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Information for Cancer Patients Entering a Clinical Trial—an Evaluation of an Information Strategy

Anders Bonde Jensen, Biddy Madsen, Poula Andersen and Carsten Rose

Informing patients before the start of antineoplastic treatment is important due to the anxiety and uncertainty felt by the patients and the legal aspects of trials. 34 women were interviewed 3 months after receiving information. Results show that the information was well remembered, patients were glad to bring a relative, two consultations with time for deliberation were well-received and that patients viewed written information as an important reinforcement. Overall, information provided was positively evaluated. Detailed information allowed patients to understand and participate in treatment decisions, thereby reducing their pretherapy anxiety. These results support expansion of the structured information programme to include all patients about to begin long-term cancer therapy.
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INTRODUCTION

INFORMING PATIENTS before they begin a complex, antineoplastic treatment is an increasingly important aspect of patient care. Today, cancer treatment often takes place in the context of a clinical trial, so the primary information must serve several purposes.

Firstly, the information should reduce patients' feelings of anxiety and uncertainty towards treatment and disease. There are many myths about cancer and the admittedly serious side-effects of treatment with chemo- or radiotherapy, which amplify the anxiety about treatment to almost unbearable proportions. To reduce these fears there is a need for understandable, factual information about the disease and its treatment [1].

Secondly, the information should provide patients with all details about the clinical trial essential for them to make an autonomous decision regarding participation. The Helsinki II Declaration provides the clinician with guidelines on the information patients should receive before consenting to enter a trial [2]. These ethical rules are the result of a process which started in the early 1930s, when the first regulations were passed addressing the rights of volunteers in clinical trials [3, 4], and which were later detailed in the Helsinki I and II Declarations [5, 6]. Accompanying this development has been a growing public demand for more information about results from diagnostic investigations, standard treatments, and especially participation in clinical trials, as well as an increased respect for the autonomy of the individual patient.

If this required consent is to be truly "informed", factual information must be given in such a way as to allow the patient to transform the information into knowledge making him or her capable of self-determination, and thereby competent to give a valid informed consent. In a randomised study, comparing total disclosure and individual approach, it was found that total disclosure gave a better understanding of treatment and trial conditions, but also a higher degree of anxiety [7].

In a previous study at our Department of Oncology, we found several factors which reduced the likelihood of obtaining valid informed consent: (a) an unstructured manner of giving the information used by the doctor, (b) lack of time to consider the information before giving consent, and (c) anxiety and nervousness of the patients. Based upon this analysis [8, 9], we

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changed our information procedure into a structured programme, and as a consequence of this new approach, we set up an evaluation study to measure the effectiveness of the information programme. The results are reported in this paper.

PATIENTS AND METHODS

The treatment of primary breast cancer in Denmark is organised by the Danish Breast Cancer Cooperative Group, which conducts nationwide clinical trials. In 1990, three new clinical trials were initiated dealing with adjuvant treatment of primary breast cancer in women up to the age of 70. The design is seen in Table 1.

At the Department of Oncology in Odense, the women are informed according to the following programme: (1) a written invitation is issued suggesting the patient to bring a relative or a friend to the first consultation. (2) An initial consultation is held at which the doctor presents detailed information about disease, standard treatment and significant facts about the trial and the therapies involved. Written information emphasising and reinforcing key points is handed out. Afterwards, a nurse who is present throughout the consultation shows the patient around the ward and answers any questions which arise. (3) The patient is given time—from 2 to 7 days—to ponder the information received before the next consultation. (4) A second consultation is held in which the information is reviewed, patient's questions are answered, and first at this point, the informed consent is given. (5) A contact person at the ward is assigned, to whom the patient may refer any questions which might arise about treatment, trial and the ward.

If the women decide not to participate in the clinical trial, they are offered the standard treatment of the department.

To evaluate this programme, all women informed about the trials in a 6-month period and who came to the oncology department for chemotherapy or routine follow-up 3 months after the information was given were approached regarding the information they had received. By interviewing the women at this stage, the patients could compare the received information with their own experience of the treatment. Participants received verbal and written information about the present study which was approved by the Regional Scientific Ethical Committee. 36 women were asked to participate. 34 women, between 33 and 66 years of age, agreed to be interviewed (94%). The 2 women who rejected participation were not asked for their reasons.

Table 1. Patients' decision about trial participation in relation to protocol

	Patients' decision		
	Yes	No	Total
DBCG 89b: chemotherapy (9 × CMF) vs. castration for premenopausal women with oestrogen receptor-positive tumours	2	1	3
DBCG 89c: hormone treatment, TAM 1 year vs. TAM 2 years vs. TAM 1/2 year plus MEG 1/2 year for postmenopausal women with either oestrogen receptor-positive or unknown tumours	10	15	25
DBCG 89d: chemotherapy (9 × CMF ± pamidronate) vs. chemotherapy (9 × CEF ± pamidronate) for women with oestrogen receptor-negative tumours	6	0	6
Total	18	16	34

C, cyclophosphamide; E, epirubicin; F, 5-fluorouracil; M, methotrexate; TAM, tamoxifen; MEG, megestrolacetate.

Table 2. Patients' opinion on the time for consideration, depending on their decision to participate

	Participation	
	Yes	No
The time was sufficient	12	11
The time was too long	0	0
Would prefer to start immediately	3	5
Did start treatment after first consultation	3	0
Total	18	16

Data were collected by one structured interview with 36 questions, grouped within the following broad topic areas: (1) what patients remembered of the information given during the primary consultation at the department 3 months earlier. Patients were asked to relate the headlines of the information, and the interviewer used a check list similar to that used at the primary information. (2) What parts of the information programme patients had used. (3) How patients evaluated the information. (4) When and how they made their decision regarding participation in the trial. (5) What emotions patients experienced regarding the decision about participation in the clinical trial.

Interviews were tape-recorded and lasted between 20 and 45 min. They were conducted by two researchers attached to the department who had not participated in the information procedure. Responses were categorised and coded for further analyses by the researchers, and cross-rating was carried out.

RESULTS

Of the 34 women, 18 (53%) agreed to participate in one of the three adjuvant trials (Table 1). There was no difference in age between those who agreed to participate and those who did not.

Patients' ability to remember the information

Patients were generally capable of remembering the given information 3 months after it had been received (Fig. 1). Information on side-effects was the information which all patients remembered best (good to reasonable). This was especially the case for side-effects attached to that specific treatment which the patient actually received, regardless of whether the patient experienced the side-effects or not.

Patients' ability to remember the information was independent of the decision about participation in the clinical trial, although there was a tendency towards remembering more facts about the trial if they had agreed to participate.

Use of the informational programme

Of the 34 patients, 28 acted upon the departmental recommendation, and brought a close relative to the initial consultation. In the group which did not participate in a trial, significantly more women brought a relative, 16/16 versus 12/18 patients ($P = 0.027$). Among the women not bringing a relative, several regretted that decision.

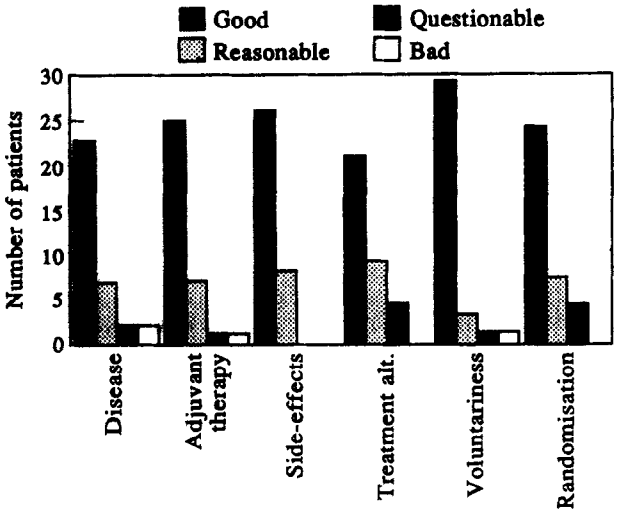

Fig. 1. Patients' ability to remember the given information (n = 34).

One main goal of the information programme was to offer each patient two consultations, thereby allowing time for consideration (Table 2). The majority of the women made use of this time to discuss the information with their families. Several asked their GP or a person with some relationship to the health system for their opinion about the trial. However, most of the women emphasised that, although they sought advice, the decision was their own.

The time between the two consultations also allowed the patients to study the written information in detail, and only 2 of the 34 patients had not read the information. In 29 cases, other people—family or friends—had also read the information. The readibility of the information was judged to be fairly good by the patients, and no one thought that two A4 pages was too much to read.

It was the intention that the nurse who attended the information sessions should function as a contact person for the patient to the department, but only 1/5 of the patients used this person. In the interviews, several women emphasised that in case of problems, it was often more convenient talking to the doctor or to the nurse who provided treatment on that particular day.

Patient decisions

At the second consultation, all patients had made their decision (Table 3).

The two main reasons given for participating in the trial was the wish to support science or the hope of receiving a more effective treatment through the experimental regimen (Table 4). The main reason for not entering the trials was the fear of the specific side-effects in the experimental arm of DBCG 89d, which had significantly more side-effects, with more severe nausea to be expected and risk of a negative effect upon the myocardium.

Table 3. Time when patients made their decision about participation

	Participation		
	Yes	No	Total
Before first consultation	4	2	6
At the first consultation	3	6	9
At home between the two consultations	11	8	19
At the second consultation	0	0	0
Total	18	16	34

Table 4. Main reasons for patient decisions about participation in the trial

	Patients' decision	
	Yes	No
Support science	9	0
Disliked trials	0	5
Hope for better treatment	8	0
Wanted maximal treatment	2	1
Wanted minimal treatment	2	0
Side-effects	0	12
Other	0	1

Patient evaluation of the information

Generally, patients evaluated the information provided as very good or good. Only 3 patients found the information unsatisfactory. These 3 patients were informed about the DBCG 89c trial, where the differences between treatments are slightest and the side-effects comparable. 4 patients informed about the DBCG 89d trial felt they had too much information. No relationship between patient satisfaction with the information and their decision was found.

Patients provided another measurement of the programme's educational success by stating whether their experiences of treatment were as anticipated, in the light of the given information. Half of the patients reported that it was as they expected, while 25% found it less strain than anticipated and 25% more strain. These findings were independent of trial participation.

Patient attitudes towards decision about trial participation

Patients generally view the detailed information as very positive. It was a main factor in reducing uncertainty and anxiety before starting treatment (Table 5). Several patients emphasised that the concrete knowledge about disease and treatment made it easier to cope with the disease and treatment situation. Only 2 patients felt that the information, especially about the trial, increased their anxiety; both felt the process would have been easier had the doctors chosen the treatment or, if trials were necessary, that the randomisation had been made without their knowledge. About 50% of the patients felt it difficult or unpleasant to decide about entering the trial, but most of the patients who felt this way were afterwards satisfied, having made the decision by themselves.

Only 5 of the 34 patients had a negative attitude towards trials

Table 5. Effect of detailed information upon patients' uncertainty and anxiety

	n
Reduced uncertainty	26
No change	3
Increased anxiety	2
Unknown	3
Total	34

as such, the rest stating that they would consider participating in another trial. None of the patients felt that the staff were pressing them to participate in the trial.

DISCUSSION

The information programme evaluated here appears to reduce the anxiety felt by the patients and fulfil the legal obligation. Patients were able to recall much of the received information 3 months later. Not surprisingly, patients paid most attention to facts concerning themselves—the actual treatment schedule and the side-effects connected to their treatment. Indeed, the treatment itself would have reminded them of what they had been told. Yet, patient learning was not entirely empirical as they were also aware of possible side-effects not experienced during treatment.

One cannot ascertain whether the verbal information by itself was sufficient. The patient might have learned something from the written information and from information received after the treatment was begun. Nevertheless, even assuming that the knowledge the patients have today is by no means better than that which they had when they made their decision, it is still likely that our information programme succeeded in informing patients to a level where they could make a qualified "informed" choice among different treatment options. That structured and detailed information leads to a better understanding by the patients is in accordance with previous findings [7].

Although most patients used the opportunity to bring a relative to the information consultation, it is notable that some patients needed our invitation to feel sure to do so. Being together with a relative made them feel more secure because the other person could support them emotionally. Additionally, the information could be discussed at home, and the accompanying person could help them to inform other family members, thereby sparing the patient the strain of telling the same story again and again.

Having two consultations was seen as positive by the patients, and only a few were afraid that the resulting slight delay would have any negative influence upon their potential to be cured. The patients we interviewed emphasised that, although they searched for a second opinion, the decision was their own, and they had to face the consequences themselves. A few patients were determined to start treatment at the first consultation. They felt well prepared for immediate decision making because they knew about the possible trial participation before they came to the first consultation.

Many patients gave altruistic reasons, such as the desire to support development of new and better treatments, for entering the clinical trial. Often, this "help others" mentality was combined with a hope for better personal treatment by receiving the experimental arm. Fears of specific side-effects were the main reason to decline trial participation; most of these women were willing to consider trial participation in other situations. Only a few of the patients rejected clinical trials as such. These findings agree with results from other studies of cancer patients [10] and from a study of patients with heart diseases [11].

The patient interviews revealed that when doctors give information in a well-structured way, it is easier for the patients to maintain a broad perspective. For the doctors it is easier to be sure they have delivered all essential information. While the verbal exchange was the most important source of information, patients found the written information to be a valuable reinforcement and an additional source of information, and a simple way of informing family members. Although it is often claimed that written information should be as short as possible, our results, as well as previous findings, show that patients are willing to read more information. The key factors are that information sheets be written in easy-to-understand language, with clear typography and format [12].

Making the choice about trial participation was seen as difficult; the women felt that this choice gave them a responsibility for the treatment. This could be a problem in the future if they have a recurrence. Some patients speculated they would blame themselves for their choice at that time. However, most realised that it was important to take this responsibility; they found it better to be fully informed and to face the problems at this stage of the disease.

It has been argued elsewhere that full information about clinical trials would depreciate the patients' relationship to the doctors [13,14]. From this study, it appears that patients are willing to accept that doctors do not know which of two specific treatments will be the best for the patient. Far from undermining patient confidence, a doctor's candor and openness preserves patient trust and willingness to rely on him in any matter concerning the disease.

The other purpose of the programme was to reduce the uncertainty and anxiety experienced by the patient. Most patients felt that the detailed information made it easier to cope with the situation, and thereby reduced their uncertainty. Likewise, diffuse and often unfocused anxiety was changed to a more concrete fear of specific side-effects. Because lack of knowledge provides a breeding ground for much frightening speculation, detailed information, including written information, at the start of every cancer treatment will be invaluable to the patient at all times, not only when the treatment is part of a clinical trial.

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