

TITLE

Cancer patient satisfaction with health care professional communication: An international EORTC study.

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Keywords

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KEY POINTS

- 1 Patient satisfaction with communication with professionals has been found to be an important endpoint in cancer treatment, especially in studies evaluating routine PRO monitoring.
2. Using data from a large cross-cultural sample of cancer patients, we analyzed the relationship between (i) patient communication competence and other clinical and demographic factors and (ii) patient satisfaction with communication with professionals.
3. Greater self-perceived patient competence in communication with professionals was found to be associated with a greater satisfaction with this communication.
4. Cross-cultural differences in levels of patient satisfaction with communication with professionals were observed, with satisfaction levels higher in southern Europe than in central Europe, India, Japan and Jordan.
5. Treatment intention and tumor location were important determinants of satisfaction with communication with professionals.

1. INTRODUCTION

Satisfaction with Care (SC) is recognized as an important endpoint in cancer treatment^{1,2}. Identifying SC determinants can therefore help improve health care¹, though more studies on SC determinants (e.g. demographic and clinical factors) are needed.²

Good communication between patients and professionals is crucial to the support provided to cancer patients and is a key determinant of SC.³ Understanding factors related to satisfaction with patient-physician communication may help develop interventions that improve communication.⁴

In recent decades a shift in models of care from a Paternalistic to a Patient-Centered approach, which includes Patient-Centered Communication (PCC), has taken place. PCC tends to positively influence the outcomes of communication between patients and professionals.

Effective PCC depends on the communication competence of both clinicians and patients. Patient communication competence includes skills in providing information (e.g. describing symptoms, expressing concerns) and asking questions, as well as other communication dimensions⁵. Competence in communication is closely related to the aims of Patient Empowerment and Self-management. However, few studies have addressed self-perceived medical communication competence.⁶

Moreover, several studies have reported cross-cultural differences in communication between patients and professionals in the clinical setting, in areas such as use of PCC, information disclosure and decision-making⁷. Differences between cultures also exist in relation to the preferred communication style between patients and professionals, e.g. how information is administered and how emotions are dealt with during consultations⁸.

Differences in communication and SC have often been studied among ethnic-based groups within countries. Cross-cultural differences in SC have also been found in some studies, for example comparing European countries and Taiwan¹. More cross-cultural studies are needed to determine the differences in levels of patient satisfaction with communication with professionals across nations and healthcare systems. Such studies may help identify service organization structures or provider behaviors that best respond to patients' expectations or needs while also taking into account cross-cultural

differences in patient preferences in communications¹. In this context, large samples of patients are recommended.⁵

Studies conducted so far to analyze the effect of clinical (e.g. comorbidity and treatment intention) and demographic variables (e.g. age, gender, and education level) on satisfaction with communication with professionals have shown inconclusive results³.

In this study of a sample of cancer patients from several cultural areas in Europe (Southern and Central) and Asia (India, Japan and Jordan) we analyzed the role of self-perceived medical communication competence and cross-cultural differences in satisfaction with communication with professionals.

2 METHODS

Patients

For this study, we consecutively recruited eligible patients. Inclusion criteria were (a) cancer diagnosis; (b) any disease stage; (c) start of a (first or consecutive) treatment line (including chemo- and/or radiotherapy) with a radical/curative or palliative/symptom relief intention (patients may or may not have received earlier surgery) (d) age ≥ 18 years; and (e) provision of informed consent. Palliative-care patients who had not received chemo- and/or radiotherapy were excluded.

Materials

Patients completed, once, the EORTC QLQ-C30 questionnaire, and the four scales of the EORTC IN-PATSAT32 SC questionnaire¹, which assesses communication with doctors and nurses in terms of the availability and interpersonal skills of these two professional groups (scores range 0-100 with a higher score indicating a higher SC level) and one item on their perception of their own competence in communication with professionals (using a visual analogue scale VAS) ranging from 0 (not at all competent) to 10 (very competent).

Procedure

Patients received oral and written information before consenting to participate in the study. Questionnaire assessment was performed on the first day of the actual treatment. Clinical and demographic data were recorded. The protocol was approved

by local ethical committees in accordance with national requirements and the Declaration of Helsinki (latest revision in 2013).

Statistical analyses

Due to skewness of the IN-PATSAT data, we used binary logistic regression analysis with the dichotomized IN-PATSAT scales (ad hoc cut-off ≤ 75 vs > 75) as dependent variables. Explanatory variables in the regression models were: patient perception of their competence in communication (0-10 point visual-analogue scale); demographic variables (age, gender, level of education, and cultural regions); and clinical variables (presence of co-morbidity (yes/no), tumor site, and treatment intention (curative/palliative). Multivariate logistic regression models were then developed with all predictors investigated in univariate analysis (including the non-significant ones). The final regression model was based on forward selection and backward elimination (significance level $P < 0.05$ in all analyses).

3 RESULTS

Included in the study, conducted between January 2017 and April 2020, were 978 patients from 14 centers in 12 countries from five cultural areas: southern Europe (Croatia, Greece, Italy, Portugal, Spain), central Europe (Austria, France, Germany, Poland), India, Japan and Jordan. The mean age of the patients was 58.1 (14.1) years. The sample comprised a variety of tumor sites and treatment for 58% of the patients had a curative intention (further details in Table 1).

Mean(SD)scores on the satisfaction scales were as follows: doctor interpersonal skills 82.3 (21.4), doctor availability 79.1 (23.4), nurse interpersonal skills 86.2 (18.1), and nurse availability 84.2 (21.6). Mean (SD) score for perception of competence in communication with professionals was 8.1 (1.8).

Results from the univariate and the multivariate regression analysis are shown in table 2.

Multivariate logistic regression analysis showed that a higher levels of patient competence in communication was related to greater satisfaction in the four IN-PATSAT domains. We also observed a large variation in patient satisfaction across the cultural areas, with patients from central Europe, India, Jordan, and Japan

being less satisfied than patients from southern Europe in all four satisfaction domains.

Furthermore, breast cancer patients were less satisfied than lung/H&N cancer patients on the doctors' scales. Patients with palliative treatment intention reported greater satisfaction in three satisfaction domains in the multivariate analyses (and in four domains in the univariate analyses). Elderly patients and men showed greater satisfaction in the doctors' domains in the univariate analyses, whereas the differences in the multivariate analyses were not significant. No differences in satisfaction were found in relation to level of education or presence of co-morbidity. See table 2 for further details.

4 DISCUSSION

In an international sample, we found that satisfaction with the availability and interpersonal skills of doctors and nurses were related to the cultural area and self-perceived competence in communication with professionals. In addition, satisfaction with communication was also related to treatment intention and tumor site.

Greater self-perceived competence in communication with professionals has also been related to higher SC in other studies^{4,6}. This could be related to the fact that higher patient-professional communication self-efficacy has been associated with better PCC, which means that patients who actively participate in medical consultations may encourage physicians to adopt a more PCC style⁹. Greater patient-professional communication self-efficacy has also been related to lower patient unmet needs (for information, etc.) and higher QOL. Higher PCC, lower unmet needs and higher QOL may therefore lead to higher SC, including greater satisfaction with communication⁶.

Satisfaction with communication with professionals was greater in southern Europe than in other cultural areas. These results are slightly different from those found in a previous SC international study, conducted in 2007¹, that used the same SC questionnaire as ours. In that study, patients from southern Europe (Italy, Spain) showed lower satisfaction with nurses' interpersonal skills and availability than patients from northern Europe (Germany, Sweden), France and Taiwan, whereas no differences were found in relation to doctors' interpersonal skills or availability. The authors asserted that, although important changes have taken place in the European

Union with regard to the patient-centered approach, some clinicians in southern Europe may tend to maintain a Paternalistic Communication style that includes refraining from providing information. The gap between patient needs and expectations and the more Paternalistic Communication style may have been reflected in lower patient satisfaction with communication in this earlier study. The results of the present study may indicate that a change towards a more definitive PCC has taken place in southern Europe since that earlier study was conducted.

Satisfaction with communication showed substantial variation across cultural areas for all four satisfaction domains covered in our study. The greatest cultural differences in satisfaction with communication were observed between southern Europe and Japan. This cross-cultural variation may reflect the different communication preferences between patients and health professionals, but also a mismatch of communication expectancies between patients and health professionals⁸.

Lower SC (including satisfaction with communication) among breast cancer patients has also been found in other studies². It has been suggested that breast cancer patients may benefit from organizations that provide support and medical information, though such support and information could also make them more critical of the care they receive. Also, in our study, women reported lower SC, which may have influenced the lower level of satisfaction with communication in breast cancer patients.

The greater satisfaction with communication among patients who receive treatment with palliative intention (chemo and/or radiotherapy) suggests that more attention is given to communication with patients in non-curative treatment. However, it is important to assess the perception these patients have of the severity and curability of their disease in order to discard the possible tendency in some countries to avoid giving bad news (such as a negative prognosis) to such patients, thus increasing their level of satisfaction with communication.¹⁰

Other studies have found that elderly patients are more satisfied with communication.^{2,3} Several explanations have been suggested for this age-based difference. One explanation is a smaller difference between communication expectancy and reality, since the greater use of the health system in older age may generate a greater understanding of what healthcare can actually deliver. Another is that older patients may have closer relationships with their doctors. Other studies have also found that male patients are more satisfied with communication than female patients.²

A major strength of this study is the large international sample of cancer patients from numerous European and Asian countries, however, cross-cultural analysis is partly limited by the low number of patients in certain cultural areas and a lack of variables to explain the cross-cultural variation observed. Future studies on communication should assess in detail, for example, the characteristics of the communication process, or expectations patients have regarding communication with their healthcare professionals.

5 CONCLUSIONS

The relationship we have found between self-perceived competence in communication and satisfaction with communication underlines the importance of interventions aimed at improving patients' communication competence.

The large cross-cultural differences in satisfaction with communication may indicate recent changes in communication between patients and professionals in Mediterranean countries. These differences should be taken into account when designing future international studies).

REFERENCES.

1. Brédart A, Coens C, Aaronson N, et al. Determinants of patient satisfaction in oncology settings from European and Asian countries: preliminary results based on the EORTC IN-PATSAT32 questionnaire. *Eur J Cancer* 2007;43:323-330.
2. Arraras JI, Illarramendi JJ, Viudez A et al. Determinants of patient satisfaction with care in a Spanish oncology day hospital and its relationship with quality of life. *Psychooncology* 2013;22:2454-2461.
3. Nguyen TV, Anota A, Brédart A, Monnier A, Bosset JF, Mercier M. A longitudinal analysis of patient satisfaction with care and quality of life in ambulatory oncology based on the OUT-PATSAT35 questionnaire. *BMC Cancer* 2014; 25;14:42.
4. Yanez B, Stanton AL, Maly RC. Breast cancer treatment decision making among Latinas and non-Latina whites: A communication model predicting decisional outcomes and quality of life. *Health Psychol* 2012; 31:552–561.
5. Brédart A, Kop JL, Fiszer C, Sigal-Zafrani B, Dolbeault S. Breast cancer survivors' perceived medical communication competence and satisfaction with care at the end of treatment. *Psychooncology* 2015;24:1670-1678.
6. Moreno PI, Ramirez AG, San Miguel-Majors SL et al. Satisfaction with cancer care, self-efficacy, and health-related quality of life in Latino cancer survivors. *Cancer* 2018;124:1770-1779.
7. Arraras JI, Greimel E, Chie WC et al. Cross-cultural differences in information disclosure evaluated through the EORTC questionnaires. *Psychooncology* 2013; 22:268-275.
8. Fujimori M, Parker PA, Akechi T, Sakano Y, Baile WF, Uchitomi Y. Japanese cancer patients' communication style preferences when receiving bad news. *Psychooncology* 2007;16:617-625.
9. Cegala DJ, Post DM. The impact of patients' participation on physicians' patient-centered communication. *Patient Educ Couns* 2009; 77:202-208.
10. Costantini A, Grassi L, Picardi A et al. Awareness of cancer, satisfaction with care, emotional distress, and adjustment to illness: an Italian multicenter study. *Psychooncology* 2015;24:1088-1096.