CHAPTER 1

Introduction
The need for adequately communicating doctors is widely accepted and is related to a plethora of patient related health outcomes\(^1\). General practice vocational training institutes and the general practitioner trainers can help general practice (GP) trainees to learn the necessary communication skills, by developing educational materials for effective teaching\(^2\). In the medical field, and particularly in general practice, there has been a change from focusing more on the patient rather than on the disease\(^3\). From this perspective, patient involvement and a patient-centered approach may not only be helpful in the process of learning consultation skills, they are in fact essential. We now need to know how educational interventions that enhance the involvement of real patients can best be evaluated and applied.

In this thesis we describe the steps that are required to build up evidence for patient feedback as an educational intervention, which is complex and multifaceted by nature.

**Context of the study**

The perception of adequate and effective communication between patients and doctors is subjected to change over time: from of a well-defined, well-delivered message communication style on the part of the doctor to a more interactive, give and take approach\(^4\). The goal should be set for a sender and a receiver reciprocal agreement. Effective communication is correlated with patient-related outcomes: improved health status, reduction of non-evidence-based prescriptions, reduced litigations, and patient satisfaction. It is self-evident that patients need adequate communication with doctors, but it is not only the patients who benefit from the good consultation skills of a general practitioner; doctors themselves can reciprocally benefit, for example by reduced diagnostic testing\(^5\).

It cannot be said that education on communication in general practice education has always been an underprivileged area. On the contrary, communication skills have traditionally (and rightly) been seen as one of the cornerstones of primary care. To set goals for graduating general practitioners, a competency profile was defined, in which the key competency ‘communicator’ covers the quality items of doctor-patient communication\(^6\).
Less well-defined and less known, however, is how GP trainees (or doctors in general) acquire good medical communication skills. Is this a natural process stimulated by ‘learning-by-doing’, or can it be influenced by rigorous methods of education? Assessment of significant improvements in communication performance, as a result of educational interventions or even systematic teaching, is notoriously difficult\(^7\), possibly due to a lack of sensitive instruments and a lack of outcome definitions.

In a recent framework for the curricula of the vocational training for general practitioners it is stated that ‘the scientific base for primary care medicine has advanced quickly, with an exponential increase of acquired knowledge and many guidelines as a result’. It is therefore remarkable that there is a great diversity in guidelines for doctor-patient communication, but very little evidence\(^8\). In fact, the implementation of more uniform teaching methods among the vocational training institutes is more justifiable when their effects have been proven.

The question that arises is to what extent there is evidence for medical teaching methods. Many studies have focused on the evaluation of programmes or satisfaction surveys, and these studies are meant to provide information for a wider audience\(^9\). However, the impact on evidence-based teaching is limited, especially if there is a lack of rigorous standards for the validity and reliability of methods and instruments.

What is needed is research to evaluate the effectiveness of educational interventions, which will make it possible to achieve higher levels of evidence-based teaching. Unfortunately, health professionals are often reluctant to participate in research on the effectiveness of educational interventions\(^{10}\). Opinions differ, not only with regard to the areas of need, but also about what ‘works’, and with which groups. Furthermore, the methodology of educational interventions is severely hampered by their complex nature, the difficulty of including a sufficiently large number of participants, and the difficulty of assessing actual change as an outcome measure\(^7,10\).
There are several models that can be used to conceptualise levels of learning evidence. One basic model, developed by Kirkpatrick in 1967\(^\text{11}\), has four levels of educational impact which measure:

- the reaction of students; what they thought and felt about the training
- learning; the resulting increase in knowledge or capability
- behaviour; the extent of improvement in behaviour
- implementation/application; the achieved change in the performance of the trainees.

Each level aims at a different level of educational impact, and therefore a different level of evidence-based teaching. Methodologically, the assessment of the level of evidence also greatly depends on the rigorousness of the applied methods and measurement instruments.

So, although much effort is put into teaching consultation skills, it is not clear how effective this is. The question that remains is: how can we further stimulate the learning of adequate communication skills effectively, within a student-centered context? Therefore, the staff of the vocational institute for general practice and the research staff worked together to develop the patient feedback programme. Patients are an important source from which to learn about consultation skills; it is simply a matter of how to optimize this learning potential, and how to evaluate it. First-year GP trainees, who were in the process of learning patient-doctor communication skills, participated in the patient feedback programme, and applied it in their daily practice. They were both the ‘objects’ and ‘subjects’ of study.

**Rationale of the study**

The choice for a patient feedback intervention is based on our wish to put greater emphasis on two major components of communication training that are believed to be effective for developing consultation skills: a greater involvement of patients in the education of GP trainees, and the development of new approaches to structured feedback assessment.

Real patient involvement might provide new stimuli in the patient-centered consultation style, which is already included to some extent in our vocational training for general practice. Patient-centeredness means that
physicians incorporate the opinions, experiences, wishes and concerns of patients in medical decision-making, within the limits of their own professional responsibilities. Patient-centered consultation skills have been found not only to enhance patient satisfaction, but also to improve various important outcomes, such as compliance to treatment, better health status and less symptom burden.

Feedback on their performance is highly valued by students (GP trainees) as well as by GP trainers and teachers. GP trainees find feedback useful, instructive, and reassuring. Furthermore, they value their teachers and GP trainers more if they make use of feedback as an educational tool. The effects of assessment and feedback on the performance of a doctor are probably greater when supported by an authoritative source, over an extended period of time. In theory, patients are in a good, or maybe the best, position to give feedback on the consultation skills of doctors, just because they are there, in sufficiently large numbers, and because they are the actual receivers of the care. However, intervention studies with patient feedback should ensure that patients are enabled to provide feedback according to well-defined criteria for safe and effective feedback. Good feedback has to meet several requirements. Most important of all is that the patients should be assured that giving feedback has no repercussions whatsoever on the care they receive or on their relationship with the doctor. Probably due to the unequal balance of power between doctors and patients, socially desirable feedback is a commonly encountered phenomenon, which limits the learning potential.

The GP trainee should also be well-prepared and comfortable with the feedback of patient assessments, in order to successfully adhere to such a programme. Important questions are: will GP trainees identify their needs for patient-centered consultation skills, and if so, how? Will they put these on their learning agenda, will they be susceptible for patient assessments and feedback, and most importantly, will they learn from the programme?
Objectives and outline of this thesis

Our aim of the studies described in this thesis is to evaluate the implementation of a patient feedback programme in the vocational training for general practice. Educational interventions of this type are complex projects, because the participants who are involved (including GP trainees, teachers and patients) all have different needs, priorities and personalities, many factors can influence the effectiveness of the interventions, and reliable and valid measurements instruments are scarce. That is why we chose a combination of various quantitative and qualitative research methods: a feasibility study (including qualitative research), a theoretical development study, validity studies, a controlled trial (in which the effectiveness of the patient feedback on the improvement of GP trainees was investigated), and a systematic review.

Development and feasibility (Chapter 2)
We piloted the patient feedback programme among first-year GP trainees, in a feasibility study in 2005. The trainees, their patients, their GP trainers, and their teachers at the institute were asked to give their opinions about the design and content of the programme. The qualitative part of this research tested the acceptance of patient feedback by the GP trainees, and we used the results to improve the feasibility of the programme.

Validity of the questionnaire (Chapter 3)
In this chapter we focussed on the validity of the patient feedback questionnaire on consultation skills (PFC), which is based on an existing questionnaire, the Patient Perception of Patient-Centeredness (PPPC). The PFC is an extension of the PPPC, including questions to cover all items of the key competency ‘communicator’. Patients and GP trainees were involved in the assessment of face validity, and experts were asked to assess the content validity. Subsequently we calculated clinimetric characteristics.

Patient view on patient-centeredness (Chapter 4)
We studied the patients’ perspective on components of patient centeredness in real consultations. Therefore patients were asked to complete a questionnaire,
the Patient Perception of Patient-centeredness (PPPC). Itemizing patient-centeredness into components (exploring both the disease and the illness experience, finding common ground, and the personal context) will provide more detailed information about the specific parts of a consultation that might need more attention.

*Effectiveness (controlled trial, Chapter 5)*
In a controlled trial, in which first-year GP trainees were randomly allocated to an intervention or a control group, we studied the actual effect: (improved) consultation skills as a result of patient feedback. The intervention group attended a patient feedback training programme, in addition to the regular communication training, whereas the control group received only the regular communication training. Standardised simulated patients visited the practices and video-taped the consultations at baseline and after three months. The consultations were assessed by eight trained staff-members.

*Context of existing literature (systematic review, Chapter 6)*
We conducted a systematic review to place our results in a wider context. In the systematic review we searched for evidence of the educational potential of real patient feedback on the general consultation skills of practicing physicians. Empirical studies with randomized (controlled) and various non-randomized designs (including qualitative research) were included, as long as the educational impact of patient feedback was described (varying from the evaluation of patient feedback to the assessment of change in outcomes).

*GPT participation (Chapter 7)*
The wide variation in adherence to the patient feedback programme by the GP trainees, as found in the trial study, was further investigated. We interviewed the GP trainees with a low level of adherence personally. We examined whether baseline consultation skills, such as performance on consultation skills, were correlated with the participation rate.
*Generalisability (Chapter 8)*

The teachers of the general practice vocational training of the VU medical center attended a short training course on the assessment of consultation skills with the MAAS-Global Instrument. They then assessed the video-taped recordings of consultations with real patients and simulated patients. All consultations were scored independently by two teachers, according to a randomized allocation procedure, providing results from which reliability and generalisability calculations could be made. With an evaluative questionnaire we assessed the perceived competence of the teachers after having attended the course.

*General discussion (Chapter 9)*

In this chapter we discussed the synthesis of the findings of the studies described in this thesis and we provided a critical reflection on what our findings add to the existing literature. We also discussed the strengths and weaknesses of the studies, and the implications for general practice vocational training and further research.

The thesis concludes with a summary of the design and results of the studies in both English and Dutch.
References


