

Contribution of Emotional Distance and Reserve in Patient–Physician Communication in Healthy Study Patients, and in Patients with Benign Breast Disease and Breast Cancer: A Prospective Case–Control Study in Finland

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Abstract. *Aim: Emotionally-restricted and ‘poor-understanding’ communication between a patient and their physician may be associated with difficulties in diagnosis and with poor treatment results in clinical practice. To our knowledge, the associations between distance and reserve in patient–physician communication and the risk of breast cancer (BC) are rarely considered together in a prospective study. Patients and Methods: In an extension of the Kuopio Breast Cancer Study, 115 women with breast symptoms were evaluated for emotional distance and reservation in patient–physician communication before any diagnostic procedures were carried out. Results: Clinical examination and biopsy showed BC in 34 patients, benign breast disease (BBD) in 53 patients, while 28 individuals were shown to be healthy (HSS). There was a trend for the BC group to report more emotional distance in patient–physician communication (30/34, 89.0%; grade I to IV emotional distance) than the patients in the HSS and BBD groups (78.6% and 75.5%, grade I to IV emotional distance, respectively). However, the mean of the distance score for HSS, BBD and BC groups differed only slightly in grade II and grade III. The BC group had a higher ERS emotional reservation score in contact (25/34, 73.5%; grade I to IV reserve) than the patients in the HSS and BBD groups (57.1% and 62.1%, grade I to IV reserve, respectively). However, the mean of the reserve score for HSS, BBD and BC groups differed only slightly in grade II, grade III and grade IV. Conclusion: The results of this study showed that patients with BC could be at risk for*

emotional distance and reserve in patient–physician communication and this should be taken into account in the relationship between the patient and their physician and may have clinical relevance in day-to-day clinical work.

Adequate communication between a patient and their physician is crucial for patients’ psychological and physical well-being, their understanding of medical information and their adherence to treatment. Emotionally-restricted and poor-quality communication may be associated with difficulties in diagnosis and with poor treatment results in oncology (1-4). Patient–physician communication in breast oncology may have particular importance as it concerns a disease with high psychological stress and complicated treatment procedures with variable outcomes (5-8). Therefore, it is a challenge for communication research to define valid indicators of patient–physician communication (9).

Because breast cancer (BC) is a hormonally-responsive neoplasm and one with great psychological impact, it is the most extensively investigated tumour for possible psychological variables associated with risk and survival (10). Hormonal factors, such as early age at menarche, later age at menopause, later age at first full-term pregnancy and hormone replacement therapy, are known to be the main risk factors for sporadic BC (11-13). In addition, life-style factors, such as obesity, smoking, alcohol consumption and lack of physical activity, appear to contribute to an increased risk for this malignancy, although the results concerning such factors are inconsistent (14-17). Psychological factors, such as stressful and adverse life events, are thought to play a role in the etiology of BC (18-33).

There is a need for reliable instruments in breast oncology to evaluate patient–physician communication properly (3, 34-36). To the our knowledge, the associations between distance and reserve in patient–physician communication as given by the emotional distance score (EDS) and the emotional reservation score (ERS), respectively and the risk of BC are

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Table I. *Characteristics of the study participants. Results are shown for the patients with breast cancer (BC), for those with benign breast disease (BBD) and for the healthy study participants (HSS).*

Variable	HSS (n=28)	BBD (n=53)	BC (n=34)	p-Value
Age (mean, years)	45.7	47.6	51.6	0.12
Height (mean, cm)	160.8	162.3	164.4	0.75
Body weight (mean, kg)	68.3	67.8	72.5	0.25
Age at menarche (mean, years)	13.4	13.4	13.4	0.99
Age at first child* (mean, years)	25.0	25.0	25.2	0.92
Age at menopause (mean, years)	50.0	48.9	47.9	0.53
No. of children (mean)	2.5	2.4	2.6	0.27
Parity	23 (82%)	44 (83%)	31 (91%)	0.50
Breast feeding (mean, months)	3.9	3.4	3.6	0.77
Use of oral contraceptives	18 (64%)	25 (47%)	13 (38%)	0.12
HRT**	14 (50%)	36 (68%)	27 (79%)	0.44
Pre-menopausal	18 (64%)	28 (53%)	13 (38%)	0.10
Post-menopausal	10 (36%)	25 (47%)	21 (62%)	0.12
History of previous BBD	10 (36%)	22 (42%)	18 (53%)	0.37
Family history of BC	5 (18%)	5 (9%)	1 (3%)	0.21
Use of alcohol	13 (46%)	31 (58%)	21 (62%)	0.44
Smoking	10 (36%)	21 (40%)	15 (44%)	0.80

*Age at birth of first child; **HRT, Use of hormonal replacement therapy.

rarely considered together. We, therefore, prospectively examined the role of EDS and ERS in women with breast symptoms referred by physicians to the Kuopio University Hospital (Finland).

Patients and Methods

The Kuopio Breast Cancer Study was a multidisciplinary cooperative project conducted by different departments of the University of Kuopio and Kuopio University Hospital, and included all women who were referred to the hospital for breast examination between April 1990 and December 1995. The Kuopio Breast Cancer Study followed the protocol of the International Collaborative Study of Breast and Colorectal Cancer coordinated by the European Institute of Oncology in Milan, and was initiated as a SEARCH program of the International Agency for Research on Cancer. The collaborative study is based on the assumption that breast cancer and colorectal cancer may have common risk factors. Study centers for the breast cancer study are situated in Canada, Finland, Greece, Ireland, Italy, Russia, Slovakia, Spain and Switzerland (37). The study participants had breast cancer symptoms (a lump in the breast or in the axilla, pain in the breast, bleeding from the nipple, nipple discharge and/or skin dimpling), or an abnormality of the breast and the indications for referral in this study were in line with our previous investigations at a Breast Cancer Diagnostic Unit in Finland (38).

This case-control study was an extension of the Kuopio Breast Cancer Study (39, 40) and was approved by the Research Ethics Committee of the Hospital District of Northern Savo (Kuopio University Hospital), Kuopio, Finland (Number 14/12/1989) and the study complies with the Declaration of Helsinki. Women referred from January 1991 to June 1992 were included. Participation was based on written consent. One hundred and fifteen women participated and were interviewed (to determine the level of emotional depression) by a psychiatrist (PO) before any diagnostic

procedures, so neither the interviewer nor the patient knew the diagnosis at the time of the interview. The interviews were recorded and the ratings were completed before the final diagnosis. The clinical examination, mammography and biopsy showed BC in 34 (29.6%) patients, benign breast disease (BBD) in 53 (46.1%) patients and 28 (23.4) patients to be healthy (HSS) (Table I).

Assessment of the patients' attitude to the examiner. The research method was a semi-structured in-depth interview (6). It was attempted to establish as good as possible social and emotional contact with the examinees during the introductory discussion. The examiner (PO) carried out all interviews of and questionnaires given to the study persons and also informed them of the purpose of the study and the confidential nature of the information. The mean duration (SD) of the interview in the BC patients was 126.5 (± 21.6) min. The corresponding values for the patients with BBD was 127.3 (± 23.3) min and for the HSS group 123.0 (± 23.3) min ($p=0.72$). After the interviews, 'the patients attitude' to the examiner were rated (by PO) according to the degree of 'distance' and 'reserve' they were likely to pose. The patients 'emotional distance' to the examiner (emotional distance score, EDS) was graded on a five-point scale: grade 0 indicating no emotional distance; grade I, slight distance; grade II, some distance; grade III, clear distance and grade IV, strong distance characteristics. The patients 'emotional reservation' (emotional reserve score, ERS) towards the examiner was also graded on a five-point scale: grade 0 indicating no emotional reservation; grade I, slight reservation; grade II, some reserve; grade III, clear reservation and grade IV, strong reservation.

Statistical analysis. Significance of the results was calculated with the SPSS/PC statistical package (SPSS Inc., Chicago, IL, USA). Correlations and differences between the study groups (BC, BBD and HSS groups) were measured with the two-sided Chi-square test and non-parametric Kruskal-Wallis variance analyses. Results were considered statistically significant at a p -value <0.05 .

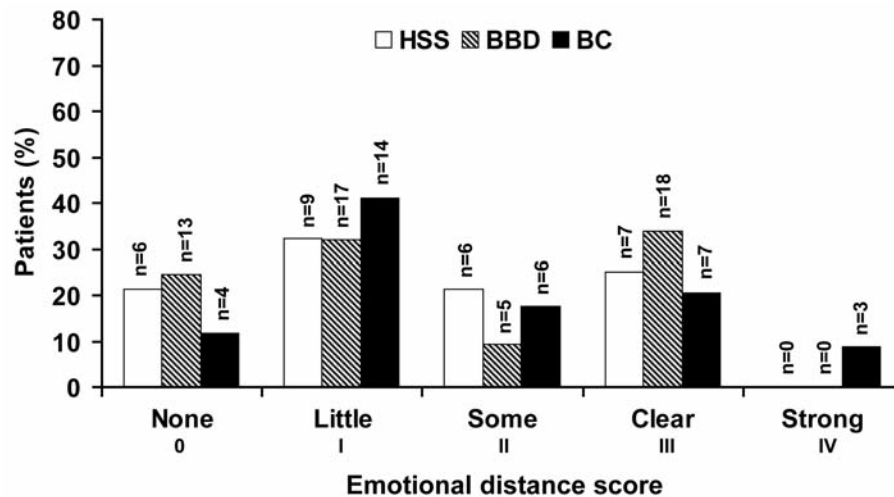


Figure 1. The distribution of the mean of the emotional distance scores in five separate categories, for the healthy study participants (HSS), for those with benign breast disease (BBD) and for patients with breast cancer (BC).

Results

The mean age of the BC patients was 51.5 years, 47.5 years for patients with BBD and 45.7 years for the HSS group. Although the patients in the BC group were older than those in the BBD and HSS groups, the age difference was not statistically significant ($p=0.12$). The majority of patients (85/115, 74%) were married or living in a steady relationship. The patients with BC were significantly ($p=0.03$) wealthier than patients with BBD and HSS, as estimated by the combined gross income of both spouses. The groups differed only slightly from each other as to the factors of the reproductive life of the women (Table I).

Distribution of the EDS. The distribution of the mean of the EDS in the five separate categories, for HSS, for those with BBD and for BC patients are shown in Figure 1. There was a trend ($p=0.11$) for the BC group for higher EDS in patient–physician communication (30/34, 89.0%; grade I to IV distance) than patients in the HSS and BBD groups (78.6% and 75.5%, grade I to IV distance, respectively). However, the mean of the EDS for HSS, BBD and BC groups differed only slightly in grade II and grade III (Figure 1).

The distribution of the ERS. The distribution of the mean of the ERS in the five separate categories are shown in Figure 2. The BC group had a trend ($p=0.07$) of higher ERS in patient–physician communication (25/34, 73.5%; grade I to IV reserve) than the patients in the HSS and BBD groups (57.1% and 62.1%, grade I to IV reserve, respectively). However, the mean of the ERS for HSS, BBD and BC groups differed only slightly in grade II, grade III and grade IV (Figure 2).

Discussion

Although there are no previous reports with this study design available for sufficient comparative evaluation and to examine the role of these scores in HSS, BBD and BC groups, some dynamics of EDS and ERS can be obtained. A number of studies that have examined patient–physician communication in oncology reveal the many difficulties encountered. For example, Swedish patients with cancer reported high scores for general satisfaction and for technical skills and low scores for physicians inter-personal and communication skills, respectively (41). Despite progress in oncology, many patients still feel unable to communicate freely with their doctors. In a recent study involving women with breast cancer, 24% of patients did not know what questions to ask the doctor, 22% did not know how to talk to the doctor and 20% indicated that they had concerns for fear of wasting the doctors' time (42). Ramirez *et al.* identified doctors' communication skills to be a major factor associated with high psychological morbidity, emotional burnout and low personal accomplishment (43). The studies that have examined the effects of training of patient–physician communication skills have produced equal findings (2).

The important bias in case–control studies is recall bias, which occurs if cases report their patient–physician communication characteristics differently from controls. To prevent recall bias from happening, we conducted this case–control study with a so-called 'limited prospective study design': women were asked to participate in the study, were interviewed, and reports on patient–physician communication characteristics were obtained before any diagnostic procedures, so neither the investigator nor the participants knew the diagnosis at the time of the interview.

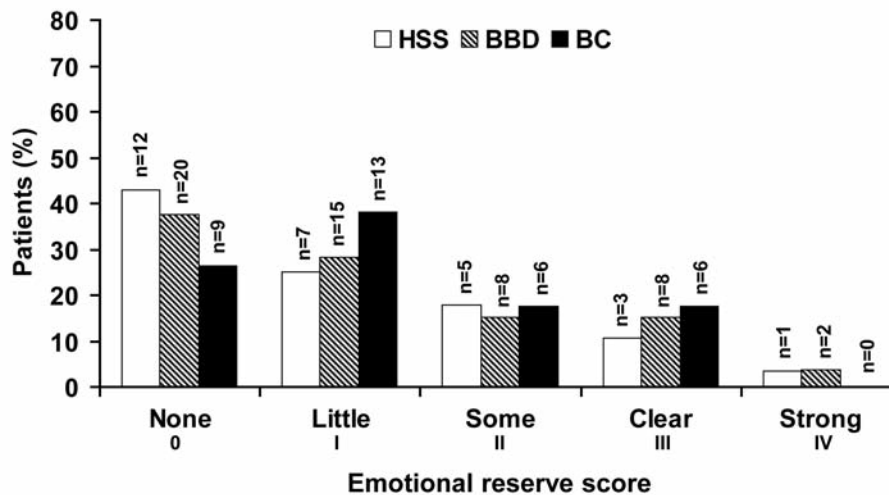


Figure 2. The distribution of the mean of the emotional reserve scores in five separate categories, for the healthy study participants (HSS), for those with benign breast disease (BBD) and for patients with breast cancer (BC).

The main methods used for assessment of patient–physician interactions have been rating scales, checklists and interactional analyses (2). Rating scales could allow observers to rate how well a study subject performs a specific task or behaviour. In the checklist study, the subjects are asked to complete a specific task or behaviour. Both rating scales and checklists are mostly used to assess task-focused behaviour and place more emphasis on technically-based skills. Interactional analyses place more emphasis on psychosocial behaviour which can be more difficult to standardize. To discuss the possible limitations of our study we have referred here on the large meta-analysis of Boon and Stewart (1), where the instruments used for assessment of patient–physician communication were reviewed and classified into two types according to their primary use, i) the assessment and teaching of patient–physician communication skills (medical education category), and ii) the assessment of patient–physician communication for research use (research category). The patient-physician communication instruments within each of these categories were then sub-divided based upon the method of obtaining data for analysis: observation and analysis of interactions in real-time, use of standardized patients, video-taped interactions, audio-taped interactions, and self-reports from the individuals involved in the interaction. Boon and Stewart (1) reviewed overall 44 instruments and of these instruments, 21 were used in only one published study each and 15 instruments have never been validated. In addition to the large number of assessment instruments, Boon and Stewart also pointed out on the great variety of variables and concepts being assessed, the large number of outcome variables, the different definitions of good communication and the different purposes for the studies.

In summary, the results of this study do not support a specific link between patient–physician communication characteristics in general and BC risk. However, patients with BC appear to be somewhat at risk for emotional distance and reservation in their patient–doctor communication and this should be taken into account in the patient–physician relation and may have clinical relevance in day to day clinical work.

Conflicts of Interest

The Authors have no conflicts of interest and they have full control of all primary data.

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