] and reported mental distress. Otherwise, there were no differences between responders and non-responders.

Patients using NPT

At admittance, 18% (44/240) of the patients had been, or were, users of NPT. These patients are classified as users in analyses from the first questionnaire. In the second questionnaire, 36 patients reported that they had started using NPT between the first and the second questionnaire. These are the patients classified as new users from the second questionnaire.

General Health Questionnaire (GHQ 5)

In order to estimate patients' mental distress, five questions from the GHQ 20 questionnaire were answered by the patients in the first and the second questionnaire. Due to an administrative flaw, only the last 179 patients in the first part of the study were given the GHQ 5 questionnaire. In the follow-up study, all participants were given the five selected questions. The five items were selected in co-operation with an experienced psychiatrist [13].

The items selected were:

Been able to concentrate on whatever you're doing?
Felt that you are playing a useful part in things?
Found everything getting on top of you?
Been feeling unhappy and depressed?
Been feeling nervous and strung up all the time?

The items were scored continuously according to the Likert scoring procedure where the score on each question ranged from 1 to 4 [11] thereby obtaining a total score theoretically ranging from 5 to 20. To obtain comparable results with other demographic and disease-related factors, such as educational level and stage of disease, degree of mental distress was ranked form 1 to 3. Patients scoring from 5–9 were analysed as having little mental distress, from 10–14 as medium distress and patients scoring from 15–20 as expressing high mental distress. A score based on a few items has been shown to rank the subjects adequately according to mental distress [11].

Statistics

The statistical analyses were performed by the statistical computer program SAS [14] testing differences between categorical variables as given in the Proc freq procedure. Multivariate analyses were done by logistic regression analyses after dichotomising the answer categories, as described by Breslow and Day [15]. Due to missing data, the number of participants may vary for some of the questions. The study was authorised by The Board of Ethics of Health Region V.

RESULTS

Patients' opinion on information received prior to admittance to the Department of Oncology

Forty-three per cent of the available patients (106/247) reported being well informed to the time of admittance to the Department of Oncology, while 34% (84/247) reported that they had received some information. Nineteen per cent (46/247) of the patients felt they had received insufficient information and 4% (11/247) no information at all with regard to their cancer.

Patients were asked whether their GP and/or their physicians at the local hospital might have concealed information regarding their malignant disease. Seventy-one per cent of patients (170/239) believed that their GP had given them all the available information and 74% of patients (170/231) expressed the opinion that doctors at the local hospital had informed them fully. The rest of the patients reported that they had received some or no information prior to admittance to the oncology unit.

Questioned whether they wanted all available information concerning their disease, including information on treatment

Table 3. Patients opinions on the importance of comprehensive information and whether or not their GP and/or their local hospital had withheld information before admittance to the Department of Oncology*

Variable	*n*	Patients want full information		GP gave full information		Local hospital gave full information	
		OR	95% CI	OR	95% CI	OR	95% CI
Sex							
Male	80	1.0	Ref	1.0	Ref	1.0	Ref
Female	76	1.3	0.6–2.7	1.8	0.8–4.2	1.1	0.5–2.6
Age in years							
17–44	39	5.0	1.7–14.9	0.5	0.2–1.7	0.5	0.2–1.7
45–59	50	1.0	Ref	1.0	Ref	1.0	Ref
60–91	67	1.3	0.6–2.9	1.2	0.5–3.1	0.9	0.4–2.2
Education							
Elementary school	108	1.0	Ref	1.0	Ref	1.0	Ref
More than elementary school	48	1.0	0.4–2.4	5.2	1.6–16.7	3.9	1.3–12.2
Use of NPTs							
No use of NPTs	125	1.0	Ref	1.0	Ref	1.0	Ref
Use of NPTs	31	2.4	0.9–6.3	0.8	0.3–2.1	0.5	0.2–1.4
Mental distress							
Low (5–9)	34	1.0	Ref	1.0	Ref	1.0	Ref
Medium (10–14)	86	0.3	0.1–0.9	1.1	0.4–3.1	1.0	0.4–2.7
High (15–20)	36	0.4	01.–1.3	0.5	0.1–1.6	0.9	0.3–3.1

*Mutually adjusted. Also adjusted for performance status (ECOG) and treatment intention.

and prognosis, 58% of the patients (138/236) wanted full information while 40% preferred only the necessary information. Only 2% of the patients felt that detailed or even cursory information could be harmful. A significantly larger portion of patients aged 17–44 years (83%, 40/48) preferred to be fully informed when compared to patients above 45 years of age (52%, 98/188) ($P = 0.001$). Users of NPT tended more often than non-users to prefer comprehensive information (68%, 27/40 versus 57%, 111/196).

The patients' preferences of information compared to their perceived level of information when first seen in the oncology department were as follows: of 11 patients who said they had not been given any information, 10 (91%) wanted to be fully informed, while 1 patient wanted only necessary information. Of 42 patients who replied that they had received inadequate information, 28 (67%) wanted all the available information and 14 (33%) only the necessary information. 81 patients said they had received "some information" and of these, 48% would prefer to be fully informed while 52% thought it enough to receive the necessary information. Among patients who reported being well informed, 61% (60/98) wanted all available information, 37% all necessary information. Two well-informed patients reported being given unwanted and possibly harmful information.

Patients' views on disease-related information given by their GP and local hospital before admittance to the oncology unit and their opinion on importance of such information were analysed, adjusted for gender, age, education, level of mental distress and use of NPT (Table 3). The calculations were restricted to the 179 patients that had received the GHQ 5 questionnaire. Disease-related factors, such as time since diagnosis, stage of disease and treatment intention (curative/palliative), were not associated with any of the dependent variables. Young age was the most important factor in patients wanting full disclosure while patients expressing mental distress were satisfied with less than full information. Users of NPT more often expressed a wish for full disclosure (68% versus 57%), but the differences between users and non-users did not reach statistical significance ($P = 0.2$). Patients with higher education reported being better informed by their GP ($P = 0.05$) and by doctors at the local hospital ($P = 0.02$) than patients with less education.

Patients' opinion of information and communication offered them in Department of Oncology

The follow-up questionnaire given to the patients 4 months after being discharged from the Department of Oncology dealt with the extent of disease and the treatment-related information patients received while staying in the hospital (Table 4). Of all responding patients, 81% (146/180) were completely satisfied with the opportunities to ask questions during their stay, and 87% of patients (156/179) reported being given comprehensive information. Moreover, 79% (142/179) believed that all available information was given to them, while 13% believed some information was withheld. Only 2% felt that most information was withheld. Two per cent (4/179) of the patients felt they had received unwanted information, but only to a small extent. 70% (126/179) of the patients were satisfied with their level of information, while 23% felt only partly so. Six per cent of patients felt they had received insufficient information.

Thirty-five per cent (61/173) of the patients reported that they had a satisfactory influence on the choice of treatment within the Department of Oncology. Thirty-two per cent (56/173) reported some influence, while the same number of patients felt they had little or no influence on the treatment choice. Seventy-two per cent (128/178) of the patients felt they had received sufficient information about the treatment. Eight per cent of the patients felt they had been given

Table 4. Patients' opinions on the quality of information about disease and treatment given at the Department of Oncology

	Not at all		Only to a small extent		To a great extent		Do not know	
	n	(%)	*n*	(%)	*n*	(%)	*n*	(%)
Opportunities to ask questions (*n* = 180)	3	(2)	25	(14)	146	(81)	6	(3)
Were you given information in an understandable way? (*n* = 179)	2	(1)	19	(11)	156	(87)	2	(1)
Was information held back? (*n* = 179)	142	(79)	24	(13)	4	(2)	9	(5)
Was unwanted information given to you? (*n* = 180)	173	(96)	4	(2)	0	(0)	3	(2)
Was the best available treatment given to you? (*n* = 179)	0	(0)	1	(1)	100	(56)	78	(44)
	No information		Insufficient information		Some information		Satisfactory information	
How well did you feel informed after the stay in the Department on Oncology? (*n* = 179)	0	(0)	11	(6)	42	(23)	126	(70)
How well was the treatment given to you explained? (*n* = 177)	3	(2)	11	(6)	35	(20)	128	(72)
	No influence		Insufficient influence		Some influence		Satisfactory influence	
How much did you influence the treatment given to you? (*n* = 173)	51	(29)	5	(3)	56	(32)	61	(35)

none or only insufficient information regarding their medical treatment. While 56% (100/178) of the patients felt that they had received the best available treatment, as many as 44% (77/178) were not sure. One patient felt that he had received suboptimal treatment.

Influence of demographic and disease-related factors on patients' satisfaction with information and treatment given at the oncology unit

The level of mental distress had an impact on the patients' satisfaction with the opportunities to ask questions and the quality of medical information given in the oncology unit. Among patients expressing little mental distress, 92% (47/51) were satisfied with the opportunities to ask questions in the department while 77% (92/120) of the more distressed patients were satisfied. Patients' satisfaction with the quality of the information given was much less among the distressed patients (82%, 98/119) than patients expressing less mental distress (98%, 50/51) ($P = 0.004$). Better educated patients seemed less satisfied with opportunities to ask questions (74%, 34/46) than less educated patients (84%, 109/130), but the difference between the two groups did not reach statistical significance ($P = 0.06$). There were no differences as to patients' satisfaction with opportunity and quality of information given in the Department of Oncology with regard to gender, age or use of NPT. Disease-related factors such as stage of disease or treatment-intention did not have any impact on patients' satisfaction. In a multivariate analysis, mental distress and higher level of education were found to predict low satisfaction with different aspects of information in the Department of Oncology (Table 5).

Mental distress was also found to be a strong predictor for patients not being satisfied with the treatment given. The less distressed patients were satisfied with the treatment in 69% of cases (35/51) compared to 52% (61/118) of patients expressing more mental distress ($P = 0.05$). Only 29% (33/115) of distressed patients reported satisfactory participation in the treatment discussions compared to 51% (26/51) of the less distressed patients ($P = 0.02$). New users of NPT reported a lower confidence regarding receiving the best available treatment compared to non-users (40%, 14/35 versus 59%, 74/125) ($P = 0.04$). Better educated patients reported less influence on the choice of treatment modalities (25%, 9/36 versus 40%, 49/123; $P = 0.02$), but their satisfaction with the treatment was the same as that expressed by patients with less education. Multivariate analysis suggests that the most important factors with regard to patients' opinion on treatment quality and influence on administered treatment are mental distress and educational level (Table 6).

DISCUSSION

According to recent American [4, 9] and Northern European studies [1, 16], most cancer patients prefer full information about their cancer. Whether or not this is the case among Norwegian cancer patients has been largely unknown. Our results, where 58% of the patients preferred detailed information whereas 40% wanted only general and necessary information, indicate that Norwegian cancer patients wish to be informed, but not necessarily in all details. In a recent Norwegian study by Loge and associates [17] on physicians' attitudes towards informing the cancer patients, 81% favoured a full disclosure of the diagnosis and prognosis.

Geographical and sociocultural differences may explain some of the differences between previous studies and our study. In 1987, Newall and associates [18] reported that patients in the U.S. demanded more comprehensive information about their illness than U.K. patients. However, in a recent U.K. study among newly diagnosed lung cancer patients, Sell and associates [19] found that 92% felt that being fully informed about their diagnosis was correct. Reports from other parts of the world, such as Japan [20]

Table 5. *Patients' reported opportunities to ask disease-related questions and quality of the information received in the Department of Oncology (answers dichotomised as excellent opportunities/less than excellent; and very good quality/less than very good quality)**

		Opportunities to ask questions in the Department of Oncology		Quality of the information given in the Department of Oncology	
		Excellent opportunities		Very good information	
Variables	*n*	OR	95% CI	OR	95% CI
Sex					
Male	77	1.0	Ref	1.0	Ref
Female	74	1.0	0.4–2.7	1.0	0.5–2.0
Age in years					
15–44	28	0.5	0.1–2.1	0.6	0.2–1.8
45–59	39	1.0	Ref	1.0	Ref
60–90	84	0.4	0.1–1.4	1.4	0.6–3.2
Education					
Elementary school	112	1.0	Ref	1.0	Ref
More than elementary school	39	0.2	0.1–0.8	1.0	0.2–4.0
New users of NPT					
No	120	1.0	Ref	1.0	Ref
Yes	31	2.3	0.6–9.1	2.3	0.4–12.7
Mental distress (GHQ 5)					
Low (5–9)	48	1.0	Ref	1.0	Ref
Medium (10–14)	82	0.2	0.1–0.8	0.4	0.2–1.0
High (15–20)	21	0.1	0.1–0.6	0.1	0.01–0.07

*Mutually adjusted. Also adjusted for performance status (ECOG) and treatment intention.

and Southern Europe [21], describe opinions among physicians and patients comparable to opinions reported from U.S. and Northern Europe in the 1950s and 1960s.

All recruited participants in our study were from Northern Norway. Whether these data are representative for the general Norwegian population is not clear. However, a previous National cross-sectional study [10] did not reveal geographical differences in patients' perceptions of promises given by physicians. This may indicate that patients' opinion on general information concerning their disease is similar throughout the nation.

Age distribution may influence study results. In our study, young patients when compared to older patients preferred, to a much greater extent, to be told all the details about diagnosis and treatment. These results are identical to those reported by others [4, 9].

Differences in the wording of questionnaires issued to patients may also influence the results. Multiple choice questions issued in Cassileth's [9] and Blanchard's study [4]

Table 6. *Patients' opinion on the quality of received medical treatment and own influence on the treatment in the Department of Oncology (answers dichotomised as very good quality/less than very good quality; and very good influence/less than very good influence)**

		Quality of the treatment given in the Department of Oncology		Influence of the treatment given in the Department of Oncology	
		Very good quality		Very good influence	
Variable	*n*	OR	95% CI	OR	95% CI
Sex					
Male	76	1.0	Ref	1.0	Ref
Female	74	0.9	0.4–1.9	1.2	0.5–2.5
Age in years					
15–44	27	0.5	0.1–1.4	1.5	0.4–4.9
45–59	39	1.0	Ref	1.0	Ref
60–90	84	0.5	0.2–1.2	1.5	0.6–3.9
Education					
Elementary school	111	1.0	Ref	1.0	Ref
More than elementary school	39	0.8	0.3–1.9	0.4	0.1–1.0
New users of NPT					
No	120	1.0	Ref	1.0	Ref
Yes	30	0.5	0.2–1.1	1.8	0.7–4.4
*Mental distress (GHQ 5)					
Mild (5–9)	48	1.0	Ref	1.0	Ref
Moderate (10–14)	81	0.5	0.2–1.0	0.4	0.2–0.9
Severe (15–20)	21	0.2	0.1–0.6	0.1	0.03–0.6

*Mutually adjusted. Also adjusted for performance status (ECOG) and treatment intention.

has been compared (Appendix). The wording and the number of choices are not equivalent.

Consistent with recent American and European reports [9, 19], we found that only 2% of the patients believed that detailed information could be harmful. In contrast, physicians refractory to full disclosure claim that the wish to protect the patients is the main reason for not giving full information. However, studies have shown that physicians favouring only restricted information to patients would prefer full information if they were patients themselves [22].

The strong association in our study, between growing mental distress and less satisfaction with the quantity and quality of medical information, is in accordance with previous reports [9, 23]. These reports confirm that lack of information increases stress and anxiety. Adequate information will in most cases prevent depression and actually assist many patients in sustaining optimistic attitudes. However, whether mental distress was precipitated by lack of information, or whether patients perceived information as inadequate because of their mental distress, cannot be addressed in a cross-sectional designed study.

Fifty-five per cent of the patients reported that they had received the best possible treatment. Scarce information about available alternative treatments may explain the somewhat low number of patients expressing strong confidence in the received treatment. However, the strongest predictor of little satisfaction with the received treatment and influence on the choice of treatment is patients' reported mental distress. This finding is consistent with the reports by Cassileth and associates [9], where hopefulness predicted patients' growing desire to participate in decisions regarding their own treatment.

It has been shown that patients in critical situations rely on different coping strategies. Denial of the consequences of a malignant disease, if not the diagnosis itself, may help patients to be more optimistic [9, 23]. Many patients are known to seek support from relatives and close friends [9]. Raleigh [24] studied patients with chronic illness or cancer, and found that the most important factors in sustaining hope were family, friends and religious beliefs.

The use of NPT may be an important coping strategy for many cancer patients. In a previous report, 41% of non-cancer patients reported family and friends to be their main informants of NPTs [12]. Two studies among Norwegian cancer patients has shown that 55% and 64%, respectively, reported family and close friends as the most important informants of NPT [10, 12]. The observation that NPT related information and advice are largely given by family and close friends has been shown by others [25, 26]. In order to cope with malignant disease in everyday family life, it is comprehensible that patients take advice from close friends and family rather than others. This mechanism represents a way of living with their cancer together with their close ones. Patients using NPTs tended to want more comprehensive information than non-users. To our knowledge, this has not been reported previously. Zouwe and associates [26] found, however, that users of NPTs believe less in the administered treatment and found the relationship with the treating physician less supportive. Stoll [23] concluded in 1993 that the growth in use of NPTs among relatively well-educated European patients reflected two major factors: (1) their increasing awareness of the uncertainties of orthodox cancer therapy, (2) the increase in full disclosure of information to the patients. Patients' use of NPT might thus reflect a need to avoid awareness of the consequences of their cancer. The finding that older patients more seldom than younger patients use NPTs seems to support this theory [9, 27]. As reported by others [4, 9], we found that younger patients wanted comprehensive information regarding their disease significantly more often than old patients. In an earlier report [28], we found that among young patients using NPTs, significantly more patients would use healing by hand or spiritual healing than among middle-aged and older patients. Furthermore, patients believing that NPT could cure the disease were often young patients. These findings may reflect a greater need of "miracles" among the younger cancer patients where only cure of disease would be acceptable in view of their family situation and long normal life expectancy.

In conclusion, clinicians treating cancer patients must be aware of the difficulties related to patients' feelings of mental distress and their opinions on use of NPT. Communication with the patients might profit from such awareness and give the patients a better possibility to comprehend the medical information.

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APPENDIX

Cassileth/Blanchard [4, 9]

a. I want only the information needed to properly care for myself.

b. I want additional information only if it is good news.

c. I want as much information as possible, good or bad.

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a. It is important for me to know all details about my disease, to the extent this information exists.

b. It is important for me to possess all the necessary information concerning my disease, without necessarily knowing all the details. The physicians will in any way treat me in the best possible way.

c. It is not important with full medical information.

d. Comprehensive information might be harmful.