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**Journal of Cancer Education**

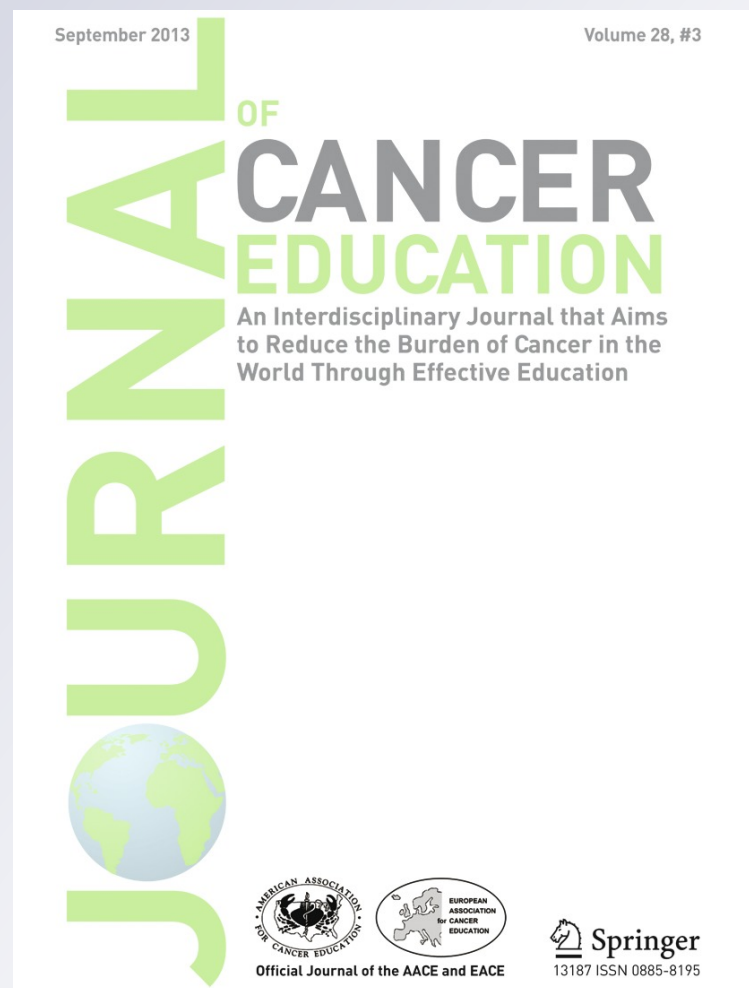
ISSN 0885-8195

Volume 28

Number 3

J Canc Educ (2013) 28:439-443

DOI 10.1007/s13187-013-0484-y



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# From Qualitative Data to GP Training on CRC Screening

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Published online: 15 June 2013

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**Abstract** Colorectal cancer (CRC) is the third most common cancer worldwide. In France, although mass screening has been performed using the guaiac fecal occult blood test since 2008, the participation rate remains too low. Previous studies have explored the perspectives of doctors and patients as well as the performance of general practitioners (GPs) by recording and analyzing consultations in which patients came and asked for fecal occult blood test. Results indicated that improvement was needed in patient-centered communication. This research aims to develop educational material and training programs for GPs in order to enhance their communication with patients on CRC screening, based on data from two qualitative studies. Triangulation of all

qualitative data was performed and discussed with communication experts in order to develop educational material and training programs based on the patient-centered clinical method. Two different scenarios were developed to improve communication with patients: one for a compliant patient and another for a noncompliant patient. Two videos were made featuring a doctor and a simulated patient. A two-sequence training program was built, including role-playing and presentation of the video followed by a discussion. The qualitative data helped us to produce a useful, relevant training program for GPs on CRC screening.

**Keywords** Colorectal cancer screening · Doctor-patient communication · Qualitative research

**Electronic supplementary material** The online version of this article (doi:10.1007/s13187-013-0484-y) contains supplementary material, which is available to authorized users.

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## Abbreviations

CRC	Colorectal cancer
gFOBT	Guaiac fecal occult blood test
FIT	Fecal immunochemical test
GPs	General practitioners
FG	Focus groups
PI	Patient interviews
RC	Recorded consultations
RIAS coding	Roter Interaction Analysis System coding
Q	Quotes

## Introduction

Colorectal cancer (CRC) is the third most common cancer worldwide. Various screening strategies have been developed for patients starting at the age of 50. The US task force on CRC recommends a yearly guaiac fecal occult blood test (gFOBT) or FIT, or a flexible sigmoidoscopy every 5 years, a colonoscopy every 10 years, or a double-contrast barium enema or virtual colonoscopy every 5 years [1]. In France, since 2008, general practitioners (GPs) have performed mass

screening using gFOBT every 2 years on all patients aged 50 to 74 who do not show any CRC risk factors [2]. Colonoscopy is reserved for patients who are test-positive. Although CRC screening is known to reduce mortality, participation rates have remained too low with considerable variability in different countries. In Europe, the proportion of adults screened using FOBT ranged from 7.2 to 91 %. In the USA, according to the National Health Interview, the proportion of adults older than 50 years who had had a recent screening test ranged from 53 to 73 % [3]. In France, the participation rate is around 32 % and has decreased in some pilot regions involved in mass screening since 2002 [4]. These results suggest that only early responders, who came in and spontaneously asked their GP for the test, participated. The physicians' communication style appeared to be an important factor in CRC screening. Patients whose doctor seemed enthusiastic when discussing FOBT more often reported a recent test [5].

Previous studies had been conducted to explore doctors' and patients' perspectives using five GP focus groups (FG) and 24 patient interviews (PI) [6]. GPs' performance was also explored by recording and analyzing 35 consultations (recorded consultations, RC) by nine GPs in which patients came and asked for FOBT. Doctor–patient communication was explored using RIAS coding which is a method widely used for coding medical dialogue [7]. Forty codes defined in the RIAS handbook were used to distinguish task-related and socioemotional communication. Task-related codes include medical condition, therapeutic regimen, lifestyle and psychosocial information, and all orientational or instructional statements told by GPs related to the clinic visit. Socioemotional codes include all statements of verbal or nonverbal exchange, indicating mainly reassurance, encouragement, approval or disapproval, criticism, and empathy. The ratio of codes related to psychosocial and socioemotional aspects and those related to biomedical issues was calculated. This ratio had been used in previous studies to explore patient-centered interaction, with a ratio of  $>1$  indicating a patient-centered consultation [8]. None of the doctors reached this ratio. It was concluded that in order to increase the participation rate for CRC screening, patient-centered communication had to be improved.

The aim of this study was to develop a training course to enhance GPs' communication skills in CRC screening, based on the two previous qualitative studies.

## Methods

The patient-centered clinical method described by Stewart et al. was used in order to pass on these skills to the GPs. This model is composed of six interactive components, i.e., exploring both disease and patients' illness experience, understanding the whole person, finding common ground, incorporating prevention and health promotion, enhancing the

patient–doctor relationship, and being realistic [9]. Triangulation of all qualitative data coming from patient interviews, GP focus groups [6], and recorded consultations was performed. All of these data were merged, and three categories were defined for CRC screening. The first category involved arguments to convince patients, the second category focused on the main items GPs had to explain to make sure the patient would be able to take the test, and the third category concerned communication skills. All of the material regarding communication was incorporated into the six components of the patient-centered clinical method and discussed from the perspective of communication skills in order to develop the educational tool. Interactive educational techniques that have been shown to be relevant were selected [10].

## Results

Based on these triangulated data, two different scenarios were developed to improve communication with patients: one for a compliant patient (Video 1) and another for a noncompliant patient (Video 2). Two videos were made with a doctor and a simulated patient. The first video was 7 min and 25 s in length, and the second video, 9 min and 12 s. A training program was developed with two sequences, including role-playing and presentation of the video followed by a discussion in small groups of GPs.

### The Scenarios

The scenarios were based on the six components of the Stewart et al. model and focused on the six components of the patient-centered clinical method [9]. When exploring both the disease and the patients' illness experience, “disease” is to be understood as the description according to the conventional model, while “illness” refers to the patients' personal experience of being sick (component 1). In the RC, we observed that most of the time, the patient's background knowledge was not taken into account. There was very little information about patients' feelings, especially fears and personal history. In the video scenario, we built in an open-ended question on what the patient knew about CRC screening and the patient's fears and knowledge were explored. Different quotes (Q) in Table 1 illustrate each component (Table 1, quotes 1 and 2 for component 1 (Q1 and Q2)).

In Table 1, the scenarios of the two videos are presented, since the videos are in French and are not well accessible to the readers of the article.

Understanding the whole person is a huge chapter that includes the person, their family life cycle, and the context (social, economic, etc.) they live in (component 2). The PI identified some patients' fears and beliefs, often related to

**Table 1** Quotes illustrating the patient-centered clinical method for the videos

Stewart et al. model component	Video	Quotes
Exploring both disease and the patients' illness experience	1	Doctor: "What do you know about CRC screening? What do you know about the test?" (Q1)
	2	Doctor: "Could you tell me more about the things that have made you decide not to participate/prevented you from participating?" (Q2)
Understanding the whole person	1	Patient: "Yes doctor, I am concerned. I have a friend who has been operated on. He has a pouch..." Doctor: "That's right, it's hard, which is why we do the screening." (Q3)
	2	Patient: "If I have a problem (with my bowels) I will tell you." Doctor: "This screening is for patients who aren't complaining of any symptoms." (Q4)
Finding common ground	1	Doctor: "If you agree, we will first talk about CRC screening." Patient: "All right doctor, but you know, my knee is really painful." Doctor: "Adenomas are not cancer but can become cancer many years later. Would you like me to tell you more?" (Q5)
	1–2	Doctor: "It's free and very useful because colorectal cancer is very common. If you don't do the screening, it is often diagnosed too late." "You can do this test whenever you want at home, on three different days." (Q6)
Incorporating prevention and health promotion	1	Doctor: "I heard that you came because of your knees but first we'll talk about the FOBT... because preventing colorectal cancer is also a way of taking care of your health." (Q7)
	2	Doctor: "Have you ever taken the test to screen for colorectal cancer?" (Q8)
Enhancing the patient–doctor relationship	1	Doctor: "If the test is negative, it's very important to do it again every two years." Patient: "So we have to do the screening every two years? I didn't know that." (Q9)
	2	"If the test is positive, it's important to see what's really happening using a colonoscopy." (Q10)
Being realistic	1–2	Doctor: "You will see. It's very well explained in the instructions." "Here is the test. Everything is in the envelope." (Q11)
	2	Patient: "I wake up very early every morning...what if I forget one day?" Doctor: "Don't worry, you can go as long as nine days between the first and third samples." (Q12) Patient: "I feel good; it's only for my renewal." Doctor: "So we have time today. I will have a look at your file." (Q13)

their previous experiences of relatives with CRC, which could influence their own reasons for undergoing the screening or not. In the scenario, the following points were used to explore patients' fears: testimonials on friends' experiences (Q3 for component 2) and patients' beliefs, including their defense mechanisms (Q4 for component 2).

Finding common ground (component 3) is the central task of patient-centered medicine. The doctor and their patient have three common aims: defining the problem to reach a mutual understanding and agreement, establishing the goals of management, and identifying the roles to be assumed by patient and doctor. As analysis of the recorded consultations showed that doctors did not ask for patients' agreement and did not investigate patients' preferences for information, these questions were used explicitly in the scenario (Q5 for component 3). In the patients' interviews, arguments in favor of screening were put forward, such as the fact that the test could be performed at home, the fact that the patient could choose the most appropriate time, the fact that the test could help to avoid a colonoscopy, and the fact that the test was free of charge. Some patients asked for epidemiological arguments. These arguments were used in the scenario to define

the problem and establish the patient's and doctor's respective roles (Q6 for component 3).

In the recorded consultations and physician FG, there was no promotion of CRC screening and the test was not delivered when patients did not request it. Prevention and health promotion (component 4) were not incorporated. In the second scenario, the patient did not come in specifically for the screening but the doctor asked to perform it and tried to convince the patient to do so (Q7 and Q8 for component 4).

Enhancing the patient–doctor relationship (component 5) includes compassion, continuity, constancy, and sharing of power. In the recorded consultations, continuity of care was not elaborated upon. There was no explanation of warning symptoms and of the need to do the test every 2 years and no explanation of the need for a colonoscopy in the event of a positive test (Q9 and Q10 for component 5).

Being realistic requires learning how to most effectively manage time and choosing the best time to deal with problems (component 6). In the focus groups, GPs complained about the time required to deliver the test and the fact that patients came in for an appointment for many other reasons in addition to the screening test. The recorded consultations

showed that that too much time was spent on technical aspects and that the leaflet given with the test was hardly used. Nonetheless, the patients interviewed had a good opinion of the information in the leaflet and said that it was very well explained. In the scenarios, GPs avoided providing only technical information and referred patients to this leaflet (Q11 for component 6). The patients' way of life was also taken into account in order to facilitate their compliance with the screening (Q12 for component 6). Although the patient was noncompliant in the second scenario and since the only reason for the appointment was a renewal, the GP had the time to deal with CRC screening (Q13 for component 6).

### The Training Course

Three sessions involving six to eight participants were organized during the same week in December 2011. Each session lasted for a total of 4 h. Eighteen GPs were recruited and trained after cluster randomization of all family practice physicians in the same geographical area (Val d'Oise, a suburb of Paris). A local prevention organization (PSVO or "Prevention Santé Val d'Oise") supported the project, and the participants were given incentives.

The three sessions were run by the same two moderators (IAA and AY) using interactive methods.

The first part of the training course was a short discussion on GPs' opinions of CRC screening in order to take them into account. The next sequence focused on how to improve communication with a compliant patient. The first step was a role-play with a participant playing the role of the GP and one of the moderators playing the role of a patient based on a predefined scenario. The simulated patient spontaneously asked the GP for an FOBT. Feedback was then given and the participants discussed what they had observed during the role-play, with the moderator focusing the discussion on issues related to communication. Afterwards, the first video was shown, with participants being given the same instructions to identify the communication skills used. After the video, there was another discussion in order to try to raise all of the main communication-related issues. The same procedure was used in the second sequence for a noncompliant patient. The instruction for the role-play was to suggest CRC screening to a patient who had not made any request and to try to convince them. Participants were given a memo summarizing all of the main communication skills required.

### Discussion

Qualitative data collected from two previous studies were used in an active way to build this training course. The material was developed based on real screening practices taken from the recorded consultations. Previous studies had been conducted

to explore physicians' CRC recommendations via semi-structured interviews or focus groups, which provided insight by allowing the GPs to talk about their practices in detail [11, 12]. Our data corroborated their results, which showed that GPs usually take a standard approach with most patients and only tailor it to each patient's level of education [12]. In addition, Wackerbath et al. concluded that the content of the CRC recommendation was a crucial issue [11].

Focusing on doctor–patient communication for CRC screening, our data showed that improvement was needed. Many reasons led us to develop educational material focused on doctor–patient communication with a patient-centered approach. Little et al. had previously demonstrated that in primary care, patients strongly preferred a patient-centered approach with communication partnership and health promotion [13]. Even with a compliant patient, this approach could be useful in enabling GPs to save time and increase patient satisfaction.

Clinical communication training in continuing medical education is feasible. Berkhof conducted a systematic review of previous communication skills programs in continuing medical education (CME) [10]. Those programs were effective if they were learner-centered, practice-oriented, and used interactive methods like role-plays, feedback, and small group discussions. One-day sessions seemed to be more effective, however.

It is not easy to get GPs to take part in such 1-day sessions, as shown by the low level of recruitment, i.e., 18 GPs, in our training course. Most of them had already been trained on CRC screening, with a focus solely on epidemiological data and technical procedures. This could enable them to save time while improving doctor–patient communication, even though these skills are rarely taught in CME. Increasing CRC screening participation rates did not seem to be a priority for these practitioners. Providers' attitudes were classified as modifiable factors influencing CRC screening participation and as potential targets for future interventions [3]. All health-care providers should be involved in such interventions in order to improve the rate of later responders.

The efficiency of our educational program must now be explored. A randomized trial is currently underway to explore whether or not this CME training could help to improve the CRC screening participation rate.

### Conclusion

The qualitative data helped us to produce a relevant training program for GPs on CRC screening. Its usefulness is currently being tested in a randomized controlled trial. The patient-centered clinical method was used to train GPs on a patient-centered approach. The main focuses were patients' health beliefs regarding CRC screening, giving appropriate

explanations, providing the correct amount and type of information, checking their understanding, and avoiding giving patients only technical information. This approach could allow for shared decision making as regards CRC screening [11], a process that all health-care providers should be involved in.

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