CHAPTER 9

General discussion
How should we valuate the patient feedback programme? What did the GP trainees learn from patient feedback, and did they appreciate it? Due to the complexity of an educational intervention in terms of effectiveness, impact, learning potential and appreciation, it is not possible to draw simple conclusions. In this general discussion we once more reflect on the above questions. All phases of the research project will be addressed: from the feasibility study (in which needs were assessed), to the study of the validity of instruments, to the effectiveness study.

Before going into a detailed description of various items, a summary of the key findings is presented here.

- In the literature, evidence of the effectiveness of feedback assessments from patients is scarce, and is hampered by the heterogeneity of study designs and the lack of rigorously validated instruments (Chapter 6).
- There is evidence that real patient feedback interventions are effective on lower levels of educational impact, but not on the level of assessment of actual change (improvement) of the consultation skills of physicians (Chapter 6).
- Patient feedback is considered to be a major potential for acquiring consultation skills, but it is limited by several organisational obstacles, and by socially desirable answers from patients (Chapter 2).
- Younger patients and male patients, the language proficiency of the GP trainee, and the complexity of the consultation, are all correlated with lower patient feedback assessments (Chapter 4).
- Specific components of the patient-centeredness of communication, such as ‘finding common ground’ and ‘personal context’ were more critically evaluated by patients (and GPTs) than ‘exploring the disease’ (Chapter 4).
- The Patient Feedback questionnaire on Consultation skills (PFC) appears to be a valid, internally consistent instrument, it adequately covers the corresponding ‘communicator’ competency items, and it has an acceptable scoring scale (Chapter 3).
General discussion

- The patient feedback training programme did not improve the consultation skills any more than the regular doctor-patient communication education (Chapter 5).
- A sub-group of GP trainees who actively participated in the patient feedback training programme did more improve their consultation skills than GP trainees who did not actively participate (Chapter 5).
- The rate of participation of GP trainees in the (self-directed learning) patient feedback programme varied widely. However, this was not related to their baseline level of consultation skills or feelings of vulnerability/awkwardness when asking patients for feedback (Chapter 7).
- The assessment between teachers of consultations skills of GPTs varied significantly. For a higher reliability of the assessments, estimated with the generalisability coefficient, the use of real-patient consultations required less observations than observations of standardized simulated patients (Chapter 8).

These key findings have, in turn, given rise to many new questions. What could be the reasons for the limited overall effect of the intervention on GP trainees? Was it the methods we used, or the clinimetric qualities of the instruments, and did we inform, stimulate and monitor GP trainees enough to make them actively participate? Did we adequately check the participants’ needs?

This general discussion presents an overview of topics that refer to the possible role of patient feedback as a potential learning method. References are made to the corresponding chapters in this thesis, or to the literature. For better understanding of this chapter, the sub-headings cover sections which are all structured to include: an introductory paragraph; a brief summary of findings; a discussion of the findings; and practice implications for future education and/or research.

In the following chapters, a personal selection of some important subjects will be discussed that concern: research on patient feedback in general practice, learning aspects in general practice training, and research on medical education.
Research on patient feedback in general practice training

Assessment of needs
In order to make successful renewals or changes in the educational programmes in general practice training it is of great importance to carefully assess the needs of all participants: the staff of the vocational training institute (locally or nationally), the research staff, and the GP trainees. Research on educational interventions should also start with adequate needs assessment, which increases the adherence of participants to the intervention. Needs assessment can produce conflicting results, for example when the research staff suggest a more intensive and time-consuming programme than the educational staff or the GP trainees consider being feasible. From the palette of currently available methods for the assessments of needs, we applied personal interviewing, evaluation forms, and discussion groups with GP trainees and their trainers. In the specific field of research on patient involvement in general practice education, personal interviews were held with patients and representatives of a patient organisation.

Summary of findings
In the exploratory study (Chapter 2), the results of semi-structured interviews and discussion groups showed that the GP trainees and their trainers were of the opinion that patient feedback has a great potential to improve consultation skills. Most of the GP trainees expected that patient feedback would provide enough educational material for discussions with their GP trainers, without apprehensiveness about the ‘extra’ assessment or feelings of vulnerability. Although they were eager to know what the patients actually thought about their consultation skills, some feared unreasonable criticism. The GP trainees also mentioned that they already had a full agenda, and that a project like this would certainly be an additional burden. The evaluation forms of GP trainees showed that acquiring consultation skills was high on the learning agenda (next to clinical skills) for the GP trainees.

The patients were generally positive to very positive about the idea of giving feedback to the GP trainees. They expected patient feedback to benefit
both doctor and patient, and were generally glad to make a contribution to the GP training programme. The concept that their feedback would be used to improve the consultation skills of GP trainees was clear for most of the patients. Only a few patients admitted that they found it difficult to give negative feedback to a doctor (especially if it was not anonymous).

**Discussion**

Careful introduction of a newly introduced educational programme, such as patient feedback, seems to be more important when it includes sensitive assessments of personal skills. Although, fortunately, the participants seemed to accept the concept of patient feedback, both the research staff and the educational staff feared that the GP trainees and patients would be apprehensive about participation. Vulnerability in being assessed, the unequal balance of power between doctor and patient, fear of the consequences etc., there are many reasons why the patient feedback programme might encounter obstacles. However, we seemed to have been able to match the needs of the participants to the content of the intervention, which has great impact on the validity of the programme and adherence to the programme.

**Practice implications**

The importance of assessing the needs of all participants can easily be underestimated. In future research on the implementation of educational programmes, we might even more deliberately ask ourselves the following questions: Have we really checked the patients’ needs? And have we checked on the GP trainees’ needs? Does the programme fit into their schedule? And what if these answers are conflicting, have we convinced them of the true benefits of educational research and the implementation of new education programmes?

**Concept and design**

Asking patients for oral feedback on the quality of the consultation at the end of a consultation is quite relevant, but students (and teachers) are looking for more general, aggregated or context-independent forms of feedback and skills assessment. As the systematic review (Chapter 6) demonstrated, almost all of
the patient feedback studies that were included made use of questionnaires for the assessment of skills\textsuperscript{1-14}. Questionnaires make it possible to study patterns and comparisons. However, there seems to be no preferential method with regard to how the feedback assessments (results of the questionnaires) should be transferred to the receiver. Personalised (tailored) reports or coaching sessions in which the collated summary of feedback is discussed are most frequently used. The intensity of patient feedback programmes, as described in the literature, varies widely with regard not only to the number of patients per physician, but also the duration of the intervention. Discussing the results and the meaning of patient feedback with a GP trainer, a teacher, or among peers, is invented to further intensify the learning effect.

Summary of findings
From the feasibility study (Chapters 2 and 4) we concluded that the educational value of patient feedback was correlated to the context of the consultation. Apparently, when GP trainees had to deal with relatively simple medical issues, patient feedback produced less meaningful learning material. In view of the common finding that first-year GP trainees see a high percentage of patients with relatively simple medical problems, they were advised to select those patients from whom they expected to receive relevant feedback. We therefore chose a method for acquiring patient feedback in which the GP trainees themselves select patients and ask them for feedback on their consultation skills, directly after the consultations. Based on the literature, the number of patients per GP trainee was set at 30, but in the following trial it was set at 20, because the GP trainees considered that acquiring feedback from 30 patients was an extra burden on an already busy time-schedule. The length of time needed to acquire this number of patients was set at three months.

The study material that was provided with the patient feedback programme included assignments for GP trainees, in which they discussed the collated results of patient feedback with their trainers. Approximately one third of the GP trainees completed the assignments, one third partly completed them, and one third did not complete them at all.
**Discussion**

The methods of patient feedback described in the literature are too diverse to make it possible to draw any conclusions about which is the best. The intensity of the programme is not always clearly correlated with the educational impact, and choices are also mainly based on local and cultural customs.

We expected the GP trainees to receive more valuable feedback if they themselves selected the most appropriate patients. This method is new and unique, and was expected to produce substantial educational impact. Experiential practice-based learning, in which the GP trainees themselves select patients to learn from, fits into the generally applied learning methods that are already used in the vocational training provided by the VU medical center.

**Practice implications**

Obviously, the intensity and duration of patient feedback should be sufficient to produce actual effect or change. It is arguable that the impact of our method could gain in strength. The choice of intensity should be a sensible one: a programme that last for many years, or require the involvement of a great many patients, or inflicts increased costs or a burden on the system, will defeat its own aim.

A possible strategy that can be applied to gain more strength is to make patient feedback a more prominent topic in the learning discussions with the GP trainer, in which case the trainers should be prepared to participate more actively. Nowadays, the agendas of these discussions very much depend on the input of the GP trainees, but they could be made more structured and test-driven. A structural and prolonged focus on the perspective of the patient can be combined with the perspectives of the GP trainers or the co-workers (360 degrees feedback), which could enhance the educational effect, at least under conditions in which skilled facilitators encourage reflection and set concrete goals\(^\text{15}\).

The patient sample selected by the GP trainees is not a random sample, so the patient feedback assessments can not be considered to be objective outcome measures. If there is need for objective patient feedback, clear assessment of the patient’s characteristics and the content of the consultation is
a prerequisite. Questionnaires should then be handed out to patients at random by a research assistant or a practice assistant. This may be a feasible alternative, especially when GP trainees appear to be struggling to complete their assignment, but of course this excludes the particular advantage of receiving feedback after specifically valuable consultations. Again, this method, in which there is no random selection of patients, precludes setting a standard, and does not allow the benchmarking of scores in a cohort of GP trainees.

The PFC questionnaire
The questionnaire we needed had to cover the whole domain of general consultation skills, the principles of patient-centeredness, and the meaning and content of the key competency ‘communicator’. Furthermore, it had to be practical and not to be much of a burden to complete for the patients and the GP trainees, and it had to be relevant and appealing. In general, it ought to be the right learning instrument for the development of consultation skills, and ultimately help GP trainees to reflect on their consultation skills and guide discussions with their trainers or their patients.

Many of the existing patient satisfaction questionnaires share a drawback: ceiling effects\textsuperscript{7,16,17}. This scoring on the upper end of an answering scale hampers the possibility to measure change (because there is little room for improvement), and also limits the learning impact.

Summary of findings
We began the validation process with, as a basis, an already existing questionnaire, the PPPC (patient perception of patient-centeredness), because this questionnaire already covered a substantial amount of general consultation skills (Chapter 3). A further advantage is that it consists of a patient version and a doctor’s (self-assessment) version, which challenges the participants to reflect on their performance and the learning possibilities. In order to cover all items of the key competency ‘communicator’\textsuperscript{18}, we extended the PPPC to include items controlled for face validity (by involving patients and GP trainees) and content validity (by involving a panel of experts).
The resulting questionnaire, called the Patient Feedback Questionnaire on consultation skills (PFC), contains 16 questions (on a single page) and takes only a few minutes to complete\(^\text{19}\). The technical qualities seem to be satisfying: factor analysis showed a one-dimensional construct with a high internal consistency was high (Cronbach’s alpha 0.89). For the single items, the mean item-response rate was 97.3%, and the mean percentage of maximum scores (ceiling effect) was 67.5%. In conclusion, the PFC appears to be a valid, internally consistent instrument.

**Discussion**

The PFC is based on a successful combination of two principles: patient-centeredness and the key competency ‘communicator’, which apparently share a comparable concept (one-dimensional construct). It is reassuring that other recent studies have also developed validated questionnaires\(^\text{17}\), with comparable content (eye-ball test), which reciprocally enhance the external validity of both questionnaires.

The efforts we made to prevent ceiling effects, by selecting and rephrasing questions, has produced acceptable results. However, ceiling effects in the scores of patient (satisfaction) questionnaires are difficult to overcome. Socially desirable answers, as a result of inequality in the balance of power between patients and doctors, might be reduced by improving patient education and information. Moreover, patients might really be satisfied with the communicative aspects of a consultation with a GP trainee, which can be considered as a major quality of GP trainees. However, from the perspective of the teaching staff, who regularly assesses video-taped consultations, there is still considerable room for improvement in many cases.

**Practice implications**

The PFC is a useful, practical and attractive instrument for transferring feedback from the patient to the GP trainee. We do not claim that this is the ‘final version’ of the PFC, because the validation process is dynamic. Further external validation might indicate the need for modifications and improvements.
Although patients tend to answer on the upper end of the scale, it is the interpretation of these answers, in particular, that gives the impression of limited learning potential. GP trainees tend to interpret the results as too flattering. We need to convince them that only excellent results are satisfactory. Some favour the idea of dichotomising the outcome into ‘excellent’ ratings (maximum scores) versus all other ratings, which visualises the deficiencies more clearly and is therefore more educative\(^7\).

**Training and organization**

Adequate estimation of time-burden, financial costs, availability of staff, and other feasibility aspects, is essential for such complex projects, otherwise they will lose their impact. The patient feedback training programme was intended to prepare, educate, and ultimately facilitate GP trainees to work with patient feedback and to benefit from it.

Before the GP trainees started asking patients for feedback they first attended a training session, in which they were informed about the content and meaning of the programme. All course materials were both provided digitally and in print form. The GP trainees could practise, with a simulated patient, how to ask a patient for feedback. They also discussed organisational aspects, and the pitfalls of patient feedback in daily practice. The training was supervised by the educational staff, who received instructions (in a two-hour meeting), a protocol, and a checklist of the items to be discussed with the participants.

*Summary of findings*

Despite the comprehensive preparation, according to the GP trainees, obtaining patient feedback in their practice was not an easy thing to do. The majority of the GP trainees (67.4\%) encountered various obstacles in organising the programme in their practice that hampered the inclusion of patients for feedback (Chapters 2 and 7). In general, these obstacles were related to GP trainees not being well informed, a busy time-schedule, or basic organisatorial problems.

The progress of participation was monitored by the teaching staff. At regular intervals the GP trainees were given encouragement in an open, ‘non-authoritive’ way (by letter or e-mail), and were asked about their progress in the
project. The research team was not involved in motivation to adhere to the educational programme or individual progress.

Discussion
The importance of a well-designed and well-organised training programme may seem obvious. It is likely to be related to the motivation of the GP trainees to actively participate in the programme, at group or individual level. However, in view of the obstacles mentioned by GP trainees it is questionable whether they were sufficiently informed and facilitated. It is always a delicate balance between providing enough information and overdoing things (being intrusive). Close monitoring, based on individual needs and motivation, is probably the best approach.

Practice implications
The literature on patient feedback intervention studies often lacks adequate descriptions of process evaluation with regard to the various aspects of training and organisation. In our opinion, adequate descriptions are of major importance, enabling new projects in general practice or other medical specialties, to benefit from them, by learning from the pitfalls, and enabling them to reproduce or improve on the results. In future projects of this kind, the participation of GP trainees could be enhanced by checking individually what is needed before they actually start implementation in their practice, and by monitoring the experiential learning process closely.

Standardized simulated patients
The assessment of consultation skills is related to the context of a consultation, therefore standardized (simulated) patients can be needed. Doctors are usually aware of the fact that they are being observed or assessed (unless incognito patients are involved). The performance of consultation skills of GP trainees is therefore usually assessed in the daily professional practice, which is their natural habitat. This approaches better the performance of GP trainees ('does-level'), instead of in a controlled, standardized setting in which the GP trainees can demonstrate what they can do ('shows-how-level'). An alternative method
that is well described is prolonged video-recording of all subsequent consultations within daily practice. A selection of video-taped consultations against sample-criteria can than be made.

Summary of findings
In our project, three simulated patients (professional actors), who were trained to act in six consultation scenarios of moderate and comparable complexity, visited all practices. The visits were announced, and the GP trainees gave their consent before participating. All consultations (one scenario at each visit) were video-taped, so that they could be assessed by the teaching staff (Chapters 5 and 8). The simulated patients encouraged the GP trainees to behave naturally, and not to put more effort into the consultation or ask more questions than they would normally do. The simulated patients were also trained to give individual feedback to the GP trainees after the visits.

Discussion
With incognito standardized patients the GP trainees would be unaware that they are being assessed. We chose not to use this method, mainly because in such projects implementation of the fielding procedure is quite difficult to realize, and also because of the excitement that such projects cause among GP trainees.

Well-trained professional actors are necessary in such projects. They have to portray a credible patient and a credible consultation, and do so repeatedly under the same conditions, so that the GP trainees are facilitated in behaving naturally in their role as a doctor. Furthermore, more than half of the teachers who finally assessed the video-taped consultations mentioned that the professionalism of the actors ‘coloured’ their scores (Chapter 8).

Practice implications
We recommend the observation of consultations with standardized patients in the general practice location, even though the training and involvement of simulated patients is time-consuming (and costly). It is a method that reflects most clearly how GP trainees actually perform under comparable conditions,
although the assessments are still on the ‘shows-how’ level. If assessments on the ‘does’ level are preferred, labour-intensive and fragile procedures, such as fielding incognito procedures, are needed. The method of prolonged video-recordings in daily practice and inclusion of consultations against sample criteria seems to be a valid, though costly and strenuous, alternative.

Building up evidence of effectiveness
The application of new educational methods should be guided by scientific evidence of their effectiveness. There is little evidence of the actual learning potential as a result of patient feedback in the postgraduate training of young physicians or the professional training of more experienced physicians. Furthermore, the level of impact of most of the earlier studies is limited to ‘appreciation and valuation’ data (‘happiness data’). One can imagine that the contribution of these studies to actual scientific proof or evidence is limited, and depends much on the rigorousness of the methods used to acquire qualitative data. Actual change in behaviour as a result of the introduction of patient feedback is much more difficult to demonstrate, possibly due to the lack of precision in outcome measures, or the lack of responsiveness of the measurement instruments.

Summary of findings
As demonstrated in the review (Chapter 6), there are several levels of educational impact as a result of patient feedback, and several corresponding levels of evidence of effectiveness. The chapters in this thesis describe a diversity of consecutive studies (from qualitative research to a controlled trial), that all build up integrated evidence of the effect of patient feedback (interventions).

There is less evidence for effectiveness of these studies at higher levels of educational impact. The GP trainees seemed to valuate/appreciate patient feedback, and they frequently formulated learning topics as a result of the feedback they received (Chapters 2 and 6). At the highest level of educational impact, in the trial (Chapter 5), we found no direct evidence of the effectiveness of patient feedback (intention-to-treat analysis); it seems only to be effective for
a sub-group of GP trainees who actively adhere to the patient feedback programme.

**Discussion**

Acquiring evidence of effectiveness at the highest level of educational impact (actual change) can be difficult, due to the inherent complexity of interventions, the usually small number of participants involved, the lack of precision of outcomes measures, and the limited responsiveness of instruments with which the outcome measures are assessed\(^{23}\). Our intervention seems to be no exception.

Consultation skills cover a large variety of qualities. One can easily imagine that assessing improvements in consultation skills in general is far more difficult than assessing only one single skill or quality. The MAAS-Global instrument that we used to measure general consultation skills mainly covers the same areas of the consultation as the PFV, but it has previously been criticised for lack of responsiveness\(^{24}\). However, in our trial, a mean improvement in the consultation skills of all GP trainees (intervention group and control group) was found during the early stage of their vocational training.

**Practice implications**

An important remaining is: what level of evidence or support is needed before including new learning opportunities, such as patient feedback, in a GP vocational training programme is warranted. In the past, the answer to that seems to depend on personal and local preferences for teaching (patient-centered) communication skills. In future, we recommend awareness of the level of acquired educational evidence and the consequences this has for incorporation new learning methods.
Learning in general practice training

The definitions of the required consultation skills for GP graduates are described in the competency profiles\textsuperscript{18}, so it is important for teachers to know how GP trainees can reach this end-goal efficiently. What is the most efficient and effective learning method? Apparently, not all GP trainees have the same learning needs, and especially not all at the same stage in their training. Therefore, in recent years at the VU medical center, acquiring knowledge has become more characterised by the self-directed learning method, in which not the teacher, but the student sets the learning agenda\textsuperscript{25}. GP trainees are encouraged to plan ahead with regard to the topics they want to learn, and discuss these with their teachers and peers. The patient feedback programme, with emphasis on practice-based experiential learning, was designed to fit into the general training of consultation skills. Two aspects that have strong educational impact on the performance of practicing physicians are 1) performance assessments\textsuperscript{26}, and 2) feedback\textsuperscript{27}, both of which will be discussed below.

Assessments of GP trainees
Assessments of GP trainees are considered to be important, not only for measuring the progress of clinical performance (summative assessment), but also because they have a strong educational potential (formative assessment). In the Dutch new curriculum of the vocational training for GPs, the GP trainee’s performance with regard to consultation skills is assessed regularly. Unfortunately, there is insufficient evidence of the reliability of these assessments.

Summary of findings
In the trial study (Chapter 5), 176 video-taped GP trainee consultations were observed by the trained staff of the institute for general practice to assess the consultation skills of the GP trainees with the MAAS-Global instrument, which has been tested for validity and reliability. With the generalisability theory\textsuperscript{28,29},
the number of consultations per GP trainee and the number of assessors per consultation could be calculated for achievement of reliable assessments (Chapter 8). The difference in scoring between the assessors was significant. The assessors appreciated working with the MAAS-Global instrument as they gained experience and competence.

Discussion
For summative assessments, the number of consultations needed to obtain reliable assessments was high, but greatly depended on the type of consultation that was observed, whether it were standardised consultations with simulation patients, or consultations with real-patients. For a higher reliability of the assessments, we recommend the use of real-patient consultations, of which less observations are required than observations of standardized simulated patients. For the teachers, the formative assessments of the consultations, and possibilities to give feedback to the GP trainees, probably have greater meaning.

Practice implications
At our institute, we now have a group of teachers who are experienced in the use of the MAAS-Global instrument. The results of their mean scores were fed back to them. Awareness of being critical or lenient might affect their future scorings or reduce the inter-observer variation. It might be interesting to make combinations of known critical assessors and known non-critical assessors ('hawks' and 'doves'), for a reciprocal averaging effect.

Feedback
The effect of feedback on practicing physicians has been widely studied in recent years. It appears that feedback is one of the more powerful methods with which to stimulate learning in students. The Pendleton rules provide certain conditions for safe and effective feedback, which should be conducted respectfully, non-judgementally and in a friendly way, and also be constructive (with the intention of achieving improvement). Furthermore, it should be bilateral, and leave options for agreements about intentions as to how to continue. Moreover, timing and dosage are also important aspects.
Summary of findings
Apparently, GP trainees are far more interested in criticism than in positive feedback. An important finding in our studies was that the GP trainees indicated that too much positive feedback decreased their motivation to learn, because they considered it unrealistic. They stopped handing out questionnaires, which further limited the learning effect. In Chapter 4, we studied the differences in opinions about the quality of consultation skills between patients and doctors, and found that GP trainees were far more critical in their self-assessments than the patients were in their feedback assessments, although they also showed similarities in the pattern of the different components of patient-centeredness.

Feeling vulnerable when asking patients for feedback, anxiety for the results of the feedback assessments, a non-comfortable learning environment, and apprehensiveness about disturbing the patient-doctor relationship might seem to be obvious barriers for participation\textsuperscript{32}, but they were seldom mentioned by the GP trainees.

Discussion
Considering whether feedback from patients by means of a questionnaire is given according to the conditions for feedback as described above, we think it generally has the following the qualities: it is respectful and friendly, non-judgemental and constructive, aiming at improvement. What is missing is a direct contact with the patient, and the fact that it is not bilateral and therefore leaves no room for agreements about intentions and plans on how to continue. Moreover, we do not know for sure whether the GP trainees felt that it was safe to ask patients for feedback, despite the fact that they denied feelings of vulnerability. From the perspective of the patients, it is unsure if they were convinced that critical and honest feedback could benefit the development of GP trainee’s consultation skills, and therefore withhold them of potential feedback material.

Practice implications
Neither the patients nor the GP trainees, like most other people, are (constantly) aware of their communication behaviour, and they are not trained to register or
rate their skills. This takes time and critical reflection. More intense and personalised education and information for patients might solve this problem. We should also prepare each participating GP trainee individually of the type of answers they can expected from patients and how to handle them. It seems a paradox that critical feedback from patients, which might reflect their dissatisfaction, could also be considered as a high learning potential (formative setting). An open and equal relationship between patient and doctor is then a prerequisite.

**Learning incentives from patient feedback?**

Feedback from patients provides insight from a unique perspective. As in other societal sectors in which policies are made after thorough marketing research, client satisfaction can lead to better service and better quality of the care that is provided. More understanding of how and why GP trainees can learn from this new perspective is desirable. GP trainees should be aware of their personal qualities and deficiencies, and should recognise what feedback can offer them. This process has to be monitored by teachers or GP trainers if it is to succeed.

**Summary of findings**

The patient feedback programme is based on experiential learning. This implies that along the way, the GP trainees were supposed to learn about their qualities and deficiencies from their patients’ perspective. For example, in general, the patients were quite satisfied with the diagnostic phase of a consultation, whereas they were less satisfied with finding common ground or the personal context of the consultation. Because the feedback was also consultation-specific, reflection on what just had happened during the consultation provided all kinds of possible learning potentials.

To some extent, most of the patients seemed to be able to give feedback. We do not know how well patients were being informed and motivated by the GP trainees to give feedback, and finding patients who can make a real contribution is therefore a challenge for the participating GP trainees.
Discussion

It is likely that not all GP trainees are suited for receiving patient feedback, because it probably requires a certain state of mind, a certain sensitivity or susceptibility. The following example may demonstrate this. A patient reports: ‘if the doctor had the right patient file in front of him, I would have had far more confidence in him’. Although this feedback seems to offer major learning potential, in the self-assessment form the GP trainee only mentioned ‘an overly critical patient’. The question is: do first-year GP trainees already have these qualities, or are they pre-occupied with so many other relevant things (e.g. making medical diagnoses)?

Giving feedback to the GP trainees on their baseline level of consultation skills (and optionally, benchmark scores), before the start of the patient feedback programme could probably motivate the GP trainees to actively participate and learn. To ensure random assessment of pre-intervention and post-intervention measurements in our trial, we did not do so.

Practice implications

It is interesting to identify the characteristics of GP trainees who benefit (or do not benefit) from a patient feedback intervention, or from educational interventions in general. Do these GP trainees have different demographics, different learning styles, different baseline skills, or do they have different needs?

It may be interesting to offer this programme to more experienced GP trainees (in their third year, the year in which there is more contemplation). However, from the results of the literature review (Chapter 6), there seems to be no correlation between the educational stage (student or experienced physician) and the intention or ability to change.

Projects like this need close monitoring by the teaching staff and GP trainers. It is important to know what motivational teaching actually can contribute. We need to find ways to measure the content and impact of discussing the learning topics, as a result of patient feedback, or in general.
Chapter 9

Research on medical education

In addition to offering new insights into learning from patients, the studies in this thesis have demonstrated the importance of close collaboration between practicing GPs and/or GP trainees, the staff of the vocational institute, and researchers. Ideas for research topics should be shared between the three parties, discussed with regard to relevance and practicality, and agreed upon. Ideas that do not meet these requirements are deemed to fail. Figure 1. presents a diagram of this co-operation.

![Figure 1. Research on medical education](image-url)
Has the patient feedback project met these criteria? The idea of including patient feedback in the vocational training in order to give patients more say, originated from the vocational training staff and the research staff. The proposed participants, the GP trainees and the GP trainers were informed in good time, and open discussions provided ideas for improving the programme. A year before the actual trial started, a feasibility study was conducted, to optimise the effectiveness of the programme, and to overcome pitfalls (Chapter 2). In this respect, we can conclude that the basic requirements were met.

This thesis has shown that the amount of effort that is needed to make educational interventions ‘work’ should not be under-estimated. Although the intention is to meet the needs of all participants, it should be kept in mind that realistic goals must be set. Health workers might be reluctant to value research on the effectiveness of educational interventions, because of different needs and different views about ‘what works’\textsuperscript{23}. Furthermore, it is probable that not all GP trainees will appreciate the patient feedback programme, and it is most likely that not all GP trainees will benefit from it.

It should be kept in mind that the intervention is ‘work in progress’: the patient feedback programme and the implementation procedure are new, teachers and GP trainers are still getting used to it, and it is becoming more tailored to the needs of the GP trainees. It might even take several years before the programmes will be integrated in the postgraduate training.

How can we do better? From the experience of the Centre for Studies in Family Medicine, London, Canada, we learned that for a period of at least three months researchers must be present in classes at the time of implementation of a new intervention in order to get it off the ground. You cannot simply deliver a research project at the door of the institute and expect it be carried out as it was meant to.

The educational training of GP trainees tends to be more practice-based, and less centrally planned. We did not go to the practices to monitor the learning moments and the individual progress of the GP trainees, because we considered that to be too intrusive. We think that it might even reduce the effectiveness of patient feedback.
Research on communication skills is probably the most common topic in research on education in primary care. Communication education represents approximately 25% (high share) of the education time at the institute during the first year of the GP training. The studies described in this thesis and other studies\(^2,7,16,35\) have shown that the communication skills of GPs and GP trainees are rewarded with high patient satisfaction rates. To maintain the relatively high standard of communication, it is justifiable to continue with education and research on communication as is the standard at the moment. However, it also gives rise to the question of whether or not research on other key competencies should receive more attention. One can think of collaboration, professionalism, etc. Irrespective of the specific field that is studied, for educational research in primary care it remains important to know how GP trainees learn and why they learn.

Research questions and study designs should be realistic, and have a reasonable expectancy to measure a change in outcomes. It seems that higher levels of evidence require high levels of effort. Scientific proof of effectiveness can be achieved at various levels, from valuation of the project to an actual assessment of change. However, although it is costly and time-consuming, major scientific proof should be acquired by designing educational interventions that apply rigorous standards of reliability and validity, whether they are (randomised) trials or qualitative studies\(^36\). As an example, we refer to the vast number of patient satisfaction studies, and, in sharp contrast, the limited number of studies that measure their learning potential.

This thesis has shown that carrying out research in the field of medical education is certainly not easy. In this general discussion section, we have made a critical appraisal of our studies, and we have made many suggestions for improvements and new strategies. Research on medical education has a great future.
References


