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Effects of a Course on Ophthalmologist Communication Skills: A Pilot Study

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ABSTRACT **Introduction:** *Although the issue of communication skills is now considered crucial for ophthalmology, no previous research has discussed training in this field. This study aimed to discuss the effects of a 16 hour communication skills course for ophthalmologists. In particular the study assessed the interest of participants with respect to the topic and the efficacy on participants' communication skills, at least in a laboratory setting.*

Materials and methods: *Eleven ophthalmologists participated in the course. Learner satisfaction was evaluated using a questionnaire with a six-point Likert scale. Course efficacy was assessed by a comparison between communicative behaviour of ophthalmologists in videoed role playing before and immediately after attending the course. Videoed consultations were coded using the Patient Centred Score Sheet (PCSS) and the Roter Interaction Analysis System (RIAS). The Wilcoxon signed rank test was used for statistical analysis.*

Findings: *The course obtained high satisfaction in participants (mean score 5.1). In the post test role playing, patient centredness increased significantly ($p < 0.01$). Furthermore, ophthalmologists improved their competence in using open ended questions ($p < 0.02$), process categories (e.g. orientation statement) ($p < 0.05$) and social communication categories (e.g. personal statement) ($p < 0.01$).*

Discussion: *According to our findings, ophthalmologists did show satisfaction for the course. Results also indicate that the course positively influenced ophthalmologist communication competence, at least in a laboratory setting. After the course, participants became more attentive to patients' psychosocial needs, both in terms of general quality of consultation (patient centredness) and in terms of using specific interpersonal skills. Present results are considered preliminary, and further research is needed with a larger sample and including an evaluation of the effects on ophthalmologists' communication skills in clinical practice.*

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Introduction

Doctor-patient communication and relationship have received increasing attention over the past two decades. A key concept to emerge is patient-centred medicine which integrates the conventional understanding of disease with each patient's unique experience of illness, namely the patient's agenda (Levenstein *et al*., 1986; Weston & Brown, 1995a). The transformed clinical method has at least two strengths: (i) it gives the doctor clear, specific tasks for understanding the patient's agenda. At every consultation the doctor should ascertain the patient's feelings, his/her ideas of the illness, its impact on his/her life and his/her expectations about the outcomes and the treatment (McWhinney, 1993); and (ii) it suggests a method for understanding the patient's agenda, through an appropriate use of specific communication skills (Brown *et al*., 1986).

Since the goals of patient-centred medicine can be reached only through the appropriate use of communication skills, a training for doctors on these skills is needed. Communication skills have been taught for many years in medical schools, as an increasing amount of literature has shown (Aspegren, 1999), and only recently have these skills been included in Italian curricula (Vegni *et al*., 2000). Communication skills are currently taught in Continuing Medical Education (CME) programmes. Most of the previous studies which address the effort of teaching communication skills have focused on training of general practitioners and internists (Vegni *et al*., 2002). Data are also available for residents (Smith *et al*., 2000) and other branches of medicine, such as gynaecology (e.g. van Dulmen & van Weert, 2002), paediatrics (e.g. van Dulmen & Holl, 2000) and oncology (e.g. Maguire, 1999). Although the issue of communication skills is now considered crucial for ophthalmology (Acheson, 2001), no previous research has discussed training in this field. In view of this, a 16 hour communication skills course for ophthalmologists was created. The course taught basic concepts and communication skills for a patient-centred consultation. This study aimed to discuss the effects of the training, and in particular: (1) to evaluate the interest of participants with respect to this new topic for ophthalmologists; and (2) to assess the efficacy of the course on participants' communication skills, at least in a laboratory setting. The article presents: (i) the course programme, which provides a theoretical and practical framework for exploring key aspects of the consultation on the basis of a patient-centred approach; (ii) the teaching methods for cognitive issues and basic communication skill training; and (iii) the assessment of the course both in terms of learner satisfaction and efficacy.

Materials and methods

Participants

Eleven ophthalmologists from different regions of Northern Italy (10 male and 1 female, average age 53 years, range 44–61 years) voluntarily participated in the course. They were all full-time chief of ophthalmology units in public hospitals. None of them previously participated in a CME programme on doctor-patient communication.

Course Description

A 16 hour course was planned by an ophthalmologist and the authors. The programme involved working through five different stages.

The first stage focused on exploring the cognitive issues of a consultation from a patient centred perspective. In particular, the traditional disease centred model was discussed according to the definition proposed by Engel (1977), and the patient centred model was discussed according to Levenstein *et al.*'s proposal (Levenstein *et al.*, 1986; Weston & Brown, 1995a). Furthermore the concept of patient's agenda was presented through the use of clinical cases, and the specific tasks of patient centred consultation were introduced.

The purpose of the second stage was to introduce video recording as the main instrument for teaching and learning communication in medicine. In this stage, ophthalmologists were asked to discuss patient centred issues on the basis of videoed doctor–patient consultations done in General Practice and in the ophthalmology setting.

The third stage focused on discussing the tasks of communication. A theory for the physician–patient interaction process (Cohen Cole, 1991; Lipkin *et al.*, 1995) was proposed, and communication skills both for gathering information and educating the patient were discussed.

The fourth stage was intended to increase practice of these communication skills through communication exercises. In particular, physicians were asked to apply specific communication skills (e.g. silence, open questions) in three interviews with the following goals: (1) to collect information from the patient; or (2) to educate the patient about medical or ophthalmic problems.

The fifth and last stage focused on the integration of concepts and skills acquired in the previous stage, using role playing sessions.

The training programme was carried out by a multidisciplinary team (the authors—a research fellow and a Professor of medical psychology; a psychologist with a training as an actress; a Professor in ophthalmology as a tutor) with previous experience in teaching communication skills in medicine.

Teaching methods

For cognitive issues a problem based learning form was applied with two working groups, each consisting of five or six physicians. Plenary discussion and ultra-brief (less than 15 minutes) academic lessons were undertaken to define

key concepts. For teaching/learning competence the following methods were applied: (1) Videotape recording sessions in which videotaped ophthalmological consultations from Departmental Archives (Vegni *et al.*, 1999) were discussed according to the Steinert's proposal (Steinert, 1993); (2) role playing sessions; and (3) communication exercises performed in groups composed of three physicians.

Assessment tools

A key problem of this study was to assess the impact of the course on participants both in terms of physicians' satisfaction and efficacy.

After the training the ophthalmologists were asked to indicate, on a six point Likert scale, with ''very negative'' and ''very positive'' marking the endpoints, how they evaluated the *training in general*, how they considered the *contents* of the course, how they assessed the *expertise of trainers* and whether they appreciated the *teaching methods*. Free comments were encouraged. The impact of the course in terms of efficacy on communication behaviours was evaluated by asking participants to interview a simulated patient before and immediately after the training. Two patient scripts were written for clinical and relational difficulty (a glaucoma in a 47 years woman; an age-related macular degeneration in a 64 years woman). For both scripts, an actress was trained to be the patient. The actress was instructed to start from the same point during the consultation, with the same intentions and the same behaviour, but with the freedom to adjust her role and to respond to the doctor according to the physician's interviewing style. Each participant—at the beginning and at the end of the course—was asked to be the ophthalmologist who had to inform the patient–actress about the relevant diagnosis in a 3 minute interview. The two scripts were randomly given to the ophthalmologists as the pre-test and crossed for the post-test.

Each interview was videotaped and analysed by a blind rater through the Patient Centred Score Sheet (PCSS) and the Roter Interaction Analysis System (RIAS). A second rater independently coded a random sample of six videoed interviews. Both coders had a training for the analysis systems and had used them in previous research programmes.

The PCSS was intended to measure changes in the patient-centredness of the doctor in the post-test, i.e. his/her ability to understand the patient's offers. The doctor's response was scored as 0 if the doctor ignored the offer altogether, as 1 if closed responses were used, as 2 if open-ended responses were given and as 3 if expression of the patient's expectations, thoughts, or feelings were specifically facilitated (Henbest & Stewart, 1989). This method for measuring patient centredness has been tested and found to be valid, sensitive, reliable and practical (Henbest & Stewart, 1989; Ong *et al.*, 1995; Boon & Stewart, 1998).

The RIAS (Roter, 1991) was intended to assess changes in the verbal communication process after the course. The RIAS is especially designed to code doctor and patient communication. This system distinguishes affective or

socio-emotional verbal utterances (15 categories) and task related utterances (24 categories). Affective categories refer to those aspects needed to establish a therapeutically effective relationship (e.g. giving comfort and reassurance). Furthermore these categories include topics related to social conversation (e.g. personal statements, greetings). Task related categories refer to those communication aspects which primarily focus on solving problems such as asking questions, giving information and counseling in medical or psychosocial topics. Task related categories also include process categories (e.g. orientation statements, checking statements). The RIAS is a method of doctor-patient interaction analysis widely used in the literature (e.g. Roter *et al.*, 1997), and it has been found to be valid, reliable and practical (Ong *et al.*, 1995; Boon & Stewart, 1998). In the present study, only physician's categories (with a frequency $\geqslant 1$) were considered. For statistical analysis categories were *a priori* grouped into the following: social communication categories, emotional categories, information medical and therapeutics categories, information life style and psychosocial categories, process categories, closed ended questions and open ended questions.

A correlation coefficient was used to assess inter-coder reliability. The Wilcoxon signed rank test (Siegel, 1956) was used for statistical analysis regarding both PCSS and RIAS data.

Findings

The ophthalmologists were generally very positive about the course. Their mean score were 4.7 (range 3–6) for evaluation of the course in general, 5.1 for contents (range 3–6), 5.4 for teaching team (range 3–6) and 5.1 (range 3–6) for teaching methods. In agreement with quantitative data, free comments showed that participants appreciated the course and suggested that they would appreciate a follow up.

Inter-rater reliability was significant both for the RIAS application ($r = 0.926$, d.f. 79, $p < 0.001$) and the PCSS ($r = 0.878$, d.f. 33, $p < 0.001$).

Mean pre-test score of patient centredness ($M = 0.24 \pm$ SD 0.12) increased significantly after the course ($M = 0.43 \pm$ SD 0.13) ($T = 1$; $n = 11$; $p < 0.01$).

As far as the RIAS clusters are considered, mean score for each cluster before and after the course are shown in Table 1.

Statistical analysis showed that ophthalmologists improved their competence in using open ended questions ($T = 0$; $n = 7$; $p < 0.02$), process categories (e.g. orientation statement) ($T = 7$; $n = 10$; $p < 0.05$), and social communication categories (e.g. personal statement) ($T = 0$; $n = 8$; $p < 0.01$). Information medical and therapeutics significantly decreased after the course ($T = 1$; $n = 11$; $p < 0.01$). No changes resulted for closed questions ($T = 7$; $n = 7$; $p =$ n.s.)., emotional categories ($T = 14$; $n = 8$; $p =$ n.s.) and information life style and psychosocial categories ($T = 5$; $n = 6$; $p =$ n.s.).

Table 1. Ophthalmologists' communication skills before and after the course. Mean frequencies of physicians' sentences in the pre and post course role playing are shown for each conversational category. Each conversational category is described and exemplified below

	Social[a] M ± SD	Emotional[b] M ± SD	Information m/t[c] M ± SD	Information l/p[d] M ± SD	Process[e] M ± SD	Closed question[f] M ± SD	Open Question[g] M ± SD
Pre-test	1.73 ± 0.9	2 ± 2.6	13.5 ± 4.3	0.4 ± 0.7	2.6 ± 1.6	1.9 ± 2.9	0.5 ± 0.5
Post-test	2.73 ± 1.2	1.64 ± 1.8	8.4 ± 2.4	0.5 ± 0.7	4.4 ± 2.2	1.7 ± 1.7	2 ± 1.6

[a]Social communication categories (e.g. chatting).
[b]Emotional categories (e.g. partnership).
[c]Medical and therapeutics information categories (e.g. gives information about disease).
[d]Lifestyle and psychosocial information categories (e.g. gives information about diet).
[e]Process categories (e.g. orientation statement).
[f]Closed question (e.g. "Where does it hurt?").
[g]Open question (e.g. "What do you mean saying *burning eye?*").

Discussion

The course described introduced Italian ophthalmologists to a set of basic concepts and communication skills for a patient centred consultation. These issues are a more and more crucial concept in medical care (Ong *et al*., 1995). However they are rarely discussed in ophthalmology. Ophthalmological training has been primarily directed at acquiring technical skills, and no previous study presented attempts to improve communication skills during ophthalmological consultation. According to our findings, ophthalmologists did show satisfaction for the course. This pilot study seems to suggest an interest in these issues in ophthalmology at least sufficient to guarantee the continuous participation during the 16 hour course. Despite the non representative group of participants, these results constitute a preliminary evaluation of the opportunity and possibility to import discussion about patient-centredness and doctor–patient communication into ophthalmology.

The high satisfaction with the active learning methods was also showed. Currently, CME is provided in Italy, using traditional, academic lessons. It is well-accepted that CME for professionals should be performed with adult learning methods (Knowles, 1973), connecting professional experience and competence with learning cognitive and behavioural objectives (Stanley *et al*., 1993). Thus, it is arguable that appropriate adult learning methods may promote the active participation in CME programmes for non-traditional issues too. It should be considered also that learner-centred learning is the teaching counterpart of the patient-centred methods being taught to the learners (Weston & Brown, 1995b). A learner-centred approach may favour participants' learning process about the patient-centred medicine.

Results of this study indicate that a 16 hour communication course positively influences ophthalmologists competence in a simulated consultation. After completing the course, ophthalmologists in the role plays became more patient centred, i.e., they tried to understand the patient's agenda, integrating patient's experience into the understanding of the disease. An increased patient-centredness seems to go with a changed communicative behaviour. In particular our data showed an increased use of both general (e.g. social conversation) and specifical relational skills (e.g. open question), whilst a simplified medical and therapeutics information-giving was observed. The decreased number of medical statements may be a doctor's attempt to tailor information given to the patient, avoiding technical and unnecessary information. Post course interviews were characterized by a more complex control of interaction process by doctors, as evidenced by a larger use of process categories. Emotional and lifestyle/psychosocial categories were not significantly changed. It is possible that the course was too brief to introduce a deeper (professional) change into the doctor–patient interaction, being enough only to modify more superficial (social) attitude.

Cautionary notes should be considered. The training was successful in terms of physicians' acquired competence (Stanley *et al*., 1993). But the study only shows

the short term effect of the training. Furthermore, this effect cannot be considered in terms of long term performance. We cannot assume that a patient-centred competent physician in a role play will perform a patient-centred consultation. Nor can we assume the retention of the acquired interviewing skills beyond the time of the training course. Another cautionary note is a possible gender bias, since almost all participating physicians were male. The measured improvement ought to be less significant if the majority of physicians were female, since they have better communication skills (e.g. Roter *et al*., 2002). Since a control group was omitted in the study, the increased patient centredness in the post-test could be the effect of variables other than the course (e.g. training to perform a role play). Given the low number of ophthalmologists who participated in this study, our findings should be considered preliminary and further research is needed using a larger sample and studying the long term effects on ophthalmologists' communication skills in clinical practice. We did consider it worthwhile to report results on a small group of ophthalmologists as it might stimulate others to developing professional education programmes on these issues.

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