Psychological effects of being offered choice of surgery for breast cancer

L J Fallowfield, A Hall, P Maguire, M Baum, R P A'Hern

Cancer Research Campaign Communication and Counselling Research Centre, Department of Oncology, University College London Medical School, London W1P 7PL
L J Fallowfield, *reader in psychoncology*
A Hall, *senior research fellow*

Cancer Research Campaign Psychological Medicine Group, Christie Hospital, Manchester M20 9BX
P Maguire, *consultant psychiatrist*

Royal Marsden Hospital, London SW3 6JJ
M Baum, *consultant surgeon*
R P A'Hern, *statistician*

Correspondence to:
Dr L J Fallowfield, Cancer Research Campaign Communication and Counselling Research Centre, Department of Oncology, University College London Medical School, 3rd Floor, Bland Sutton Institute, 48 Riding House Street, London W1P 7PL.

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The putative benefits of patients participating in decision making in health care are frequently asserted by the proponents of a strong consumerist approach but are supported by few data. The proponents argue, for example, that an opportunity to choose surgery prevents the psychological morbidity associated with breast cancer. Results from studies are equivocal, although the studies are often based on small samples with short follow up and minimal assessment of morbidity.[1-3] We report psychological data from a prospective study covering three years which compared women treated by surgeons who offered choice whenever possible with women treated by surgeons who favoured either mastectomy or breast conserving surgery.

Patients, methods, and results

We studied 269 consecutive patients aged under 75 with stage I or II breast cancer in south east England. We assessed them using semistructured psychiatric interviews and standardised questionnaires before treatment and at two weeks and three, 12, 24, and 36 months after treatment.

Of the 22 surgeons whose patients participated in the study eight favoured mastectomy whenever possible and treated 30 women. Ten surgeons favoured breast conservation whenever possible and treated 121 women. Four surgeons offered choice of treatment whenever possible and treated 118 women.

Data for the follow up at 12 months have already been reported.[4] We report the data on 216 women (80%) at three years.

For an appreciable minority of the women (28) irrespective of their surgeon's preferred approach to treatment or the surgery performed, anxiety and depression were unremitting and merited intervention. At three years 41 women were clinically anxious and 32 were clinically depressed. With three years' follow up the relative risk (95% confidence interval) for both anxiety and depression showed a benefit to women treated by surgeons who offered choice compared with women treated by surgeons who favoured mastectomy ($P < 0.05$). The risks of anxiety in the women treated by surgeons who favoured breast conservation and in those given choice relative to those treated by surgeons who favoured mastectomy were 0·84 (0·51 to 1·38) and 0·70 (0·49 to 0·98) respectively. The corresponding risks of depression were 0·68 (0·41 to 1·14) and 0·58 (0·34 to 0·97). The table shows data for the 118 women treated by surgeons who offered choice; no significant difference in psychological morbidity existed between the women offered choice and those not offered choice due to technical constraints which determined the treatment.

Twenty three of the 62 women who were offered choice found it difficult to make a decision; eight refused to choose. Women were asked how they felt about having been asked to choose their operation. Twenty six of the women expressed positive reactions, 13 were unable to say, and 10 were unenthusiastic. Five women, four of whom had chosen breast conservation, expressed doubts about their original decision; two eventually underwent mastectomy, one because of recurrence of the cancer and the other because of severe problems after radiotherapy. The remaining 48 patients, nine of whom subsequently developed recurrence, did not regret their choice.

Anxiety and depression among women treated by surgeons who offered choice of treatment whenever possible. Values are numbers (percentages) of women unless stated otherwise

Follow up	Choice	No choice	Difference (95% confidence interval)
At 12 months:			
Anxiety	14/57 (25)	11/52 (21)	4 (−12 to 19)
Depression	10/57 (18)	9/52 (17)	1 (−14 to 14)
At two years:			
Anxiety	10/50 (20)	6/44 (14)	6 (−9 to 21)
Depression	10/50 (20)	5/44 (11)	9 (−6 to 23)
At three years:			
Anxiety	7/52 (13)	9/42 (21)	−8 (−23 to 7)
Depression	9/52 (17)	3/42 (7)	10 (−3 to 23)

Comment

Although no evidence exists to support the notion that choice prevents psychological morbidity, the data show the importance of effective communication when diagnosis and treatment options are discussed to the long term adjustment to treatment of breast cancer. A person's desire for autonomy may be less strong than the need for clear and accurate information. A study of 150 women with recently diagnosed breast cancer showed that only 20% wanted an active role in deciding their treatment; 28% preferred to share decision making, and 52% wished the surgeon to decide.[5]

Much is written about patients' rights, and adequate information about options, side effects, and realistic therapeutic benefits are crucial; but women also have a right to decline the opportunity to participate in decision making.

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