A method for introducing standardized (simulated) patients into general practice consultations

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SUMMARY. A study has been undertaken to determine whether it is possible for a set of standardized (simulated) patients to visit general practitioners, without being detected, in a health care system where doctors have fixed patient lists. Since sending standardized patients into doctors' offices is a new way to assess the performance of general practitioners; this paper describes in detail the methodology that has been used for visits.

The paper looks first at the general preparation for visits and secondly at the specific preparation concerning the fine detail of the individual visit. The method was tested in 156 consultations with 39 general practitioners and in no cases were the standardized patients detected. None of the doctors visited felt offended and all were prepared to cooperate in future studies with standardized patients. It is concluded that the standardized patient method, following the step-by-step procedure described, is feasible in actual practice.

Introduction

RECENTLY the need has been stressed for new methods of assessing the actual performance of general practitioners rather than assessing what they are capable of doing: their competence.[1,2]

Doctors' behaviour may be measured directly or indirectly. With direct methods the research worker observes the physician dealing with patients by means of video- or audio-tapes, or the use of standardized patients. Indirect methods consist of chart audits or written or oral examination. The choice of a particular method depends on whether one is interested in actual practice of doctors or in test (competence) situations. For both situations high validity and high reliability of a method are essential.

In the last two decades the standardized (or simulated) patient has proved a powerful high quality instrument for assessing the competence of medical students and doctors.[3] This method has been extended by introducing standardized patients, indistinguishable in almost every case from real patients, into general practice. Since the method is a direct one and both reliability and validity are high,[4] it may be the best method of assessing clinical care. Experience of this method in actual practice is limited; only four studies making valid, reliable use of standardized patients in practice have been reported.[4-7] Woodward described the use of standardized patients in the North American situation.[8] In view of the need for more methods for assessing performance in actual practice, and in view of the lack

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of experience with the use of standardized patients in actual practice, the department of general practice at the University of Limburg has undertaken a study to determine whether it is possible for a set of standardized patients to visit general practitioners without being detected, in a health care system where general practitioners have fixed patient lists. This paper reports in detail on the method that has been used.

The preparation for visits consisted of: first, general preparation in which the whole operation was organized regardless of individual practices or doctors; and secondly, specific preparation on fine detail of the individual visit.

General preparation for the visits

Preliminary mailing of information to doctors

It was important to explain this research as a means of studying what happens in the consultation so that doctors did not perceive standardized patients to be offensive or intrusive. The purpose was not to look for 'rotten apples' but to show that knowledge of what really happens in the consultation improves our understanding of why doctors behave as they do.[9] Doctors were paid for their care of the standardized patients and all data was treated in strict confidence and analysed blind. Feedback was provided to individual doctors and consisted of an item list, scored by the patients, about the performance of the individual doctor, compared with his or her peers. This procedure ensured that none of the participating doctors experienced ethical problems with this type of research in general practice. Doctors did not know when or how often they would be visited by standardized patients. Information was sent to doctors at the start of preparation thus ensuring a long interval between consent and the visit.

Doctors were also sent 'detection forms' which they were asked to use to report suspected standardized patients, giving the patient's name, the date of the visit and degree of the doctor's certainty of having identified a standardized patient.

Selection of simulated medical problem

Any medical problem without physical signs, and many conditions with physical signs, can be simulated effectively. For example, jaundice can be simulated with make-up. Standardized patients can also be recruited from real patients with stable physical pathology, for example heart murmurs.[3] It was our experience that a vivid imagination among researchers was of great value in designing different types of simulations.

There are four possible types of consultations made by standardized patients: (1) a patient consulting while on holiday; (2) a consultation outside practice hours while the doctor is deputizing for others; (3) a consultation during normal working hours by a patient working in the neighbourhood with an acute problem (for example chest pain or foreign body in the eye); (4) a first consultation by a patient who has been newly enlisted in the practice.

An additional variant is the home visit but this has not been used here.

Setting up background data

Many general practitioners will ask the name of a patient's previous doctor. Therefore standardized patients were provided with names of doctors who had been briefed with written descriptions of the standardized patient's role so that they could respond to a request from the other doctor.

Seventy per cent of patients in the Netherlands are insured for medical care through health insurance schemes or *ziekenfonds* and must show their insurance cards to their doctor at each visit. These insurance cards show the private health insurance number, name, address, date of birth and name of the patient's general practitioner, pharmacist and dentist. To keep detection of the patients as low as possible the *ziekenfonds* were asked to cooperate by supplying the standardized patients with real insurance cards (new patient names) and to enlist these patients on the lists of the doctors: this also allowed doctors to be paid for their consultations. For the first three types of consultation this insurance card procedure was not really essential, but it was necessary in order to get a patient newly enlisted in the practice. During the project the patients remained on the list of their own real general practitioner in case of genuine illness.

Selection of standardized patients

Any motivated person may become a standardized patient and many medical schools have pools of standardized patients available for educational purposes.[3] The standardized patients used in our studies were selected from a pool of 100 in the skills laboratory of the medical school at Maastricht. They were paid for their participation. The criteria used in selection were that standardized patients matched the roles assigned to them (a 40-year-old woman cannot be simulated by an 18-year-old man); were able to memorize 20–40 items of information; were able to cope with stressful events; ideally possessed a driving licence and were independent of public transport (it is unconvincing to be very late for an appointment when the patient supposedly lives close to the practice).

Standardized patients were required to make a written undertaking to keep all information about doctors strictly confidential.

Though some standardized patients were able to visit up to 20 doctors in a given role most managed 13 and it was found very useful to have some reserves in case of real illness.

Role and reliability training

The standardized patients were trained to play their role as a patient and to report reliable and valid facts about the consultation. This training took place at the medical school and lasted about 14 hours. During these sessions the patients repeatedly played their role in contact with other doctors. With the use of videotapes of these sessions the patients were supplied with feedback about how they performed. To check the reliability among the standardized patients three videotaped test consultations were evaluated. In these tests the patients played their role in a contact with a staff member of a university department of general practice. The patients completed a checklist of items, based on a consensus set of standards of care (see the accompanying paper),[7] immediately after such a consultation; the same consultation was also scored by three independent doctors. For each consultation the scores obtained by the three independent doctors were considered to be the gold standard for that particular consultation. Subsequently, the individual scores of the standardized patients were compared with this gold standard to assess their reliability. To assess the consistency of individual patients each patient was retested after about six weeks, after the visits to the doctors by scoring the same consultation recorded on videotape. These procedures have been carried out successfully before.[5,6] The reliability and consistency agreement scores all ranged from 0.9 to 1.0 (kappa 0.8–1.0).

Specific preparation for a visit

Selection of doctors to be visited

In some cases economic considerations influenced the selection of a doctor from the list of those willing to participate. It was important not to select doctors who could detect the standardized patient, therefore only one doctor per practice was selected. Caution was exercised in selecting doctors from small communities where everybody knows everybody or colleagues of the researchers with possible access to information about the standardized patient's medical problem or date of visit. Standardized patients were not asked to make these assessment visits to their own real general practitioner. They were sent to doctors and practices that they had never been to before, often travelling to other cities. This minimized recognition of the standardized patients by practice staff or other patients.

Reconnoitre of practice and district ·

All selected practices were visited by the first author to gain knowledge that would make the stories of the standardized patients credible. This enabled information to be collected about possible addresses for the patients, about places where the patients could be employed and about some local interesting buildings or events.

Selection of home addresses for standardized patients

The address used by a standardized patient needed to be credible to the doctor being consulted yet not so familiar that he was capable of recognizing its falsity. Addresses were selected in three ways. It was sometimes possible to access the computer of another doctor with a practice in the same city where the address of a real patient could be 'borrowed'. Real addresses of friends and relatives of the researchers were also used. If these did not succeed a risk was taken in selecting a non-existing house number in a known street. Once names and addresses were selected the doctors were notified by a routine mailing of the *ziekenfonds* of the inclusion of the patient on their list. This notification was made between two and five months before the standardized patient visited the doctor.

Information given to standardized patients

Standardized patients were given detailed information about the practice to be visited, such as telephone number, appointment system, address details of the doctors and other staff, the number of medical secretaries and the other health personnel (physiotherapists, practice nurses) present. Some practices received students or trainees from the research workers' medical school. Where possible standardized patients were told of the experiences of other standardized patients who had made previous visits. It might be argued that most real patients are not usually so well informed about a practice, but it should be borne in mind that standardized patients had to concentrate on their role. Every item of information about practices helped them to feel 'at home' in the practices and enabled them to concentrate better on essential items of their role. Around six hours of additional training was needed to give this information to patients about the practice they were going to visit and for return meetings around the time of and after the actual visits to the general practitioners.

Selection of dates for visits

After studying details about the practices the standardized patients were asked to visit the practices as soon as possible, choosing a date which would ensure that they saw their target doctor rather than a deputy.

Pilot visits

After the training programme standardized patients made a single pilot visit — that is, their first real visit in actual practice as a standardized patient — and this was evaluated at the medical school. These pilot visits were always successful and increased the confidence of the standardized patients.

Feasibility study

In January 1988 all 442 general practitioners working in the province of our university received information about this study and were asked to give their written permission that they would accept standardized patients into their practices until January 1991. The doctors were not told how many times and when they would be visited, nor were they informed about the content of the medical complaints. The doctors were told that at the end of the project they would receive information about which standardized patients had visited them. Of the 442 doctors, 137 agreed to participate and were sent a 'detection form', which had to be returned immediately after they thought they had detected a standardized patient.

Of the 137 doctors who agreed to participate, 39 were selected. The main criterion for including a general practitioner was that the distance between his or her practice and the university was less than 30 kilometres. This was done for financial reasons. Each selected general practitioner was visited by four different standardized patients presenting four different medical complaints during a four month period starting at least 12 months after they agreed to participate.

None of the standardized patients was detected. Two doctors returned a completed detection form but both forms reported real patients.

Discussion

The ethical problems of sending standardized patients into doctors' offices were discussed at the start of this project with representatives of the Dutch college of general practitioners (Nederlands Huisartsen Genootschap). It was concluded that there were no ethical problems if doctors gave a written consent to be visited and if they were informed at the end of the project when and by which standardized patients they had been visited.

It was encouraging that in none of the 156 consultations was a patient detected, even though each doctor was visited by four patients. There are probably several reasons for this success. First, there was a lengthy period between the doctors' consent to participate and the actual visits. Secondly, the original health insurance cards certainly helped the patients to validate their position. In at least two visits the patients thought that the doctors were suspicious at the start of the consultation. In both cases the original insurance papers convinced the doctors that nothing was wrong. Thirdly, the standardized patients were supplied with a great deal of inside information about the practice they were going to visit. Thus, before a particular visit, the only thing the standardized patient did not know was what the doctor looked like. During the project the standardized patients also learned to adopt strategies for dealing with the doctors' secretaries. Although we had thought that it would be difficult for standardized patients to visit doctors in small villages without detection, all eight such consultations succeeded. The selection of the practices may perhaps have been too strict. It can be concluded that for assessment purposes the standardized patient method is a feasible and adequate method, even in a health care system where doctors see only patients who are registered in their practice.

There are some additional aspects of standardized patient studies which are worth mentioning. The method was not expensive: the budget of this project (lasting two years) was calculated to be about £32 300. This sum includes the payment and training of the patients involved (£1100) and the fees for the participating doctors (£320). The rest of the budget consisted of the salary for the researcher (one doctor working four days a week).

Many non-medical issues were reported spontaneously by the standardized patients. For example, at the beginning of their visits most standardized patients felt embarrassed to find that the doctors were really interested in them. Some doctors used to explain where the patients could find the closest pharmacy or started small talk with the patients, after the complaint had

been treated. Other doctors actively helped standardized patients to dress or undress. Some doctors sent written patient information about complaints to the addresses of the patients. Some doctors, after receiving the routine mailing list of new patients, sent an invitation to the patient to come to the practice to get acquainted. Some peculiar details were reported: one doctor started to sing for his patient and another doctor smoked during the consultation. Furthermore, each patient saw many waiting rooms and different styles of interior. The waiting times differed considerably. In some cases standardized patients felt satisfied with the doctor, but not with the practice nurses. Some patients thanked us after the study for enabling them to get this experience and spoke of 'those nice, kind and dear doctors'.

At the end of the studies we informed the participating general practitioners about the methods used. None of the doctors felt offended and all were prepared to cooperate in future studies with standardized patients. All participating general practitioners expressed their belief in research by means of standardized patients in real practice: they considered the data to be valid and very useful for feedback purposes.

We conclude that the use of standardized patients is a method which has proved feasible in actual practice. The limitations of the method are in the simulation of particular medical problems, as we pointed out earlier. Roles in which patients would be at risk of undergoing invasive investigations could also be a problem. In general practice, however, this rarely occurs and if patients are referred to hospitals to undergo such investigations, the results can be simulated too. Until now an important aspect of this type of study was to test whether patients would succeed in entering the practices. This is not a problem and more attention may be paid to more important aspects such as the content of consultations and personal working styles of doctors. We believe that the standardized patient method has enormous potential for research and audit because it gives more insight into what goes on in the consulting room of doctors. One example would be a study in which doctors were asked immediately after a visit by a standardized patient why they acted as they did. From this we could learn more about why doctors act as they do and evaluate how they provide their care.

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