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Gaining Professional Competence for  
Patient Encounters by Means of a  
New Understanding

BY

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## **ABSTRACT**

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Swedish health care is currently facing problems, such as lack of financial resources, staff shortage and dissatisfaction among patients and professionals. Patients' dissatisfaction was the point of departure for the present study, and one approach dealing with this problem was investigated. It was hypothesised that a patient-centred perspective could offer a possible solution. The aim of the study was to explore health care professionals' and medical students' understanding of their professional role and the patient encounter. A further goal was to determine whether these understandings could be developed by educational interventions. Students and professionals have been either interviewed or responded to a survey about their professional role and the patient encounter. Qualitative analysis was used. One group- and one individualised intervention were carried out. The participants' understandings of their professional role were taken as the starting point for learning. The results showed that a minority of medical students and professionals in diabetes care had incorporated a patient-centred perspective. Nurses in telephone advisory services recognised the patients' needs, but experienced conflicting demands of being both carer and gatekeeper. A non-optimal match between patients' needs and what professionals understand as their role could cause some of the problems. Competence development could be achieved by taking the participants' understanding of the professionals' role and of the patient encounter as a starting point for reflection. The results have implications for changes in organisation and education in health care, to optimise outcomes of care. Time for reflection, mentoring and professional development is needed.

*Keywords:* competence development, diabetes care, educational interventions, medical students, patient encounters, phenomenography, phenomenology, professional role, telephone advisory services

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*To Torbjörn with all my love*



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## *Swedish summary – Sammanfattning på svenska*

### **Att utveckla professionell kompetens för patientmötet genom en ny förståelse**

Svensk hälso – och sjukvård brottas med en mängd problem, såsom sviktande ekonomi, personalbrist och missnöje bland anställda och patienter. Det missnöje som finns bland patienter avser ofta bemötandet. Avhandlingen fokuserar mötet mellan patient och personal, och utgår från antagandet att ett patientcentrerat arbetssätt har störst möjligheter att göra både patienter och personal nöjda. Huvudsyftet var att undersöka hur vårdpersonal och läkarstuderande förstår sin professionella roll och mötet med patienten. Vidare att studera huruvida yrkesrollen kan utvecklas genom interventioner med syfte att förändra förståelsen.

Läkarstuderande, sjuksköterskor i telefonrådgivning samt personal i diabetesvård har antingen intervjuats eller besvarat en kort enkät. Kvalitativa metoder har i huvudsak använts för analys av materialet. Två utbildningsinterventioner har genomförts, en individuell och en i grupp. Båda har syftat mot ett mer patientcentrerat arbetssätt. En fenomenografisk ansats har använts vid interventionerna. Genom *learning-by-doing* och *reflection-on-action* togs deltagarnas förståelse av yrkesrollen som utgångspunkt för deras lärande process.

Kartläggningen av förståelsen av den professionella rollen och mötet med patienten bland läkarstuderande och personal i diabetesvård visade att endast en mindre andel av dem införlivat ett patientcentrerat perspektiv. Sjuksköterskorna i telefonrådgivning såg tydligare patientens behov, men brottades med motstridiga krav på att vara både sjukvårdens dörrvakt och patientens hjälpare. En del av sjukvårdens problem kan spåras till dålig överensstämmelse mellan vad patienterna efterfrågar och ser som centralt, och vad vårdpersonalen ser och förstår som sin roll och arbetsuppgift. Kompetensutveckling för patientmötet kunde uppnås genom båda interventionerna, vilket visar på det fruktbara i att använda förståelsen som utgångspunkt för professionell utveckling. Resultatet har konsekvenser för såväl organisationsutveckling som vårdutbildningar. Tid för reflektion, handledning och professionell utveckling bör införlivas i systemet för att skapa förutsättningar för högkvalitativ vård och optimalt utfall av denna, såväl för samhället i stort som för enskilda patienter.

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## ***Chapter 1: Current problems in the health care sector and the patient-centeredness concept***

### **1:1 Introduction**

The problems that the health care sector has to face today are numerous, but the most important include financial cutbacks, shortage of staff, increased distress and workload among personnel within the health care sector [1] and general patient dissatisfaction. It could be expected that working conditions within the health care sector impact upon quality of care and patient satisfaction. For example, stress and job dissatisfaction among physicians and other professionals may have negative effects on the care and satisfaction of patients [2]. The problems faced by the health care sector need to be dealt with using a multitude of strategies. This thesis does not aim to offer a solution for all these complex problems. However, the point of departure for the study has been the current patient dissatisfaction, and one approach to deal with the problems is investigated here.

Patient dissatisfaction might result in repeated visits to health care centres, unnecessary referrals and insufficient handling of self-care or illnesses; moreover investments made in technique [3] and organisation, and the patient's own resources cannot be fully utilised [4-6]. Consequently, an unsuccessful encounter between patient and professionals might generate increased economic burdens for an already strained health care sector [3, 7, 8]. Furthermore, if health care professionals take a traditional, professional-centred approach, there is a risk for the patient to be objectified [9, 10]. This might cause difficulties for both the patient and society [11] as noted by Roter [5]:

*A frustrated and angry patient may make inappropriate time and service demands and ultimately drop out of care completely because of failed expectations. For physicians, these visits represent the most frustrating aspects of medicine reflecting 'the difficult and hateful patient'.*

There seems to be a gap between what patients' want from health care, and the professionals' view of their task. Patients currently complain that doctors and nurses do not listen to them [12]. If the health care professionals do not listen, the patients' are likely to be dissatisfied with care [13] and their real problem might not surface. A patient-centred approach offers an opportunity to increase the patient's autonomy and involvement in decision-making, care and treatment [8, 14, 15]. However, the current complaints indicate that professionals might have a professional-centred approach and more authoritarian style than what patients' prefer. Hence, the focus in the thesis will be on the patient-professional encounter and the role of the professionals. The patient-professional encounter is at the very centre of the health care arena [13], and the quality of the encounter is thus likely to have an important contribution to make to patient satisfaction. This study aims at describing health care professionals understanding of the patient-professional encounter, and of their professional role. If professionals do not take a patient-centred perspective, would it then be possible to influence their understanding of the encounter and thus enhance competence development?

To explore the understanding of the professional role and of the patient encounter in a broad way three groups were studied. The first group was comprised of medical students representing future health care professionals; the second group were nurses in telephone advisory services, representing the basic

primary health care; and the third group consisted of health care professionals in diabetes care, representing those caring for the chronically ill. The views of health care professionals are important to study because their understanding of the encounter will influence their actions [16, 17]. Hence, the perspectives studied are those of health care professionals. Although views of patients' are equally important, they are beyond the scope of this study. However, the ultimate goal is to bring about changes in practice for the benefit of the patients.

The thesis is outlined as follows: the central concept of patient-centeredness and some methodological considerations are presented (Chapter 1). Thereafter, modern theory of competence and its development is introduced (Chapter 2). Next, the first three studies are described, giving a broad picture of medical students' (Chapter 3) and health care professionals' (Chapters 4 and 5) views of their professional role and the patient encounter. With the findings from those studies, the two intervention studies with the source of departure in modern theory of competence development are described (Chapter 6). Finally, the overall results and their implications for practice and further research are discussed (Chapter 7).

## **1:2 Aims and overview of studies**

The overall aim of this thesis was to explore health care professionals' and medical students' understandings of their professional role and of the core aspect of the patient encounter. A further aim was to study if their understandings of their professional role could be developed and influenced to a more patient-centred understanding.

### **Specific aims:**

- To describe the views medical students have of their professional role and the organisation of future health care.
- To describe how nurses' experience the patient encounter by telephone.
- To identify the different understandings that health care professional have of diabetes care and the distribution of these understandings.
- To map if physicians might develop a more patient-centred approach of working by an experienced-based specialist course and how such a development is related to the physicians' understanding of the task.
- To map physicians and nurses understanding of the patient encounter before and after an educational intervention programme that focused on their experience of the encounter, and to describe how their understanding changed as a result of the programme.

*Table 1.* Overview of participants and methods used in Studies I-V.

<b>Study</b>	<b>Participants</b>	<b>Data collection</b>	<b>Data analysis</b>
I	53 medical students	Written essays	Thematic analysis
II	5 nurses in telephone advisory services	Interviews	Phenomenological analysis
III	169 primary health care physicians, nurses, assistant nurses and chiropodists	Written questions	Phenomenographic analysis of questions and numerical distribution of answers
IV	10 physicians in specialist training	Video recordings Written answers to before and after questions	Time study Assessment with Pendleton et als.' consultation map Thematic analysis
V	2 GPs and 2 diabetes nurses	Before and after intervention interviews	Phenomenographic analysis

### **1:3 The patient-centred approach – a central concept**

The patient-professional encounter is the basis for clinical work. An encounter based on mutual trust, respect and empathy is powerful. As stated in the introduction, a patient-centred approach might be a good way to deal with the current dissatisfaction among patients. The patient-centred perspective offers an opportunity to increase the patient's autonomy and involvement in decision-making, care and treatment [8, 14, 15]. However, the concept is vague, with about as many definitions as there are authors [5, 11, 18]. In this thesis, the patient-centred concept is defined in terms of a *focus on the patient as a human being with an illness* rather than a focus on the disease itself.

A patient-centred encounter is based on good communication. Self-care of many conditions, whether trivial or severe, demands of the patient to be not only well-informed but also to have understood complex medical phenomena [8, 19, 20, 21, 22], i.e. that the communication is good. However, many doctors and nurses have not had any specific training in communication [23], although this topic often is included in modern education. The importance of effective professional-patient communication is well documented and known to affect health outcomes [9, 11, 21, 24]. Patient outcomes have been defined by Ong et al. [11] in the following terms:

*“Outcome” as it is used in health care studies can be defined as “an observable consequence of prior activity occurring after an encounter, or some portion of the encounter, is completed”.*

In contrast to the patient-centred encounter, the professional-centred encounter is asymmetrical because of inequality in power [25] and knowledge [21]. Research indicates that patients and professionals often focus upon different domains, as clinical and life-world contexts frame their perspectives differentially [26, 27]. Patients might not even view themselves as ill [10]. On the other hand, health care professionals are predominantly fostered in a tradition in which the patients' problems and symptoms are objectified [9, 10, 28]. The implication is that in the traditional biomedical perspective the patient is considered as a case, and thus the focus is on technology and an instrumental behaviour, rather than on establishing a therapeutic relationship [13]. However, there is no doubt that the biomedical and holistic perspectives are intricately interlinked and that both perspectives are needed to optimise patient outcomes [13].

The patient-centred concept implies an adult-to-adult relation [28] and a holistic view of the patient as a human being with one or more problems that affects life and health [9]. This notion of patient-centeredness furthermore means that the patient's life-world, including family, work, expectations, and anxieties, are central for the encounter [29]. The concept includes the patient as an essential member of the health care team. A patient-centred consultation with its focus on the unique predicament, context, priorities and choices of the individual patient might seem to oppose the current strong calls for consistent and evidence-based standards of care [30]. There is evidently a need to bridge this gap.

Several lines of development have increased the interest for working in a patient-centred way: for instance, ideological efforts have been made in Swedish legislation to emphasise the patients' autonomy and participation in decision making [31]. In addition, in recent years the patient empowerment movement has emphasised patients' rights to participate in care and decision making [11, 28, 32]. Today's patients expect to be involved in decision making and planning of treatment regimens [13, 33, 34]. An increasing number of patients have access to information on the Internet and are well informed when it comes to their specific illness and its treatment. There is also an increased knowledge of the intimate connection between body, mind and environmental factors, an increased knowledge of communication and interaction [35], and the importance of these factors for health and well-being [8, 20, 36].

A holistic perspective is the basis for a patient-centred concept. Hellström [37] points out that the "holistic" concept has been used in several ways, though stresses that holism should not be viewed as merely components of the whole but as aspects of it. As a consequence of the patient-centred approach the term *illness* is used in place of *disease*. In addition, the *compliance* concept is not suitable for a patient-centred approach. The compliance concept implies patient obedience [10]. It is authoritarian in the sense that the patient is supposed to adapt to regimens prescribed by professionals with no or little knowledge of their individual needs and life conditions. Patients who are not willing to carry out the measures derived from the objective facts of medicine have repeatedly been labelled as *noncompliant* [38].

Instead of categorising the patient as *compliant or noncompliant*, a main task for health care professionals in a patient-centred encounter should be to extend and support the patient's learning and reflection [3, 9, 39]. To achieve effective patient education health care professionals who educate patients to deal with their illnesses have to find ways to make the patients reflect on their experience of the illness in order to enhance understanding and management of it. It is currently widely agreed that health care professionals should seek *concordance with*, rather than *compliance from*, patients when it comes to treatment [40, 41]. However, labelling things differently is not enough to create change of practice [41]. Change of practice might be achieved by educational interventions to enhance competence development. Some contemporary theories of competence and competence development will be elaborated on in Chapter 2. First, however, some methodological considerations regarding Studies I-V are discussed in the next section.

#### **1:4 Methodological considerations**

The studies presented here are largely qualitative research: the use of numbers and statistics are complementary. Qualitative methods can facilitate clinical problem definition and solution [42]. As stated by Malterud [43]:

*Qualitative methods are useful for the study of human and social experience, communication, thoughts, expectations, meaning, attitudes, and processes, especially related to interaction, relations, development, interpretation, movement, and activity – all core components of clinical knowledge.*

There is an ongoing philosophical debate between qualitative purism and pluralism [44, 45, 46]. Some people view the combination of qualitative and quantitative methods as a methodological ‘blur’ because of the different underlying paradigms [47]. As argued by Bendz, this polarisation is unfortunate and contra-productive [48]. Qualitative and quantitative methods or approaches are not viewed here as dichotomies; on the contrary, they are part of a continuum. The research question should direct the choice of method(s), not fundamentalists’ demands for methodological purity. Furthermore, important health and educational issues must be investigated using a wide range of methods.

The combination of qualitative and quantitative methods, or different qualitative methods, is likely to strengthen a study’s design [5, 43, 49-51]. Mixed-method studies are not necessarily a mixture of paradigms; rather, the underlying paradigms are reflected in how the techniques are used and combined [46]. By paradigms, it is meant the underlying ontology (worldview) and epistemology (view of knowledge) and the way in which these are evident in all aspects of the research. The worldview reflected in this thesis is that reality has many faces and is individually as well as culturally constructed.

### **1:5 Rigour in research**

Because they typically have different ontological and epistemological assumptions, the quality criteria differ between qualitative and quantitative research. The quality standards in qualitative research are perhaps even more challenging than in quantitative studies, as rigor, subjectivity, and creativity are actively incorporated in the process [44]. The issue in qualitative work is not to be able to replicate a study, but to make clear how the results, whether it is

analytic categories or interpretations, have been reached [52, 53]. However, as Sandelowski [54] notes, “...*rigour is less about adherence to the letter of rules than it is about fidelity to the spirit of qualitative work.*”

No consensus exists today among qualitative researchers about specific quality criteria [55]. At the same time, there is a broad range of qualitative research approaches. Some researchers use the criteria identified by Guba and Lincoln [56]: *credibility*, *dependability*, *confirmability* and *transferability* [56, 57]. *Credibility* is concerned with the trustworthiness in the study, and demands on the researcher to be thorough in both data collection and analysis. This is a basic demand in all types of research. *Dependability* is a concept of consistency. The research process should be described so the readers can easily follow it, and the study has to be adjusted to new material that emerges during the study. *Confirmability* refers to the notion that the research should convincingly show how the results are grounded in the material. One way to do this is to use quotes from interviews or narratives for illustrative purposes. Finally, *transferability*, that the results can be readily communicated to others, denotes that the results are presented in a way that others can understand. The researcher has a responsibility to provide a thorough description of findings and context [54, 57, 58].

How were *credibility*, *dependability*, *confirmability* and *transferability* [56, 57] in the present studies? *Credibility* means to be thorough in both data collection and analysis. The process of data collection and analysis for the present thesis has been described in greater depth in each paper. However, in retrospect, the *dependability* criterion could have been better met in Studies IV and V, with a more thorough description of the analysis of the material. *Confirmability* is the

degree to which the findings are the product of the focus of the inquiry and not of the biases of the researcher. This implies that they are grounded in the material. One way to do this, as was done in the present studies, is to use quotes from interviews or narratives to illustrate. Concerning *transferability* the reader is probably the best judge of this criterion.

## **Chapter 2: Competence and competence development**

### **2:1 Competence development as a new understanding of the work**

As stated in Chapter 1, a need to enhance a patient-centred approach, i.e. competence development for health care professionals has to be attained. How could development of health care professionals' competence in the patient encounter be achieved? To answer this question, a definition of what are meant by *competence* and *competence development* is needed. However, there are many definitions of what competence is and how it can be expanded or developed [59]. Traditionally, competence development would mean the acquisition of attributes such as knowledge, skills and attitudes [17]. Hence, in this view competence is attribute-based [60]. It also implies that the learning process is regarded only as an increase in *the amount* of knowledge and skills [10] that is achieved by a transfer process [60].

Contemporary theories in competence and its development have shown that competence is the result of how people understand their work [60]. Hence, *competence development means not only acquisition of new knowledge and skills, but also a new and different understanding of the phenomena under study or revision of a previous understanding*. The (health care) professionals' understanding of their work is largely expressed in how they carry out their various duties. Understanding one's work is central for one's actions [16]. A person's understanding is created in relation to his/her reality and perception of it. According to Pramling, humans act in relation to their way of understanding the world [61]. Understanding and action (including speech) are thus inseparably intertwined, where actions are a manifestation of understanding.

The first step in competence development is for the educator to map the understandings that students or professionals have of phenomena [61, 62]. When professional competence is to be developed, understanding of the work in question should be the starting point for careful and critical reflection [60]. (In this context, *reflection* should be read *thoughtfulness*.)

Meaningful learning can occur when a person feels a need for a change in his/her way of understanding [48]. A deeper understanding of one's work should then be developed interactively with observations and reflection [63-65]. When the person has established a new understanding, there is no turning back. In this way, the understanding becomes imperative. Concrete, personal experiences, meetings, and dialogues as well as emotionally charged experiences aid new understanding [16]. This view of competence has been developed over the years [16, 17, 66, 67]. As described below, Theman [68] has particularly worked with this concept of competence in a health care context.

## **2:2 Competence development and CME/CPD courses**

Continuing Medical Education (CME)/Continuous Professional Development (CPD) courses for doctors and nurses are often traditionally arranged, with the intention of increasing *the amount* of knowledge and skills [10] through a process of transfer described above [60]. The CME/CPD courses have been shown to have little impact on clinical work and professional performance [3, 9, 69] as traditional teaching methods bring about only a limited change in most students' thinking [62]. Hence, the teaching methods do not affect the students or health care professionals' understanding that forms the basis for their actions in the patient encounter. The implication is that traditional education is not enough to develop professional competence.

Over the years, a number of CME/CPD courses have been carried out in the field of diabetes care. To support the development of modern diabetes education, “Diabetologicum” courses in Stockholm, Sweden were initiated by Theman. During the courses, it became evident that professionals could be patient-centred in their general attitude, but still dominating in clinical practice [68]. When evaluating the “Diabetologicum 1” course concept, Henriksen and Sjögren Marklund [70] showed that the course participants found it hard to deal with personal shortcomings during the videotaped sessions and that the educational approach adopted was experienced as rather aggressive and did not facilitate their learning in an optimal way [70]. Although the course concept was innovative and based on a strong theoretical base, it became evident that it had to be performed in a manner that was less aggressive. A safe learning environment for the participating professionals thus had to be created. “Diabetologicum 2” was never evaluated. The type of CME/CPD courses evaluated in Studies IV and V were strongly influenced by the “Diabetologicum” [68] course concept and the lessons learned by that.

### **2:3 Influences from phenomenology**

The above-mentioned view of competence and its development is influenced by phenomenology and phenomenography. Therefore, these research approaches are briefly described here.

Husserl is considered the father of the modern phenomenological movement. He sought to uncover true knowledge, the pure essence of a phenomenon [71]. Subsequent phenomenologists have moved away from the notion of true knowledge and instead focused on Husserl’s notion of *life-world*. Life-world

refers to the world as we immediately experience it (pre-reflectively) which is without conceptualisation, categorisation or contemplation [72, 73]. We are immersed in this life-world and cannot be separated from it [74]. Phenomenology attempts to critically examine the life-world in order to describe its essence, structure, and character [75]. Although phenomenology has its origins in philosophy, it now incorporates both philosophy and empirical research methodology. Phenomenology strives for an inductive and holistic understanding of human experience [49].

The life-world perspective has influenced the present work. The interest here is on the life-world of doctors, nurses and medical students with particular emphasis on the way in which they understand their professional role and encounters with patients. According to phenomenological theory, our way of experiencing the world expresses itself in the way we act, including our speech [72, 76]. For example, the way the nurse or physician understands the patient encounter is expressed in his/her actions. Whether the health care professionals view the patient as a person with a problem that affects life and health, or with an error to be fixed, will result in different ways of acting in the patient encounter [3].

An important concept in phenomenology, which is relevant here, is intentionality. Our consciousness is intentional, as it is always directed toward someone or something: you hate something or are in love with someone [74, 77, 78]. When trying to develop competence by enhancing a new understanding of the task, reflection on intentionality is a core aspect. Intentionality is not to be confused with intention, which relates to the purpose or reasoning for carrying out an action.

## **2:4 Influences from phenomenography**

There are some common features in phenomenological and phenomenographic research, including the life-world perspective and the interest in the way in which we are aware of the world [48, 79, 80]. The phenomenographic approach was developed in Gothenburg, Sweden during the early 1970s by a research group within the domain of human learning [81]. Phenomenography is a research approach aiming at describing *the variation* in people's *conceptions* of different phenomena in the world [62]. Marton has stated:

*Phenomenography is a research method for mapping the qualitatively different ways in which people experience, conceptualise, perceive, and understand various aspects of, and phenomena in, the world around them [82].*

In phenomenographic studies there is typically a limited number of conceptions of a phenomenon [83, 84]. Instead of using the term *conception*, subsequent phenomenographers have used such labels as *ways of experiencing* or *understanding* [85]. In Swedish, the single concept *uppfattningar*, covers the English concepts of *understanding*, *conceptualisation* and *ways of experiencing* [80].

Because the focus in this chapter is on competence development for the patient-professional encounter the phenomenographic approach has been used. Briefly, the approach could be described as the mapping of different conceptions that students or professionals have of various phenomena - here the patient encounter - and to take this conception, or understanding, as a departure for learning [62, 79].

The focus in phenomenography is on taken-for-granted aspects of phenomena [61]. Thus, phenomenography is descriptive, empirical and content-oriented [81]. Given that focus on experience and understanding is central, phenomenographic studies frequently include interviews [81]. A phenomenographic analysis could be carried out in several ways, aiming at an outcome space that encompasses the different conceptions and their relations to each other [65, 85]. The phenomenographic research method was used in Studies III and V.

In summary, contemporary theories of competence development are influenced both by phenomenography and phenomenology. Common features are the interests in the life-world perspective and intentionality. The phenomenographic approach to learning has inspired the educational interventions described in Chapter 6.

## ***Chapter 3: Medical students and the demands of the profession***

### **3:1 The patient encounter in medical education**

In this chapter medical students, the future health care workforce, are studied. The question dealt with here is what message do medical schools convey to their students concerning the professional role of physicians. Furthermore, to examine whether current medical education prepare students to work from a patient-centred perspective.

It is well established from international studies that medical students are affected by their education in a way that makes them more depressed, cynic and stressed than other students. Moreover, they tend to experience a loss of personal ideals and autonomy [86-90]. This negative situation must be counterproductive in an education that aims at developing skilled and ethical professionals with self-knowledge and empathy, the basis for lifelong learning and possibilities for professional development [91]. Cynicism, combined with loss of ideals and autonomy, might hinder a patient-centred approach to working.

Dall'Alba argues that an important task for medical education is to enrich the students' understanding of what medical practice is all about [17]; however, it still seems as though the biomedical tradition dominates the curriculum [9, 38, 92]. The patient encounter has had little space in examinations [4] and tutoring during the medical educational process is not considered optimal [38].

Dahlgren & Marton stress that the interpretation adopted by a teacher can be crucial to students' comprehension of a concept or phenomenon [93] (here the professional role and the patient encounter).

### **3:2 Swedish medical students' views of the changing professional role of medical doctors and the organisation of health care (Study I)**

To describe the views that medical students have of their professional role and the organisation of future health care all fourth year (semester 9 of 11) medical students at a Swedish University during the spring of 2000 were asked to participate in the study. The students were given oral and written information as follows:

*Write down your reflections about your professional role in tomorrow's health care. Describe how the recent changes in health care financing and organisation will affect the professional role of the physician. Will the physician's role be different from what you thought before you started medical school?*

Of 57 fourth year medical students, 53 (22 females and 31 males) agreed to participate in the study, yielding a response rate of 93%. The mean age was 29 years (range 23 to 42 years). These figures are consistent with the entire cohort. The students gave their informed consent and participated voluntarily. The Ethics committee at Uppsala University approved the study (ups dnr 00213). Thematic analysis of the essays was carried out in three stages.

### *Stage 1*

Fifteen randomly selected essays were analysed inductively, whereby the meaning of the original text was put into condensed form. This part of the analysis consists of five steps [75]:

(1) Reading through each essay to acquire a good grasp of the whole material.

(2) The text in each essay was divided into meaning units (MUs) and a mark was made in the text each time the meaning shifted.

(3) Each MU was examined closely and the informants' everyday language was transformed into the researchers' language.

(4-5) The transformed MUs were reformulated into themes, which were then related to each other.

### *Stage 2*

*The professional role in change, the organisation of health care, the working conditions and a balance in life* were the four themes that emerged from step one. The remaining essays were analysed according to these four themes.

### *Stage 3*

All essays were re-examined by two of the authors to check that no themes were overlooked. When opinions differed, the texts and themes were checked and discussed again until agreement was reached.

### **3:3 Results: the pessimistic worldview of medical students**

The following themes identified in the medical students' texts were (a) *the professional role in change*, (b) *the organisation of health care*, (c) *the working conditions* and (d) *a balance in life*. These themes were intertwined in an intricate web that constitutes the professional role of medical doctors from the students' standpoint. As *the professional role in change* was emphasised, its sub-themes were examined in detail and were identified as "team leader", "increased sub-specialisation", "supporting the patient" and "computer science and technology."

#### ***The professional role in change***

##### ***1. Team leader***

The students reported that the professional role of medical doctors has become obscure in that nowadays many other groups of professionals have influence over the care of patients: "...*the doctors must regain their role as leaders and be the personnel who push the development forward in their workplace*". The students promote co-operation and communication between the various groups but agree that doctors should lead the teams and that the medical profession as a whole needs to be clear about its leadership role. The students also view leadership training as relevant.

##### ***2. Increased sub-specialisation***

Students reported that the rapidly growing knowledge in medicine makes it impossible to have exhaustive knowledge of all medical fields. This leads to a greater need for sub-specialisation among doctors. Many students believed that a large group of doctors would work as 'consultant specialist' in the near future.

This specialisation was unfortunate because many doctors will no longer have the complete overview of the patient, working only with one specific illness or problem area.

### *3. Supporting the patient*

The students feel that the traditional role of a paternalistic model is rapidly losing its status. They reported a preference for an informative model of doctor-patient relations in which the patients are allowed to exercise their rights to autonomy and participate in decisions: “...*how important it is to let the patient have his or her say, to view the patient as a resource*”. In this context the pedagogical aspects of the medical profession are highlighted.

### *4. Computer science and technology*

The use of Internet and new technology already has, and will continue to have, a substantial impact on the medical profession. It will reduce the burden of paper work and facilitate administrative duties. Patients will also use the Internet. However, the students recognised that patients’ medical needs could not be satisfied entirely by “Net” doctors.

### ***Organisation of health care***

The students viewed the organisation of health care in Sweden as deficient. They expressed that for the most part the public health care system in Sweden is negative for patients and professionals alike. Most students believed that improved working conditions and employee satisfaction could only come about through private alternatives in addition to public health care.

### ***Working conditions***

The medical students expressed deep concern about the risk of developing work-related health problems. They have generally a pessimistic view of the working conditions for people in health care because of escalating demands on an already exhausted system of organization. Some students feared that they would be unable to stand the pressure of the overwhelming demands placed on them as doctors: *“If the working conditions don’t get any better, it’s unlikely that I will stay in the profession until retirement”*.

### ***A balance in life***

The students made it clear that they do not intend to neglect family life and hobbies because of their profession. It is clear from the study that the new generation of medical students demand freedom, flexibility, and the right to make decisions on their own.

### **3:4 Discussion and conclusions**

It is well known from international studies that medical students suffer from stress, cynicism, and depression [86-90]. Although the negative views of the students in the present study were overwhelming, they also expressed a positive attitude for patient involvement in care and for future medical conditions. As a student or a neophyte professional it is natural to have some concerns about how to cope with the demands of the profession one has chosen. Allen [94] stated that it would be a challenge for employers to keep young doctors within public health care. To do this both the professional role of medical doctors as well as the organisation of the work would demand change. Students emphasised the right of exercise power over both life and work. Some had doubts about enduring the pressure of being a medical doctor until retirement. The young

doctors want to combine family, professional work and outside interests in a way that should give them possibilities for a positive professional development [87, 88, 95, 96].

Issues *not* highlighted by the students are also a cause of concern for future health care. For example, preventive medicine and research were hardly mentioned in the essays. The results indicate that the students' share a rather dismal view of both the medical profession and health care, which seems to be related to such factors as stress and financial cut backs. They wanted changes in organisation and leadership training, as well as a decreased workload. In addition, the students seemed to have an ambiguous attitude toward power and control. It might be that the strong focus on biomedical aspects during education does not optimally equip students for the patient encounter and for the clinical reality. If the students are to develop a more positive view of their future profession and patient centred perspective, the entire curricula might need a change [38, 97]. However, Burger states that reforming the medical curricula requires that implicit concepts of worldviews are made explicit and critically examined [38]. Although this is a demanding task, it is fully possible to accomplish.

## *Conclusions*

- Swedish medical students held a pessimistic view of health care in general and their future medical profession in particular because of stress, organisational problems and financial cut backs;
- the organisation of health care and the working conditions need to be improved to create possibilities for holistic care;
- the medical student had ambiguous feelings toward power and control;
- the students did not discuss research and issues of preventive medicine;
- reforms of the curricula might be needed.

## ***Chapter 4: Nurses in telephone advisory services: a special form of patient-encounters***

### **4:1 Challenges and pitfalls in telephone encounters**

Having studied students, the focus now shifts to nurses in telephone advisory services, representing professionals in basic primary health care. The professional role of these nurses and their patient encounters are in some ways different from other nursing work. The challenges and pitfalls inherent in this type of encounter are important to explore as this is an expanding field within the health care sector in Sweden and in several other countries. An abundance of evidence indicates that health care telephone services provide patients with valuable listening, information and referrals [98-101]. However, it seems as if nurses involved in telephone services experience anxiety about assessing people and their health problems using this media. There is always a risk that the wrong measures have been taken. In this respect, the nurses are under considerable pressure in that they need to make complex decisions after talking only for a short time with the caller [102, 103]. In addition, the nurse is expected to be flexible, sensitive and patient, additional to having a broad knowledge in several fields, such as nursing, medicine and pedagogy. The frequent, brief telephone calls necessitate that the nurse is focused and attentive [104]. It is impossible for the nurses to make preparations since they cannot predict who is going to call and what issues will be raised. Concerning the pedagogy used, it seems as if nurses use an old-fashioned method of conveying information rather than facilitating the patients' own learning [103, 105]. However, few nurses have had any special training in encountering patients by telephone [105].

#### **4:2 “Carer and gatekeeper” – Conflicting demands in nurses’ experiences of telephone advisory services (Study II)**

To explore nurses’ experiences of the patient encounter by telephone a strategic sample of five nurses in telephone advisory services were interviewed in 1998. The nurses were selected to maximise the variation in their previous professional experience. However, they were female, middle-aged, had a working experience of 20 to 30 years and had been employed at the Primary Health Care Telephone Advisory Services for at least two years. The interviews were conducted by the present author (IH), tape recorded, and transcribed verbatim. The interviewees were queried regarding the following issues:

*Tell me how you experience the patient encounter when working with telephone advisory services. What is central in this experience? Describe a concrete encounter that you experienced on your latest shift.*

#### **4:3 The neophyte nurse researcher and phenomenology – reflections on methodology**

Karlsson’s phenomenological method [75] was used in analysis of the interviews. The analysis consists of five steps: Step one involves reading through each text thoroughly without any predetermined categories or schemes in mind in an effort to obtain a good grasp of the whole material. Step two involves dividing the text into “meaning units” marking by numbers in the text when a shift in meaning occurred. Step three concerns transforming the participants’ everyday language into the language that is relevant to the research question. In step four the transformed meaning units are reformulated into themes.

Finally, in step five the themes are related to each other in the general structure of the phenomenon. For a thorough presentation of the method, the reader is referred to Study II.

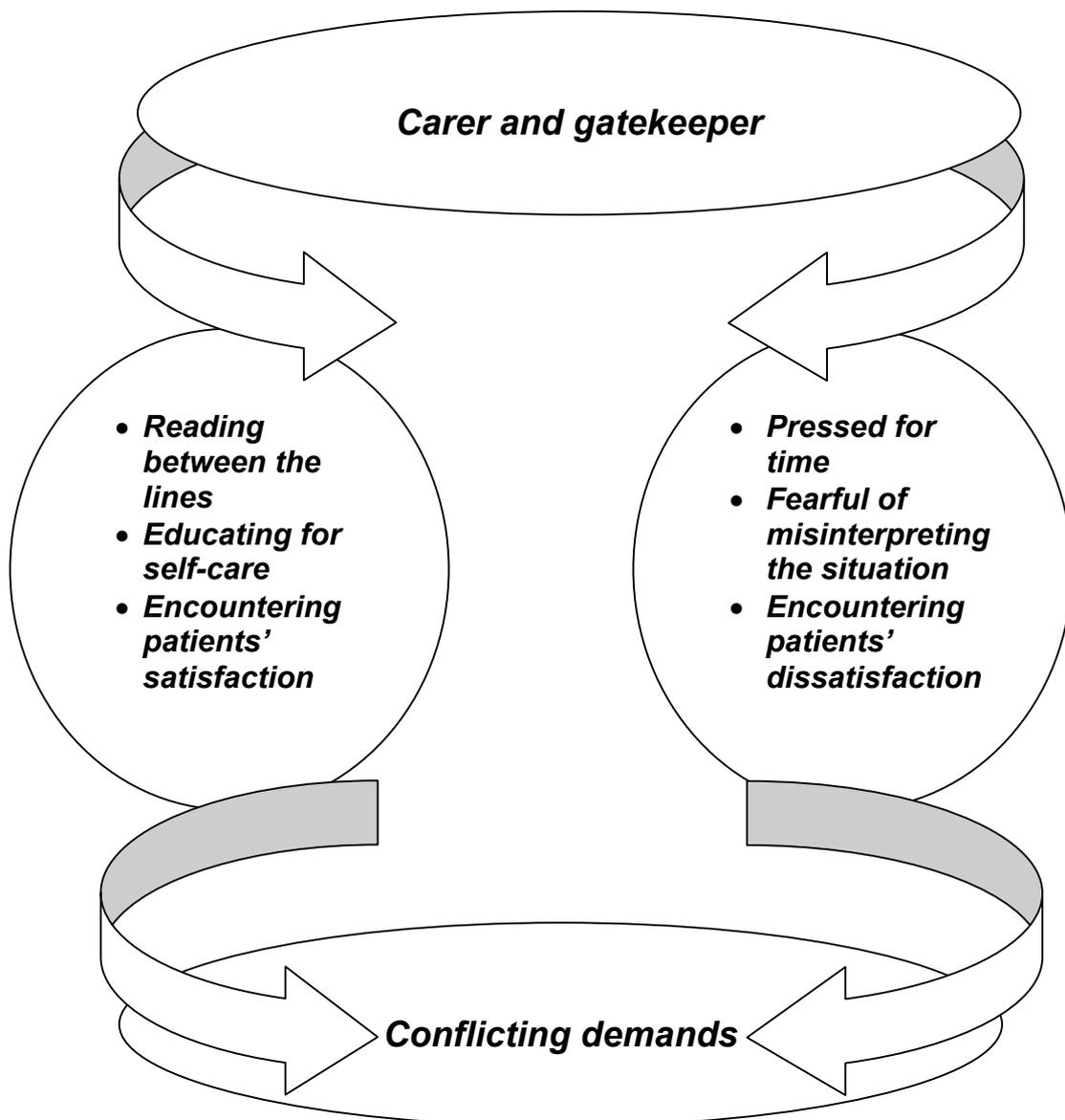
Nursing researchers' way of practising phenomenology has been examined in several studies [106-109]. Neophyte nurse researchers have been criticised for being naïve or impure [106, 107] in their way of applying phenomenology to the field of nursing. The critique has focused on nurses' studies of individual experiences rather than on the essence of the phenomenon under study and the confusion between phenomenology as a philosophy and a research method [107] or with other research methods [106]. To conduct phenomenological research, nurses (or other professionals) do not need to be philosophers, but they *do need* to know of the philosophic underpinnings of the methodology. All research, despite paradigms or methods, has to be carried out skilfully to be of any value. Giorgi has defended phenomenology as a research method suitable for nursing research, pointing out that Husserl was a great philosopher but not a practicing scientist [108, 109]. However, the above-mentioned critique could not be applied in the present context. For the phenomenological study presented here, the essence of the participating nurses' experiences was sought. The nurses in Study II were asked to describe their subjective experiences. In the phenomenological analysis, the empirical, subjective meanings were transcended in exploring nurses' experience of the patient encounter by telephone. A focus on the nurses' experience was achieved.

#### **4:4 Results: The conflicting demands of being both carer and gatekeeper**

The nurses' experience of the patient encounter when performing telephone advisory services can be characterised in terms of *the conflicting demands of being both carer and gatekeeper*. The constituents of these conflicting demands included *reading between the lines while pressed for time; educating for self-care while fearful of misinterpreting the situation; and encountering patients' satisfaction and dissatisfaction*. The nurses strongly felt that the patients have a right to fast and correct handling of their problems, i.e. they expressed a patient-centred perspective. They furthermore expressed a conflict between doing what they thought was best for each caller and what the health care *de facto* has to offer (Fig. 1).

*Of course, everything would be easier - for oneself too - if everyone who calls could be given a doctor's appointment ...at the same time I want to reach people with my self-care advice and make them look at the body from a different angle and suggest actions they should take on their own. But, especially when you are kind of tired yourself, it's easier to make them an appointment to see the doctor even if one could have given some advice instead. Sometimes I feel like a gatekeeper.*

(Nurse 2)



**Figure 1.** General structure of the nurses' experience of the patient encounter when performing telephone advisory services, showing the conflicting demands of being both carer and gatekeeper.

### ***Reading between the lines while pressed for time***

To be able to read between the lines and to catch what was not said were important in order to help the patient in the best possible way, as well as to keep the nurses' "own backs" covered. Not being able to see the callers' facial expressions or physical movements necessitated a sensitive ear. The nurses wanted to give each caller the time s/he needed, but they also knew that they had to make every call as short as possible because of the large number of incoming calls. They described the feeling of being able to help any caller as strongly connected to the possibility of giving the time needed for each one.

### ***Educating the patient for self-care while fearful of misinterpreting the situation***

The nurses believed in educating the patients to handle simple problems at home, and thought that this was clearly a part of their nursing role. They expressed a strong feeling of responsibility toward the patients. They wanted to be of service to the patient and mobilise all available resources to help. The experience of responsibility was underpinned by the fact that a misjudgement might result in an unfavourable report to the Health Care Responsibility Board and, at worst, they could lose their nursing licence.

### ***Encountering patients' satisfaction and dissatisfaction***

In addition to difficulties communicating with immigrants, the calls from angry and aggressive people caused the nurses problems. Not every caller was satisfied with the advice of self-care or with the health care system as a whole. However, the nurses not only experienced the telephone work as demanding, but they also found it rewarding. They expressed a feeling of satisfaction when they were able to help by listening, answering, and giving a few hints about what to do.

#### **4:5 Discussion and conclusions**

The organisation of the telephone advisory services had conflicting demands built into the system, which seemed to hinder the quality care the nurses wanted to give. The essence of the nurses' experiences was the conflicting demands of being both carer and gatekeeper. The nurses felt that they had to be loyal to both the health care system and to the patient calling. It seems as if the nurses want to act in the interests of the patients' health, but the lack of resources and the organisation of health care are hindrances that lead to more of a 'fix-the-error' sort of care. Nursing education should address both the need for effective pedagogy and the conflicting demands of patient encounter by telephone. Excessive and conflicting demands might cause stress-related health problems among staff [110, 111]. Other health care workers, including GPs, might have similar experiences regarding conflicting demands. Under those circumstances, a high quality care is almost impossible to deliver. Benner et al. made the following observation regarding this point [96]:

*We are alarmed by the discouragement and demoralization of nurses who are asked to do more than is possible and who are not given the time to do their care giving work. When nurses are not given the time to be attentive, the large-scale health care system we have created become dangerous places (p. 22).*

### ***Conclusions***

- Conflicting demands on the nurses in telephone advisory services were built into the system. Consequently, a patient-centred perspective was difficult to carry out in practice;
- the nurses might risk stress-related problems because of the conflicting demands;
- the organisation of health care seemed to hinder reflection, follow-up and the quality care that the nurses would prefer to give;
- both effective pedagogy and conflicting demands within the nurse's role are issues that require attention in the education of nurses.

## **Chapter 5: Diabetes care as an example of the needs of the chronically ill**

### **5:1 Understanding the core aspects of diabetes care**

The focus will now shift toward those encountering the chronically ill, here exemplified by professionals in diabetes care. The need for a deep understanding of the core aspects of the patient–professional encounter becomes evident in diabetes care. This is because life-long illnesses, such as diabetes, put great demands on the patient [112], the health care professionals, and the encounter [113] as the handling of chronic conditions differs from that of more acute conditions [9, 38]. In this context, Segall noted the following [39]:

*People with chronic diseases, such as diabetes, need constant support because a chronic illness is not something that goes to sleep at night, takes the weekend off, or goes away for Spring Break to Fort Lauderdale. It is always there.*

Diabetes mellitus includes a group of illnesses characterised by chronically elevated blood glucose levels because of decreased insulin producing capacity or because of decreased ability to use available insulin, or both [114, 115]. The prevalence of diabetes is increasing world wide [116, 117] and there are many undiagnosed persons with diabetes [118]. Diabetes has become a major health and economic problem for society [119]. Diabetes can have serious complications, including heart, eye, and kidney failure. However, tight control of glucose levels can significantly reduce the risk of developing such complications [116]. To achieve rigorous control of blood-glucose levels, extensive self-care is needed. However, keeping the blood-glucose levels as low as possible to reduce complications must be weighted against other important factors in life, such as family.

This is a fine balancing act for the patient [24, 36, 40, 116, 120]. Hence, effective patient education and intervention are needed but have been difficult to achieve [121, 122].

For chronic illness, the planning of treatment to reduce complications and for the patient to make life-style changes are crucial [123]. Good communication, mutual trust and respect, enough time and an easy access to care are important factors [9, 12, 20]. The patient - professional encounter in diabetes care needs to focus on the patient's learning process, using content derived from the individuals' own experiences and adapt the learning pace to the patient [77, 113, 124-126]. However, diabetes care has often been "checklist driven" by the use of clinical guidelines and a focus on technical advice [9]. Patients have raised complaints against such standardised text book approaches [6, 20] that are used by professionals at the lower levels on the development *from novice to expert* [67]. In these cases the health care professionals or educators work with *information giving* rather than *facilitating the patients' learning* [77].

### **5:2 Swedish health care professionals understanding of diabetes care – is the patient's learning in focus? (Study III)**

As stated in Chapter 1, one important aspect of a patient-centred perspective is to support the patient's learning. This is how it should be, but how is clinical practice carried out? To identify the different understandings that health care professionals have of diabetes care and the distribution of these understandings all health care centres (HHCs) in 1996 in one catchment area in Stockholm, Sweden were invited to participate in Study III. Twenty of the 23 health care centres agreed to participate: one centre rejected the invitation and two did not answer our inquiry.

Approximately 50% of the professionals employed in the catchment area answered the survey: totally, 169 physicians, nurses, assistant nurses and chiropodists participated. Slightly more than 70% had had diabetes specific training. The health care professionals were asked to write down their answers to three questions. The first two questions are derived from Dall’Alba [97] in a study designed to obtain in-depth descriptions of medical students’ personal experiences.

1. *What do you think is the central feature(s) of diabetes care? Give a concrete example.*
2. *What do you find difficult to deal with regarding diabetes care? Give a concrete example.*
3. *When do you think you have been successful regarding diabetes care? Give a concrete example.*

### **5:3 A phenomenographic analysis of written answers – reflections on methodology**

Phenomenographic analysis according to Sandberg was used for Study III [16]. However, Dahlgren & Fallsberg’s [81] suggestion below was taken into account:

*“...a slavish compliance to the sequence described would be contradictory to the spirit of qualitative analysis that aims at catching the essence of people’s world of thoughts.”*

According to Sandberg, the first step is to read the text thoroughly in order to get a good grasp of the whole. Step two is a systematic search for the content of meaning, the *what-aspect* of the studied phenomena. Step three is the analysis of the perspective, the *how-aspects*. Step four is an iterative movement between the conceived and the conceiving act. Step five concerns establishing an outcome space by identifying and describing the logical relation between the conceptions [16, 127]. Each category should be illustrated by quotes [128].

Concerning phenomenographic analysis, Säljö suggests that phenomenography has a weak point in that it lacks theories of communication and language and ignores why people talk the way they do. He argues that phenomenographers merely have access to discourse and nothing else [129]. To avoid this potential problem an interviewer should try to explore themes in-depth. The use of essays might be a limitation compared with interviews because in the latter method an interviewer has the opportunity to ask follow-up questions. However, the essay approach was used for Study III as it is cost-effective, less time consuming than interviews, and yet allows entrance into the participants' life-worlds. In addition, some people might express themselves better in writing and the problem of interviewer influence is avoided. Even though this material consists of short essays, they are not 'narratives'. For instance, Adelsvärd gives three criteria for a narrative: a narrative is in past tense, about something that has already happened, and it must have some sort of point and a structural pattern [130].

Hasselgren's opinions, as well as those of Ashworth & Lucas, are that phenomenographic studies often lack information about the analysis of the material and merely end up in the described outcome space [131, 132].

It is easy to agree that many studies do not describe the analysis in a way that gives the reader full access to how it was carried out. This is a weakness that phenomenographers need to resolve.

Who should confirm the findings in a study: the participants, the researcher, the research community or an outside expert? There are different schools of thought on this question. One school argues for co-reading and the returning of interpretations to informants for verification [56]. However, Lincoln and Guba admit that member-checks might cause problems [56]. An informant who gave a description of a phenomenon in an interview might have some trouble judging the results that emerged from an analysis of several interviews [54]. Other researchers argue that co-reading and member-checks do not strengthen a study [16, 48, 54]. For instance, informants in a study might reject unpleasant or non-flattering results and approve interpretations they view as more positive [133]. Because of these pitfalls, different strategies were used in this thesis to assure quality. In Study III the present author (IH) acted as co-reader.

#### **5:4 Results: Few health care professionals' focused on the patient's learning**

Five qualitatively different understandings of diabetes care among 169 physicians, nurses, assistant nurses and chiropodists were identified through the phenomenographic analysis of the participants written answers to the three questions posed (*Table 2*).

*Table 2. Variations in the understanding (A – E) of diabetes care among 169 Swedish health care professionals.*

<b>Understandings A -E</b>	<b>Number of answers</b>	<b>Answers in %</b>
A. The professionals treat the patient	<b>87</b>	<b>51,5</b>
B. The professionals give information	<b>34</b>	<b>20,1</b>
C. The professionals' focus on relation and organisation	<b>9</b>	<b>5,3</b>
D. The professionals seek the patient's agreement	<b>10</b>	<b>5,9</b>
E. The professionals' focus on the patients' understanding of the situation	<b>20</b>	<b>11,8</b>
Incomplete answers	<b>9</b>	<b>5,3</b>
<b>Total</b>	<b>169</b>	<b>100</b>

*A. The professionals treat the patient*

The professionals describe treatment and its result using primarily medical terminology. They inform or give advice in treatment related to life style. Recommendations take their departure from the professionals' standpoint of what is 'right' or 'wrong'. The professionals are the active agents. The difficulties encountered are often described in terms of "*they don't do as I tell them,*" and to succeed with treatment in terms of "*I managed to change the patients' life style.*" The patient is described as a passive receiver of care.

*B. The professionals give information to the patient*

Unlike in **A**, in **B** the focus is on patients having an understanding of treatment principles. Participation is described in general terms, as being able to "*take care of treatment*" or in terms of an understanding of treatment principles. In many cases there is no mention of how patients are thought to develop knowledge of this kind. However, health care professionals give the patients knowledge and understanding: "*To give the patient knowledge about the disease so that s/he might have control over treatment and understand the connection between insulin, diet and exercise.*"

*C. The professionals' focus on relation and organisation*

Unlike **A** and **B**, understanding **C** focuses mostly on the organisation and the relational aspects of the encounter. These responses either highlight the importance of having a well-functioning organisation of diabetes care or the quality in emotional terms of the consultation.

Organisational aspects imply, for example, having appointed enough time to talk and discuss with patients or ensure continuity of care: *“Adjust enough time for the patient. Continuity. Regularly visits –check-ups...”*

*D. The professionals seek the patient’s agreement*

Unlike, **A**, **B**, and **C**, the emphasis here is on co-operation. This could mean that the professionals, with help from the information given by the patient, who in this case have a more passive role (as in **A** and **B**), view their task as determining goals for treatment. However, it could as well be interpreted as if the central aspect of this understanding was that the patient is active in forming the treatment/goal for treatment: *“Dialogue between staff and the patient with diabetes where you together decide optimal treatment and quality of life...”* The dialogue would thus mean focusing the relational aspects of the encounter, like in **C**.

*E. The professionals’ focus on the patient’s understanding*

The focus is on the patients’ understanding of their illness and their own responsibility in treatment. The professional role in relation to the patient should be *“support or be a support for help to self-help.”* This means that, unlike **A**, **B**, **C**, and **D**, the patient is not given knowledge by the professional but gets support to seek knowledge that is relevant for the individual patient in his/her own context.

## **5:5 Discussion and conclusions**

The most important finding in Study III was that only 20 (11,8%) of 169 health care professionals had their focus on the patients' understanding and thus learning process in their answers to the questions posed. Eighty-seven (51,5%) of the professionals had a traditional and professional-centred understanding of the patient encounter. Over the past 20 years, professionals of health in the field of diabetes care have participated in numerous CME/CPD courses [24]. Despite that over 70% of our sample had participated in such education, only a small number of the professionals could recognise that successful treatment of diabetes is contingent upon patients' understanding of their illness and its treatment. Thus, these few health care providers see patient education as an integral component in health care, especially in the case of diabetes care. The current results support the notion that the health care professionals' understandings of care and of the patient encounter are important to explore and take as a starting point for CME/CPD courses. The primary care givers' understanding might be developed by newer pedagogic efforts that work to increase the efficiency of care [134], as in Studies IV and V.

## ***Conclusions***

- Only 20 (11,8%) of 169 health care professionals had their focus on the patients' understanding and thus learning process, while 87 (51,5%) were professional- centred;
- a majority of professionals work with *information that they give to the patient* rather than *to facilitate the patients' learning process*;
- health care professionals' understanding of care and of the patient encounter are important to explore and take as a starting point for CME/CPD courses;
- the need to take into account the patient's understanding of illness and treatment as a departure for meaningful learning must be emphasised and checklist approaches have to be abandoned.

## ***Chapter 6: Interventions to develop a new understanding of the patient-professional encounter***

### **6:1 Educational interventions for health care professionals**

Given the results Studies I-III, an intervention to develop a patient-centred approach and expand the scope of the professional role might be appropriate. The medical students and professionals had described disillusion, conflicting demands and a lack of time for reflection and follow-up. In addition, focus was on their role rather than on the patient's individual needs and learning process. As stated previously, educational interventions for health care professionals based on traditional teaching methods have been found to have little impact on clinical work and professional performance [3, 9, 69]. This finding implies that traditional education might be insufficient in developing professional competence for a patient-centred way of working.

The purpose of Studies IV and V was to evaluate educational interventions. The ultimate goal for such interventions for health care professionals would be better patient outcomes. Phenomenographic epistemology offered a suitable theoretical framework as built on the lessons learned by the “Diabetologicum 1” course concept [68] described in Chapter 2. Because the “Diabetologicum 1” was perceived to be a rather aggressive educational programme that did not facilitate the professionals' learning optimally [70], a “softer” approach based on modern theory of competence development was tested. The interventions aimed at a more patient-centred approach aiding a new understanding of the core aspects of care. The professionals' understanding should thus be the point of departure for the interventions.

## **6:2 Video recordings of the consultation – methods and ethics**

One possibility to develop the consultation is to video record the patient-professional encounters [135, 136]. The group intervention in Study IV and the individualised intervention in Study V were both based on video recordings of the participants patient encounters. The professionals reflected over and discussed their videotaped consultations in a group that was facilitated by a tutor in *stimulated recall sessions* [137]. The advantage with this approach is that the studied persons' experiences and thoughts are in focus [48]. The tutor's role was to ask questions that stimulated awareness of *what* the core aspect of the consultation was and *how* it was done. The specific action focused on was the understanding of the patient's needs and learning process in the encounter.

Video-recorded authentic material offers advantages appropriate in research. Factors influencing the interaction (e.g., facial expressions, gestures and body language) could be documented [138] and the researcher can later return to the material as often as desired. One disadvantage might be that the consultation becomes influenced such that sensitive matters will not be discussed. Several researchers, however, maintain that the influence of the video camera on the consultation is only marginal [59, 136, 139-141].

Ethical considerations were concerned with any mental strain that the video-recorded participants (patients and professionals) might be subjected to during the video-recording sessions. The patients who participated in Study IV were informed that their video recordings would be viewed by a group of physicians' currently undergoing specialist training, a facilitator, and a researcher.

Although the participating patients gave their informed consent, it is always difficult to determine if a patient may feel forced to participate. However, in the course arrangement the participating patients could choose what subjects to bring up for discussion. Concerning the health care professionals participating in the intervention studies, the ethical concerns were about the mental strain put on them while watching potential professional shortcomings together with others. Study IV was approved by the Ethics committee at Uppsala University (ups dnr 99213).

### **6:3 A group intervention for physicians in specialist training (Study IV)**

Group interventions and individualised interventions both have their strengths and weaknesses [142]. In Study IV, a group intervention performed in 1998 as an elective course called *'The patient-physician encounter'* was evaluated. Ten physicians under specialist training participated in the course. The aim of the course was to enhance the physicians' development toward a patient-centred approach and to expand their understanding of the patient encounter and their professional role. During the group-based intervention, the participating physicians' recorded 60 video consultations of encounters with patients from the Diabetes Association. The group sessions were based on *stimulated recall sessions* [137] and also influenced by the Pendleton method [143]. The latter is a 'soft' non-confrontational method that aims at strengthening positive and patient-centred aspects of the patient-physician encounter. The intervention comprised 3+3 days with self-studies at home taking place between interventions. Of the 10 doctors, seven were women and three were men. The mean age was 40 years (range 28-60 years).

### 6:3:1 *Time study*

The 60-videotaped consultations with the participating physicians were analysed according to how much time of the consultation the physician and patient used respectively, as well as the length of the introductory stage of the consultation, the discussion and the final stage. Melander Marttala suggested that these stages are particularly important for the medical encounter [144]. The material from the time study was analysed using nonparametric statistics: the Friedman test and Wilcoxon's Signed-rank Test for paired observations [145].

### 6:3:2 *Pendleton et al.'s consultation map*

Each of the videotaped consultations was also analysed with Pendleton et al.'s consultation map [143]. According to Pendleton et al., the following areas should be covered during a complete consultation: the nature and history of problems, aetiology, the patient's ideas, concerns, and expectations, the effects of the problems, continuing problems, risk factors, actions taken, shared understanding, and the patient being involved in management [143]. For a consultation to be patient-centred, all these areas must be included. A consultation map was made for each consultation and used when categorising the consultations as either patient- or physician-centred.

### 6:3:3 *Before-after questions*

The 10 physicians also answered, in writing, the same three questions (see p.49) regarding the core aspects of the patient encounter, both before the intervention and about one month post-intervention. The answers were thematically analysed.

#### **6:4 Evaluating the consultation**

The clinical encounter is not an easy area to research [146]. Consequently, there is no ‘golden standard’ to conduct research on the clinical encounter. A possible useful approach to increase understanding and knowledge of complex phenomena is to employ methodological triangulation - the use of multiple methods to study a single problem [49]. Because the medical encounter is an extremely complex situation, the different methodological approaches described above have been used.

A large number of instruments to describe and evaluate medical consultations currently exist [147]. They differ according to quality, practical usefulness and validation [148, 149]. It seemed logical to use Pendleton et al.’s consultation map [143] for the evaluation of the intervention in Study IV considering that the course in question was significantly influenced by Pendleton et al.’s work. This instrument was found useful; however, there are always limitations when trying to transform complicated human interactions into some sort of instrument or scheme. How delicate a problem this is materialised when one participant in the course covered all areas of the consultation, and hence could be judged as patient-centred in Pendleton et al.’s definition [143]; however, at the same time, the participant acted in a mechanical and checklist manner. In retrospect, a diabetes specific instrument would probably have been more useful for the purpose of the study.

## **6:5 Results: A changed understanding of the core aspects of the encounter**

### *6:5:1 Time-study*

The time study of the 60 video consultations yielded ambiguous results. Six of the participating doctors had longer consultations at the end of the course. Seven doctors had shortened the introductory phase of the consultation at the end of the course. Eight doctors shortened the final phase of the consultation at the end of the course. Five of them shortened both introduction and ending. The time the patient was allowed was constant for two of the doctors and varied for the rest.

### *6:5:2 Assessments from the Pendleton et al.'s consultation map*

Seven of the 10 physicians who participated in the course '*The patient-physician encounter*' developed their style of consultation toward a patient-centred encounter according to Pendleton et al. [143]. The intervention had little or no effect in changing three of the physicians' consultation style. One of the three had a patient-centred consultation style even before the start of the course. This physician's consultations included all the aspects of Pendleton et al.'s consultation map [143] though the aspects were judged as mechanical and stereotypical.

### *6:5:3 Before-after questions*

All 10 participating physicians answered the three questions (p.49) about the core aspect of the patient encounter before the intervention. At that time, none of the physicians described a patient-centred view of the clinical encounter. The answers ranged from an illness-orientation to a more physician-centred opinion. Several physicians emphasised the educational component of the encounter: "*To inform the patient of the basics in taking responsibility for his/her illness*" (Dr. 5).

There were also diverging opinions regarding the difficulties that arise in the patient encounter: “...that I find it difficult to live up to the patient’s expectations” (Dr. 9). When the physicians described a successful encounter, the same pattern emerged. Those who were physician-centred started with themselves: “when the patient has agreed to do what I consider best” (Dr. 3).

After completion of the course, eight of the nine physicians who had answered the three questions stated that they had changed their opinions concerning the content of the encounter with the patient. One example is “to find out what the patient sees as his/her problem, what worries patients have (Dr. 1). One physician, however, remained physician centred. This physician thought that the things that were difficult in the encounter before were still difficult later in the course. The physicians seemed to have changed their opinions with regard to the success of an encounter; e.g. “...that the patient has been made to understand, not just informed” (Dr. 4).

### **6:6 Individualised interventions for primary health care physicians and nurses (Study V)**

An individualised intervention program for two GPs and two primary care nurses was carried out in 1997-1998 and evaluated in Study V. The aim of the intervention was to enhance the participants development toward a more patient-centred approach and to expand their understanding of the patient encounter and their professional role.

The four GPs and primary care nurses had had several years of professional experience and previously participated in diabetes courses for health care professionals. They were recruited using snowball sampling [150].

#### 6:6:1 *The individualised intervention*

The intervention lasted for about one year. During that year, the four participants videotaped their encounters with diabetes patients on four or five separate occasions. They reflected over and discussed at length and in depth together with a facilitator over their videotaped encounters in *stimulated recall sessions* [137]. The facilitator's role was to ask questions that stimulated reflection on *what* the core aspect of the encounter was and *how* it was done. The specific action focused on was the understanding of the patient's needs and learning process in the encounter. The professionals were *not* told a "right way" of acting or talking, but simply to thoughtfully reflect over their own encounters. The participating patients were informed that only their GP or diabetes nurse, the facilitator, and the researcher would view the video-recorded material. Although the patients gave their informed consent there might be concerns that the relation to health care staff might suffer if they are unwilling to participate in a study or that they might receive poorer care. However, it was easy to recruit patients. Study V was approved by the Ethics committee at Uppsala University (Ups dnr 97420) and the Ethics committee at Karolinska Institutet (KI dnr 97430).

#### 6:6:2 *Interviews and analysis*

Interviews were carried out both before and after the yearlong intervention, tape-recorded and transcribed verbatim. The interviews examined three questions regarding the core aspects of patient encounters (see p. 49).

In the follow-up interviews the participants were also asked to describe their experiences from the intervention. The interview texts were analysed using the stepwise phenomenographic method described in Study III (see p. 50). In the analysis of the interviews the software QRS NUD\*IST [151] was used for categorisation of the material.

Instead of co-readers and member-checks, Sandberg suggests an *interpretative awareness* as a way to deal with quality aspects [152]. This interpretative awareness approach is a stepwise procedure used in Study V. The first step is to orient one self toward the phenomenon under investigation and the way it shows itself in the research process. Step two involves the orientation toward description, not explanation. Step three is to treat all aspects of the researched phenomenon as equally important. Step four concerns the search for the basic meaning structure through different ways of interpretation. The last step relates to the use of intentionality as a correlation rule when explicating the variation in the conceptions identified [152].

### **6:7 Results: A new need to focus the patient's learning process**

Three qualitatively different ways of understanding the patient encounter were identified before introducing the individualised intervention in Study V. After the intervention, the participants had changed their understanding of the patient encounter, in which none of the four participants had the conception that the aim of the consultation was *conveying information from checklists or lab tests* (Table 3).

*Table 3.* Ways of experiencing the diabetes patient encounter before and after the intervention.

<b>Participant</b>	<b>Before the intervention</b>	<b>After the intervention</b>
Nurse 2	Conveying information by checklist or lab results	Supporting the patient through dialogue
Physician 2	Conveying information by checklist or lab results	Supporting the patient through dialogue
Nurse 1	Supporting the patient through dialogue	Listening, giving advice for improved/maintained quality of life
Physician 1	Listening, giving advice for improved/maintained quality of life	Listening, giving advice for improved/maintained quality of life

### ***1. Conveying information by checklist or lab results***

The focus is on metabolic control. The professional informs and explains about diabetes and its management. The professional is in charge of the encounter, which is physician- or nurse-centred. The information is often directed using a checklist or lab results. The nurse or GP is perceived to have the knowledge, knowledge that can be transferred to the patient as factual information. The patients' role is to follow the advice and make lifestyle changes.

### ***2. Supporting the patient through dialogue***

Attention is on establishing a dialogue so that the patient can take responsibility and make lifestyle changes. Giving information about diet and exercise is important, but the information is delivered with regard to the patient as an individual living in his or her unique situation. The consultation is physician- or nurse-centred as in conception 1. An encounter is perceived to be successful when it leads to an improvement of the patient's health and receipt of information (as in conception 1). The opposite holds when a dialogue is not established and the information does not reach the patient.

### ***3. Listening, giving advice for improved/maintained quality of life***

In conception 3 the consultation is patient-centred. The patient is treated as a person with diabetes, not a diabetic patient. The aim of the consultation is to strengthen this person's autonomy and quality of life. The focus is on listening, respecting and taking the patient's perceptions as a starting point in a learning process: "*...to show the patient that I am truly present, that I am there for her, ready to listen, to share her worries, thoughts and feelings*" (physician 1).

## **6: 8 Discussion and conclusions**

The most important finding in Study V was the awareness that different understandings of the patient-professional relationship exist, and that these understandings could be used to reach a patient-centred approach, i.e. competence development. In other words, the interventions seemed to work well. During the past 20 years, health care professionals have participated in CME/CPD courses with the hope that they will be able to take better care of their patients' and optimise outcomes [24]. However, as shown in Studies III-V, a minority of health care professionals had incorporated into their understanding the patient-centred perspective. The awareness that there exist different understandings is to be taken into account when developing and implementing educational programmes for health care professionals.

Bringing about change in clinical practice that result in actual improvements for the patients is a delicate, time-consuming, complex, and complicated process. There is definitely no single approach that could easily and successfully be applied in all cases. Two ways of designing educational interventions for health care professionals were examined in Studies IV and V. They were based on the same pedagogic principles [137, 143] and both seemed to work well. Seven of the 10 physicians participating in the specialist-course in Study IV changed their view to a more patient-centred approach. In Study V the intervention was individualised and lasted for over one year. All four participants in that study developed their understanding of the encounter toward a more patient-centred perspective. Before the intervention, two of the participants in Study V had procedure-way to work and encounter the patient, lacking a holistic view. This finding is consistent with other studies [59, 67, 153] which have shown that not all health care professionals eventually become experts, despite working in their

profession for many years. During the interventions, the participants through reflection started to question their understanding of the medical or caring professional-patient encounter and went on to develop a new or enriched understanding of the encounter. They were more focused on the patient's learning process and how it could be stimulated. However, it is possible that nurses and physicians who find that they are functioning less well in conversational situations avoid participating in video-recording sessions. Accordingly, the choice of both professionals and patients might have been too positive. Furthermore, the studies are small-scaled and the interventions need to be tested in larger studies.

## *Conclusions*

- Seven of 10 physicians participating in the group intervention had developed a patient-centred view and acted accordingly;
- the professionals in the individualised intervention changed their understanding the encounter to a more patient-centred perspective;
- they started to question their way of working, focused more on the patient's learning process and became interested in how to stimulate patient learning;
- both studies implicate that it is possible to initiate competence development for health care professionals by influencing their understanding of the encounter;
- the interventions might open new avenues in designing and carrying out CME/CPD courses;
- the interventions need to be tested in larger studies in order to obtain conclusive evidence of their effectiveness.

## **Chapter 7: General discussion**

There are many aspects of the included Studies I-V that could be of interest to discuss. However, the patient-centeredness concept and different aspects of basic and continuing health care education will be the main focus. The first thing to be discussed below is, however, the methods used and the trustworthiness of the results.

### **7:1 Are the results trustworthy?**

Studies I-III are descriptive, and the data collection and analysis are fairly easy to follow. However, as different methods have been used for data collection and analysis, it might be difficult to readily compare the results from the studies included in the thesis. It must be made clear that the goal never has been to standardise the methods. Instead, the aim was to give a rich picture of the field and of the phenomena under study, as suggested by for example Morse [51] and Patton [49].

Another question to be discussed in the context of qualitative studies is the labelling of categories or concepts. Labelling categories is an important research procedure. Morse [154] holds that there might be a risk for *theoretical congestion* when every qualitative researcher is trying to find new labels for their results. One could argue that understanding A, *The professionals treat the patient*, and B, *The professionals give information*, in Study III, have much in common with understanding 1 in Study IV, *Conveying information by checklist or lab results*. The basis for these views of the encounter is of the same nature. Why are they not given the same label? The answer to that question is also given by Morse [154]:

*The rule is that they are labelled as closely to data as possible...The rationale behind this dictum is that to prematurely label the category with a known concept – for instance, coping – is a threat to validity.*

However, the results from the intervention studies (Studies IV and V) must be interpreted with caution, as they are more complex. Trying to explore and develop understanding in clinical settings *is* complex. New methods must be tried to enhance a development within this field. To date, no educational interventions with a phenomenographic approach for the health care sector have been published. However, Wahlström et al. studied changes in GPs' conceptions of the management of hyperlipidaemia [155]. Although a phenomenographic analysis was carried out, both before and after their intervention, the intervention as such had no phenomenographic approach.

Despite the advantages of *stimulated recall sessions* [137] with videotaping, Bendz holds that the method does not suit the health care context for ethical reasons [48]. However, in our sample the *stimulated recall sessions* did work for the development of competence in clinical encounters. The interventions in Studies IV and V have not been shown to be the one and only cause of the changes in the participants' understanding of the patient encounter and/or clinical performance. For example, the results may have been influenced by the *Hawthorne effect* [150]. Conclusive results could only be reached by large-scale controlled studies. An ideal design would be a study in which one group of professionals participates in group intervention; one group participates in individualised intervention and one group with no intervention, i.e. a control group. Both individualised and group interventions have their strengths and weaknesses [142].

However, it would be difficult to control all aspects in studies conducted in clinical settings; for instance, randomising of participants may not be possible. Other factors external to the study might influence the outcome. The participants in Studies IV and V wanted to develop their encounters. Another group of participants might not have developed a comparable positive posture. However, the sample does not seem to be biased as suggested by the fact that some participants in study IV did not change.

Another form of evaluation that might be suitable would be to ask the patients' about their views of the encounter before and after an intervention. This arrangement might be difficult in practice for several reasons. For example, it might be difficult for the patient to judge a GP or nurse's competence if the patient is depending on them for their care.

## **7:2 Design of the ultimate study**

To design a study connecting *professionals' understanding of the encounter with patients' outcomes* was a primary goal when this research started out several years ago. However, designing such a study is problematic. Because the work has included patients with diabetes, a logical way to study patient outcomes would have been to measure blood glucose values or HbA1c [125]. This is easy to do. The difficulties, however, are encountered in the next step when trying to connect patients' blood glucose levels to professionals' understanding of the patient encounter. Crossover effects are a cause of concern for the study design in that the patient might meet a staff-focused nurse but a patient-centred GP, or vice versa. Who has the greatest impact on patients' learning and thus patient outcomes? The patient also encounters a number of other professionals.

Another cause of concern is the current high turnover rates in the health care sector. If there is no continuity in care, optimal patient outcomes will be difficult to achieve [8] and study. Because of these problems, the design with focus on professionals only was chosen here. Further exploration of how to design an optimal study in this field is needed. The solution *might be* a faster and tighter connection between the professionals' understandings of core aspects of care and patient outcomes.

### **7:3 Does the patient-centred approach need to be expanded to meet the needs of patients?**

As noted in the introduction, the overall aim of this thesis was to explore health care professionals and medical students' understanding of the core aspect of the patient encounter and their professional role. A further goal was to study if their understandings of their role could be developed and influenced to a more patient-centred understanding. By investigating *what* and *how* they understood as the core aspect of the patient encounter, their patient-centeredness was explored. The most important finding from the five studies was highlighting the various understandings of the patient-professional encounter, and ascertaining that few professionals in the sample had incorporated a patient-centred perspective. This is rather surprising when taking into account the patient empowerment movement and the strengthening of patients' rights [28, 31, 32], as well as the numerous CME/CPD courses for professionals.

Although the work with this thesis started out with an understanding of the patient-centred approach as an optimal way of interacting with patients, the work has given insights into the limitations of this approach.

In some ways the approach might have too much in common with the *compliance* concept, a concept that was already rejected in the introductory section. For example, professionals in Pooley et al.'s study on diabetes care expressed views that suggested they were concerned with traditional patient education and compliance, although they verbally embraced the patient-centeredness approach [20]. In retrospect, the concept probably needs to be reinterpreted by professionals to avoid patient dissatisfaction and to take the *patients' perspective*. Furthermore, *support for the patient's learning and reflection* [3, 9] should be included in the concept.

It must be stressed that labelling things in a new way is not enough – a shift in understanding is required. However, this might require not only a new understanding among health care professionals, but also structural and organisational changes within the health care sector and health care education. In addition, studies of patients' views are needed. What do the patients' think of the care of the (chronically) ill, the patient-centred approach and the need for competence development among health care professionals? These questions cannot be answered here in that the patients' views were not explored in the present study. Further work is needed whereby the patients' perspective is central. After all, it is their health and well being we are concerned about. Thorne and Paterson's results however have challenged traditional compliance models of chronic illness education [156]. The persons with diabetes who participated in their study described that health care professionals who responded inadequately to the patients needs could make it more difficult for them to progress through their developing process and thus become competent disease managers [156].

#### **7:4 The patient-centred approach and health care education**

The present participants described the barriers to a patient-centred approach in terms of organisational factors, stress and conflicting demands. In Chapter 1 problems in the health care sector, such as stress, were discussed. These problems are confirmed and clearly described by medical students and professionals. However, blaming the organisation may be an easy way out when realising that one might embrace a professional-centred perspective rather than the politically correct patient-centred approach. Perhaps one could challenge the participants' opinions: is lack of time, as often mentioned, the main cause of non-optimal encounters with patients? Research indicates, however, that time is not a crucial factor for a patient-centred consultation [141, 157]. Thus, limited time cannot be the only explanation for not working from a patient-centred perspective. Furthermore, other deterrents not detected here possibly exist. However, the main finding was, as stated above, that few health care professionals had an optimal understanding of their role and of the patient encounter. The result might have to do with the organisation, as stated by so many participants in the studies, but also with the way in which health care professionals are educated.

Medical and nursing education focus largely on diagnosis and treatment of acute illnesses. Hence, students (and professionals) might not be well equipped for encountering the (chronically) ill [97] and thus act in a counterproductive manner. The reason for this might be several. For instance, in medical and nursing education the burdens of traditions are heavy. There is also a well-known gap between theory and practice [59]. Most of the socialisation into the profession goes on in practice. Students risk taking over views of their supervisors in clinical settings when little or no time is reserved for reflection.

Löfmark has shown that nursing students were not given sufficient supervision and that organisational shortcomings and a general lack of time in the wards [59] affected the learning in clinical settings. In addition, because the health care system is complex, it tends to adapt rather slowly to changes [30]. Thus, a more authoritarian view of the professionals' role might live on for a while in practice, although officially abandoned.

Another question is whether students and health care professionals *really want* to incorporate a patient-centred perspective. The empowered, competent, and well-informed patient could be viewed as a threat undermining professional authority. Carlson [126] states that objectifying the patient and taking a professional-centred approach might be based on individual psychological defence mechanisms. However, it seems to be a good sign that the medical students in Study I strongly questioned the traditional role of medical doctors. To meet the needs of the patients, especially the chronically ill, either of two educational directions seems reasonable.

### **7:5 Educating the educators**

There are two ways one can take in supporting the patients' learning and autonomy. One can either educate the educators, most often health care professionals, or one can bypass the professionals and educate the patients directly. *The first way* suggested is hence CME/CPD courses. As stated previously in this thesis, there are numerous such courses with different educational approaches and goals. However, to be cost-effective [158] and of value for professionals and patients, the education would need to focus the professionals understanding of their role. The educational interventions for physicians and nurses described in Studies IV and V might be a way to educate

the educators and thus enhance competence for their patient encounters. One of the aims with the interventions was to create a curiosity among the participants about how to, in turn, stimulate the patients' curiosity and thus learning. Patients' might need help to see that there are many ways of understanding and living with illness and treatment. Motivational interviewing [68] [125] might be a way to deal with this issue.

The educational interventions evaluated here represent different forms of *supervision*. Many such forms do exist. Petersson and Vahlne [159] point out that there are many definitions of the word *supervision*, and gives examples of different methods. Hawkins and Shohet indicate that supervision has three goals: educative, supportive and managerial [142]. The educative goal was the focus during the interventions in Studies IV and V. Lauvås and Handal [160] describe different theoretical traditions within the domain of *supervision*, including the Polanyi tradition, the Wittgenstein tradition and the Schön tradition. Both the Polanyi tradition and the Wittgenstein tradition stress the importance of *tacit knowledge*, although they have different views of it. The Schön tradition, on the other hand, has a different point of departure, namely empirical studies of professional practice [66, 160]. As described in Chapter 2, the latter had the greatest influence over the present work.

Of course, long-term follow-ups of Studies IV and V are important. What happens some years after the interventions? A follow-up of the four participants in the intervention in Study V is currently in progress. Preliminary results show that the participants' understanding of the encounter (two years after the intervention) had continued to develop, but occasional relapse to earlier practices occurs in stressful situations. These occasional relapses have

previously been described as a part of the development process [17, 121]. In the follow-up interviews one participant stated the following:

*We think that we can inform patients about diabetes and that they then automatically shall change their habits; when they don't do as expected, we look very puzzled and tell them again how dangerous this disease is, how important it is...But in connection to the stimulated recall sessions and the video technique, I think I had my eyes opened as to how hard it is to actually let the patient's agenda direct the consultation...(physician 1)*

### **7: 6 Educating the patients**

*A second direction* for educational interventions is to focus directly on the chronically ill and bypass the step “in between,” i.e. the health care professionals. Such interventions might be based on the patient empowerment concept with the aim to strengthen the patients' over-all abilities [32, 161]. On the other hand, interventions could be more directed towards the patients' understanding of their illness. They could be carried out in the form of study circles for patients at the pharmacies. In the study circles the patients would share knowledge with each other while acquiring new experiences in a “safe” environment. It is well known that people in general are most dedicated to problems and solutions which are generated from or based upon their own knowledge and experiences [162]. Sarkadi and Rosenqvist have shown that blood glucose levels are improved in patients with diabetes that have participated in such study circles [163, 164]. The advantage with being at a pharmacy instead of a health care centre seems to be that the participants experience to be on more equal terms when the group leader is a pharmacist as compared with a physician or nurse group leader.

### **7:7 Closing remarks**

Consequently, there are different means to improve outcomes of care for large groups of patients. How competence develops within the medical and nursing profession in the future is connected to how we, as a society, can manage problems both within and outside the professions [165]. Will the current cycle of cutbacks and strain on the health care sector stop and allow time for professionals to reflect on their work *and* to have a balance in life? Are health care professionals and their educators willing to make efforts to change their understanding of the patient encounter and their way of working? Change is often difficult to come to terms with successfully and strong forces will challenge those who want change [122]. As noted by Lonka & Ahola, fostering change requires both theory development and practical experiments [166]. Co-operation between patients, researchers, health care professionals, educators and politicians seems essential to come to terms with problems of the health care sector. For all of the participants in Studies I-V, time and opportunities for reflection seemed to be central for the professional development. This process must start already during the professional education.

## **7:8 Overall conclusions**

- Few medical students and professionals in diabetes care had incorporated a patient-centred perspective. Nurses in telephone advisory services recognised the patients' needs, but experienced conflicting demands of being both carer and gatekeeper. Some of the current problems in health care could be caused by a non-optimal match between patients' needs and wishes and what professionals understand as their role;
- the hindrances associated with patient-centred working are partly due to organisational and educational aspects, as well as work-related mental and emotional stress, but also by the limited understandings that health care professionals have of the patient encounter;
- health care professionals' understandings of the patient encounter are important to explore and should be considered in relation to competence development. Phenomenographic theories of learning should prove helpful to accomplish this goal in clinical settings;
- video recordings would need to become a routine component of clinical practice in order to capture competence development within one's profession. Time for reflection, mentoring and professional development should be built into the health care system;
- the generalisation of the results has yet to be tested with the inclusion of lessons learned from these studies. The lessons include becoming more aware of barriers to competence development and strategies for dealing with these barriers. These obstacles must be overcome in the struggle to give high quality, patient-centred care to patients and optimise outcomes of the health care system for both individuals and society.

## 7:9 Summary

- The medical students' that were studied held a pessimistic view of health care in general and their future medical profession in particular because of stress, organisational problems and financial cut backs;
- the nurses' experience of the patient encounter when performing telephone advisory services could be described in terms of *the conflicting demands of being both carer and gatekeeper*. The organisation of health care seemed to hinder reflection, follow-up, and the quality care that the nurses would prefer to give;
- five different understandings of diabetes care were identified among the health care professionals in our sample. Only 20 (12%) of 169 professionals had their focus on the patients' understanding and thus learning while 87 (51%) had the traditional and professional-centred view of the patient encounter;
- seven of 10 physicians participating in the educational group intervention had developed a patient-centred view of their professional role and the patient encounter, and acted accordingly;
- three different understandings of the patient encounter were described by the four participants in the individualised intervention. After the intervention they started to question their way of working, focused more on the patient's learning process and became motivated as how to best stimulate this learning process.

## REFERENCES

1. Arnetz, B., Psychosocial challenges facing physicians of today. *Social Science and Medicine*, 2001. 52: 203-13.
2. Firth-Cozens, J., Interventions to improve physicians well being and patient care. *Social Science and Medicine*, 2001. 52: 215-22.
3. Rosenqvist, U., Theman, J., Assal, J-P., *The patients task, new development in diabetes education. TDTL, Diabetes Education Study Group of the European Association for the Study of Diabetes, EASD*. 1994: Geneva.
4. Simpson, M., Buckman, R., Stewart, M., Maguire, P., Lipkin, M., Novack, D., Till, J., Doctor-patient communication; the Toronto consensus statement. *British Medical Journal*, 1991. 303: 1385-1387.
5. Roter, D., The enduring and evolving nature of the patient-physician relationship. *Patient Education and Counseling*, 2000. 39: 5-15.
6. Söderlund, M., "En mänsklig atmosfär". *Trygghet, samhörighet, gemenskap - God vård ur ett patientperspektiv (In the atmosphere of humanity. Security, solidarity and mutual understanding - A concept of good caring from the patients' perspective)* (Thesis) Uppsala Studies in Education, 77. 1998, Uppsala University.
7. Bartlett, E., Cost-benefit analysis in patient education. *Patient Education and Counseling*, 1995. 26: 87-91.
8. Markson, L., Voller, WM., Fitterman, L., O'Connor, E., Narayanan, S., Berger, M., Buist, S., Insight Into Patient Dissatisfaction With Asthma Treatment. *Archives of Internal Medicine*, 2001. 161(3): 379-84.
9. Wikblad, K., Patient perspectives of diabetes care and education. *Journal of Advanced Nursing*, 1991. 16: 837-44.
10. Hansson Scherman, M., *Att vägra vara sjuk. En longitudinell studie av förhållningsätt till astma/allergi (Refusing to be ill: A longitudinal study of patients' relationship with their asthma/allergy)*. (Thesis) Göteborg Studies in Educational Sciences 95. 1994, University of Gothenburg.
11. Ong, L., Visser, MRM., Lamnes, FB., de Haes, JCJM., Doctor-patient communication and cancer patients' quality of life and satisfaction. *Patient Education and Counseling*, 2000. 41: 145-56.
12. Paterson, B., Sloan, J., A Phenomenological Study of the Decision-Making Experience of Individuals with Long-Standing Diabetes. *Canadian Journal of Diabetes Care*, 1994. 18(4): 10-19.
13. Bensing, J., *Doctor-patient communication and the quality of care. an observation study into affective and instrumental behavior in general practice*. 1991, Rotterdam: Nivel.
14. Little, P., Everitt, H., Williamson, I., Warner, G., Moore, M., Gould, C., Ferrier, K., Payne, S., Observational study of patient centredness and positive approach on outcomes of general practice consultations. *British Medical Journal*, 2001. 323: 908-11.
15. Little, P., Everitt, H., Williamson, I., Warner, G., Moore, M., Gould, C., Ferrier, K., Payne, S., Preferences of patients for patient centred approach to consultation in primary care: observational study. *British Medical Journal*, 2001. 322: p. 468.
16. Sandberg, J., *Human competence at work, an interpretive approach*. 1994, Göteborg: BAS.

17. Dall'Alba, G., Sandberg, J., Educating for Competence in Professional Practice. *Instructional Science*, 1996. 24: 411-437.
18. Bensing, J., Briding the gap. The separate worlds of evidence-based medicine and patient-centred medicine. *Patient Education and Counseling*, 2000. 39: 17-25.
19. Göransson, A., Dahlgren, LO., Lennerstrand, G., Changes in conceptions of meaning, effect and treatment of amblyopia. A phenomenographic analysis of interview data from parents with amblyopic children. *Patient Education and Counseling*, 1998. 34(3): 213-25.
20. Pooley, C., Gerrard, C., Hollis, S., Morton, S., Astbury, J., "Oh, it's a wonderful practice...you can talk to them": a qualitative study of patients' and health professionals' views on the management of type 2 diabetes. *Health & Social Care in the Community*, 2001. 9(5): 318-26.
21. Stewart, M.A., Effective Physician-patient communication and health outcomes: A review. *Canadian Medical Association Journal*, 1995. 152(9): 1423-1433.
22. Reichard, P., Toomingas, B., Rosenqvist, U., Changes in conceptions and attitudes during five years of intensified conventional insulin treatment in the Stockholm Diabetes Intervention Study (SDIS). *Diabetes Educator*, 1994. 20(6): 503-8.
23. Aspegren, K., Birgegård, G., Ekeberg, Ö., Hietanen, P., Holm, U., Bonde Jensen, A., Lindfors, O., Oskarsson, H., Improving awareness of the psychosocial needs of the patient - a training course for experienced cancer doctors. *Acta Oncologica*, 1996. 35(2): 246-48.
24. Saleh-Stattin, N., *Immigrant Patients with Diabetes. How they understand, learn to manage and live with their Diabetes.* (Thesis) Dpt. of Public Health and Caring Sciences. 2001, Uppsala University.
25. Zaner, R., Power and hope in the clinical encounter: a meditation on vulnerability. *Medicine, Health Care and Philosophy*, 2000. 3: 265-75.
26. Ringman Fagerberg, C., Kragstrup, J., Stovring, H., Rasmussen, NK., How well do patient and general practitioner agree about the content of the consultations? *Scandinavian Journal of Primary Health Care*, 1999. 17: 149-52.
27. Toombs, K.S., *The meaning of Illness. A Phenomenological Account of the Different Perspectives of Physician and Patient.* 1992, Dordrecht/ Boston/ London: Kluwer Academic Publishers.
28. Svenaeus, F., *The Hermeneutics of medicine and the Phenomenology of Health. Steps towards a philosophy of medical Practice.* (Thesis) The Tema Institute, Dpt. of Health and Society. 1999, Linköping University.
29. Svenaeus, F., Fenomenologiska perspektiv på hälsa och sjukdom (Phenomenological perspectives on health and illness). *Läkartidningen*, 2002. 99(6): 540-44.
30. Plsek, P., Greenhalgh, T., The challenge of complexity in health care. *British Medical Journal*, 2001. 323: 625-28.
31. *SFS 1982:763, Hälso- och sjukvårdslag (Health Care Act).* 1982:763. Modified 1989 and 1998
32. Björwell, H., Patient empowerment. *Vård*, 1996. 4: 74-80.
33. Deber, R., Kraetschmer, N., Irvine, J., What Role Do Patients Wish to Play in Treatment Decision Making? *Archives of Internal Medicine*, 1996. 156: 1414-20.
34. Deber, R., Kraetschmer, N., Irvine, J., Physicians in health care management: 8. The patient-physician partnership: decision making, problem solving and the desire to participate. *Canadian Medical Association Journal*, 1994. 151(4): 423-27.

35. Holm, U., *Empati i patient-läkarrelationen. En teoretisk och empirisk analys (Empathy in the doctor-patient relationship. A theoretical and empirical analysis)*. (Thesis) Uppsala Studies in Education 24. 1985, Uppsala University.
36. Wikblad, K., Leksell, J., Wibell, L., Health-related quality of life in relation to metabolic control and late complications in patients with insulin dependent diabetes mellitus. *Quality of Life Research*, 1996. 5: 123-30.
37. Hellström, O., *Patienten som person. Om mening och dialog i allmänmedicinsk praktik (The patient as a person. Of meaning and dialogue in general practice)*. (Thesis) Division of Social Medicine, Dpt. of Community. 1999, Umeå University.
38. Burger, W., The relation between medical education and the medical profession's world view. *Medicine, Health Care and Philosophy*, 2001. 4: 79-84.
39. Segall, P., The rewards of chronic illness. *Western Journal of Medicine*, 2001. 175(5): 374.
40. Wilson, T., Holt, T., Complexity and clinical care. *British Medical Journal*, 2001. 323: 685-88.
41. Mullen, P., Compliance becomes concordance. Making a change in terminology produce a change in behaviour. *British Medical Journal*, 1997. 314: 691-93.
42. Hutchinson, S., The development of Qualitative Health Research. *Qualitative Health Research*, 2001. 11(4): 505-21.
43. Malterud, K., The art and science of clinical knowledge: evidence beyond measures and numbers. *The Lancet*, 2001. 358: 397-400.
44. Wittlemore, R., Chase, SK., Mandl, CL., Validity in Qualitative Research. *Qualitative Health Research*, 2001. 11(4): 522-37.
45. Sandelowski, M., Real Qualitative Researcher Do Not Count: The use of Numbers in Qualitative Research. *Research in Nursing and Health*, 2001. 24:230-40.
46. Sandelowski, M., Combining Qualitative and Quantitative Sampling, data Collection, and Analysis Techniques in Mixed-Method Studies. *Research in Nursing and Health*, 2000. 23: 246-55.
47. Lonka, K., Lindblom-Ylänne, S., Epistemologies, conceptions of learning, and study practices in medicine and psychology. *Higher Education*, 1996. 31: 5-24.
48. Bendz, M., *Kunskap i praktik. Hur sjuksköterskestuderande uppfattar kliniska vårdssituationer och sitt eget handlande i dem samt hur deras uppfattningar förändras under och efter utbildningen (Knowledge in practice. How nursing students conceive of clinical caring situations and their own actions in them, and how their conceptions change during and after their education)*. (Thesis) 1995, University of Lund.
49. Patton, M., *Qualitative Evaluation and Research methods. Second edition*. 1990, Newbury Park, London, New Delhi: Sage Publications, Inc.
50. Casebeer, A., Verhoef, MJ., Combining Qualitative and Quantitative Research Methods: Considering the Possibilities for Enhancing the Study of Chronic Diseases. *Chronic Diseases in Canada*, 1997. 18(3): 130-35.
51. Morse, J.M., Qualitative Health Research: Challenges for the 21st Century. *Qualitative Health Research*, 2002. 12(1): 116-29.
52. Marton, F., Phenomenography, in *The International Encyclopedia of Education*, Husén, T., Postlethwaite, TN., (Eds.)1994, Pergamon. p. 4424-29.
53. Starrin, B., Svensson, P-G., *Kvalitativ metod och vetenskapsteori (Qualitative research methods and theories)*. 1994, Lund: Studentlitteratur.

54. Sandelowski, M., Rigor or rigor mortis: the problem of rigor in qualitative research revisited. *Advances in Nursing Sciences*, 1993. 16(2): 1-8.
55. Sparkes, A., Myth 94: Qualitative Health Researchers Will Agree About Validity. *Qualitative Health Research*, 2001. 11(4): 538-52.
56. Guba, E., Lincoln, YS., *Fourth Generation Evaluation*. 1989, Newbury Park, London and New Dehli: Sage Publications.
57. Hamberg, K., Johansson, E., Lindgren, G., Westman, G., Scientific Rigour in qualitative research - Examples From a Study of Women's Health in Family Practice. *Family Practice*, 1994. 11(2):176-81.
58. Kvale, S., *Den kvalitativa forskningsintervjun (The qualitative research interview)*. 1997, Lund: Studentlitteratur.
59. Löfmark, A., *Student Nurses in Clinical Practice. Studies on independence, assessment and performance.*(Thesis) Dpt. of Public Health and Caring Sciences. 2000, University of Uppsala..
60. Sandberg, J., *Understanding the basis for competence development.*, in *International Perspectives on Competence in the Workplace.*, C. Velde, Editor. 2001, Kluwer Academic Publishers: Netherlands. p. 9-25.
61. Pramling, I., *The foundations of knowing*. Dpt. of Education. 1994, University of Gothenburg.
62. Marton, F., Phenomenography and "the art of teaching all things to all men". *Qualitative Studies in Education*, 1992. 5(3): 253-67.
63. Lauvås, P., Noen punkter om praktisk yrkest teori (Some notes on professional practice theories). *Nordisk Pedagogik*, 1990. 3: 162-66.
64. Bentling, S., *Sjuksköterskeprofessionen. Vetenskapliga idéer och kunskapsutveckling (The nursing profession. Ideas of nursing science and knowledge development)*. 1995, Falköping: Liber Utbildning.
65. Wing Yan, P. *The Dynamics of Awareness*. Paper presented at the 8th European Conference for Learning and Instruction. 1999. University of Gothenburg.
66. Schön, D., *The reflective practitioner: How professionals think in action*. 1983, New York: State University of New York Press.
67. Benner, P., *From novice to expert: Excellence and power in clinical nursing practice*. 1984, San Francisco: Addison-Wesley.
68. Theman, J., *Welcome to the Exploratorium. Hands on diabetes education*. 1995, Förändringskonsult AB: Göteborg.
69. Carlson, A., Rosenqvist, U., Diabetes care organization, process, and patient outcomes: effects of a diabetes control program. *Diabetes Educator*, 1991. 17(1): 42-8.
70. Henriksen, E., Sjögren Marklund, K., *Utvärdering av en intervjukurs för vårdpersonal inom diabetesvård, Diabetologicum 1 (A follow-up of a interview course for diabetes staff, Diabetologicum 1)*. 1993, Pedagogiska institutionen, Stockholms universitet: Stockholm.
71. Sandler, Å. *Edmund Husserls fenomenologiska tradition (The phenomenological tradition of Edmund Husserl)*. Lecture manuscript. NHV 2000: Göteborg.
72. van Manen, M., *Researching Lived Experience: Human Science for an Action Sensitive Pedagogy*. 1990, New York: SUNY Press.
73. Bengtsson, J., *Sammanflätningar. Husserls och Merleau-Pontys fenomenologi (Intertwinements. The phenomenology of Husserl and Merleau-Ponty)*. 1993, Göteborg: Daidalos.

74. Husserl, E., *Fenomenologins idé (The idea of phenomenology)*. 1989, Göteborg: Daidalos.
75. Karlsson, G., *Psychological Qualitative Research from a Phenomenological Perspective*. 1995, Göteborg, Sweden: Almqvist & Wiksell International.
76. Friberg, F., Dahlberg, K., Nyström Peterson, M., Öhlén, J., Methodological decontextualization in Nursing research with examples from Phenomenography. *Scandinavian Journal of Caring Sciences*, 2000. 14(1): 37-43.
77. Theman, J. Pedagogiska synpunkter (Pedagogical viewpoints) in *Diabetes. Läkardagarna i Örebro 1989*. 1989. Örebro: Svenska Läkaresällskapet och Spri.
78. Giorgi, A., A phenomenological Perspective on Certain Qualitative Research Methods. *Journal of Phenomenological Psychology*, 1994. 25(2): 190-220.
79. Abrandt, M., *Learning Physiotherapy: The impact of formal education and professional experience*. (Thesis) *Dpt. of Education and Psychology*. 1997, University of Linköping.
80. Dahlberg, K., Drew, N., Nyström, M., *Reflexive Lifeworld Research*. 2001, Lund: Studentlitteratur.
81. Dahlgren, L.-O., Fallsberg, M., Phenomenography as a Qualitative Approach in Social Pharmacy Research. *Journal of Social and Administrative Pharmacy*, 1991. 8(4): 150-157.
82. Marton, F., Phenomenography - A research approach to investigate different understandings of reality. *Journal of Thought*, 1986. 21: 28-49.
83. Dall'Alba, G., Reflections on phenomenography. *Nordisk Pedagogik*, 1994. 4: 222-26.
84. Francis, H., Advancing phenomenography - Questions of method, in *Reflections on phenomenography. Toward a methodology?* Dall'Alba, G., Hasselgren, B., (Eds) 1996, Acta Universitatis Gothoburgensis.
85. Lindberg-Sand, Å. *Spindeln i klistret. Den kliniska praktikens betydelse för utvecklingen av yrkeskompetens som sjuksköterska (A Spider in Glue. The significance of student nurses clinical experiences for the development of their professional competence. An ethnographic-phenomenographic study)*. (Thesis) 1996, University of Lund..
86. Thistlethwaite, J., Jordan, JJ., Patient-centred consultations: a comparison of student experience and understanding in two clinical environments. *Medical Education*, 1999. 33: 678-85.
87. Niemi, P., Vainiomäki, PT., Medical Students' Academic Distress, Coping and Achievement Strategies During the Preclinical Years. *Teaching and Learning in Medicine*, 1999. 11(3): 125-134.
88. Spiro, J., Simpson, DE., Matteson, RL., "Entering the adult world": Developmental Issues in Medical Education. *Psychiatry*, 1987. 50: 256-66.
89. Fields, S., Toffler, WL., Hopes and concerns of a first-year medical school class. *Medical Education*, 1993. 27: 124-29.
90. Self, D., Schrader, DE., Baldwin Jr., DC., Wolinsky, FD., The moral development of medical students: a pilot study of the possible influence of medical education. *Medical Education*, 1993. 27: 26-34.
91. Allen, I., *Doctors and their careers. A new generation*. 1994, London: Policy Studies Institute.

92. Strömberg, B., *Professionellt förhållningssätt hos läkare och sjuksköterskor. En studie av uppfattningar (Professional attitudes of doctors and nurses. A Study of Conceptions)* (Thesis) Göteborg Studies in Educational Sciences 111. 1997, University of Gothenburg.
93. Dahlgren, L., Marton, F., Students' Conceptions of Subject Matter: an aspect of learning and teaching in higher education. *Studies in Higher Education*, 1978. 3(1): 25-35.
94. Allen, I., Challenges to the health services: the professions. *British Medical Journal*, 2000. 320: 1533-35.
95. Lindström, U., *Levande läkare. Vad behöver allmänläkare för att känna sig levande i sin yrkesutövning? (Vital physicians. What do general practitioners need to feel vital in their professional role?)*. 1998, Lund: Studentlitteratur.
96. Benner, P., Hooper-Kyriakidis, P., Stannard, D., *Clinical Wisdom and Interventions in Critical Care. A thinking-in-action approach*. 1999, Philadelphia: W.B. Saunders Company.
97. Dall'Alba, G., Medical Practice as Characterised by Beginning Medical Students. *Advances in Health Sciences Education*, 1998. 3: 101-18.
98. Hornblow, A., The evolution and Effectiveness of Telephone Counseling Services. *Hospital and Community Psychiatry*, 1986. 37(7): 731-33.
99. Carlsson, M., Strang, P., Lindblad, L., Telephone Help Line for Cancer Counseling and Cancer Information. *Cancer Practice*, 1996. 4(6): 319-23.
100. Hallam, L., You've Got a Lot to Answer for, Mr Bell. A review of the Use of the Telephone in Primary Care. *Family Practice*, 1989. 6(1): 47-57.
101. Wahlberg, A., Wredling, R., Telephone nursing: Calls and caller satisfaction. *International Journal of Nursing Practice*, 1999. 5: 164-70.
102. Wilson, K., Williams, A., Visualism in Community Nursing: Implications for Telephone Work with Service Users. *Qualitative Health Research*, 2000. 10(4): 507-20.
103. Timpka, T., Arborelius, E., The primary-care nurse's dilemma: a study of knowledge use and need during telephone consultations. *Journal of Advanced Nursing*, 1990. 15: 1457-65.
104. Skipwith, D., Telephone Counseling Interventions with Caregivers of Elders. *Journal of Psychosocial Nursing*, 1994. 33(3): 7-10.
105. Holmström, I., *Telefonrådgivning - en pedagogisk utmaning (Telephone advisory services - a pedagogic challenge)*. 1998, Lärarhögskolan i Stockholm, enheten för Vårdpedagogik: Stockholm.
106. Crotty, M., *Phenomenology and Nursing Research*. 1996, South Melbourne, Australia: Churchill Livingstone. 202.
107. Caelli, K., The Changing Face of Phenomenological research: Traditional and American Phenomenology in Nursing. *Qualitative Health Research*, 2000. 10(3): 366-77.
108. Giorgi, A., The Status of Husserlian Phenomenology in Caring Research. *Scandinavian Journal of Caring Sciences*, 2000. 14(1): 3-10.
109. Giorgi, A., Concerning the Application of Phenomenology to Caring Research. *Scandinavian Journal of Caring Sciences*, 2000. 14(1): 11-15.
110. Hannigan, B., *Burnout in community mental health nurses: findings from the all-Wales study*. *Journal of Psychiatric and Mental Health Nursing*, 2000. 7: 127-34.
111. Rout, U., Stress amongst district nurses: a preliminary investigation. *Journal of Clinical Nursing*, 2000. 9: 303-9.

112. Lundman, B., Norberg, A., The significance of a sense of coherence for subjective health in persons with insulin-dependent diabetes. *Journal of Advanced Nursing*, 1993. 18: 381-86.
113. Price, M.J., An Experiential Model of Learning Diabetes Self-Management. *Qualitative Health Research*, 1993. 3(1): 29-54.
114. American Diabetes Association. Report of the Expert Committee on the Diagnosis and Classification of Diabetes Mellitus. *Diabetes Care*, 2001. 24, supplement 1.
115. *Diabetes*, Agardh, C-D., Berne, C., Östman, J., (Eds.) 1992, Falköping: Almqvist & Wiksell Förlag AB. 384.
116. Hunt, L., Arar, NH., Larme, AC., Contrasting Patient and Practitioners Perspective in Type 2 Diabetes Management. *Western Journal of Nursing Research*, 1998. 20(6): 656-82.
117. Vessby, B., Karlström, B., Öhrvall, M., Järvi, A., Andersson, A., Basu, S., Diet, Nutritions and Diabetes Mellitus. *Uppsala Journal of Medical Science*, 2000. 105(2): 151-60.
118. Grill, V., Carlsson, S., Norman, A., Alvarsson, M., Östensson, C-G., Svanström, L., Efendic, S., Family history of diabetes in middle-aged Swedish men is a gender unrelated factor which associates with insulinopenia in newly diagnosed diabetic subjects. *Diabetologica*, 1999. 42: 15-23.
119. Cravey, A., Washburn, SA., Gesler, WM., Arcury TA., Skelly, AH., Developing socio-spatial knowledge networks: a qualitative methodology for chronic disease prevention. *Social Science and Medicine*, 2001. 52: 1763-75.
120. Franciosi, M., Pellegrini, F., De Beradis, G., Belfiglio, M., Cavaliere, D., Di Nardo, B., Greenfield, S., Kaplan, SH., Sacco, M., Tognoni, G., Valentini, M., Nicolucci, A., The Impact of Blood Glucose self-Monitoring on metabolic Control and Quality of Life in Type 2 Diabetic Patients. *Diabetes Care*, 2001. 24: 1870-77.
121. Doherty, Y., Hall, D., James, PT., Roberts, SH., Simpson, RJ., Change counselling in diabetes: the development in a training programme for the diabetes team. *Patient Education and Counseling*, 2000. 40: 263-78.
122. Rosenqvist, U., Diabetes service management training and the need for a patient perspective: a 10-year evolution of training strategies and goals. *Patient Education and Counseling*, 1995. 26(1-3): 209-13.
123. van den Arend, I., Stolk, RP., Krans, HMJ., Grobbee, DE., Schrijvers, AJP., Management of type 2 diabetes: a challenge for patient and physician. *Patient Education and Counseling*, 2000. 40: 187-94.
124. Sarkadi, A., *The Borderland between Care and Self-Care*. (Thesis) Dpt. of Public Health and Caring Sciences, 2001, Uppsala University.
125. Wolpert, H., Anderson, BJ., Management of diabetes: are doctors framing the benefits from the wrong perspective? *British Medical Journal*, 2001. 323(7319): 994-996.
126. Carlson, A., *Reforming diabetes care in general practice. Evaluation of two strategies for the development of the organisation and quality of health care*. (Thesis) Department of Endocrinology. 1990, Karolinska Institutet: Stockholm.
127. Solér, C., *Att köpa miljövänliga dagligvaror (Buying ecologically friendly consumer goods)*. 1997, Göteborg: Nerenius & Santérus Förlag.
128. Bowden, J., Phenomenographic research - Some methodological issues., in *Reflections on phenomenography. Toward a methodology?* Dall'Alba, G., Hasselgren, B.,( Eds.) 1996, Acta Universitatis Gothoburgensis.

129. Säljö, R., Minding action - Conceiving of the world versus participating in cultural practices. in *Reflections on phenomenography. Toward a methodology?* Dall'Alba, G., Hasselgren, B., (Eds.) 1996, Acta Universitatis Gothoburgensis.
130. Adelsvärd, V., Berättelser från älgpassen (Moose hunting narratives) in *Att studera berättelser (To study narratives)*, Hydén, L., Hydén, M., (Eds.) 1997, Liber: Stockholm.
131. Hasselgren, B., Tytti Soila and the phenomenographic approach., in *Reflections on Phenomenography*, Dall'Alba, G., Hasselgren, B., (Eds.) 1996, Acta Universitatis Gothoburgensis.
132. Ashworth, P., Lucas, U., What is the "World" of Phenomenography? *Scandinavian Journal of Educational Research*, 1998. 42(4): 415-31.
133. Sanner, M., *Den döda kroppen. Psykologiska och socialmedicinska aspekter på organdonation, transplantaion och dödsriterier (The dead body. Psychological and socio-medical aspects of organ donation, transplantation and death criteria)* (Thesis) Dpt. of Socialmedicine. 1991, University of Uppsala.
134. Elasy, T., Ellis, SE., Brown, A., Pichert, JW., A taxonomy for diabetes educational interventions. *Patient Education and Counseling*, 2001. 43: 121-27.
135. Usherwood, T., *Understanding the consultation. Evidence, theory and practice*. 1999, Buckingham and Philadelphia: Poen University Press.
136. Arborelius, E. and T. Timpka, General Practitioners' Comments on Video Recorded Consultations as an Aid to Understanding the Doctor-Patient Relationship. *Family Practice*, 1990. 7(2): 84-91.
137. Alexandersson, M., *Metod och medvetande (Method and awareness)*. (Thesis) Dpt. of Education. 1994, University of Gothenburg.
138. Caris-Verhallen, W., Kerkstra, A., Bensing, JM., Grypdonck., MHF., Effects of video interaction analysis training on nurse-patient communication in the care of the elderly. *Patient Education and Counseling*, 2000. 39: 91-103.
139. Fossum, B., Arborelius, E., Theorell, T., How do patients experience consultations at an orthopaedic out-patient clinic? *European Journal of Public Health*, 1998(8): 59-65.
140. Poskiparta, M., Liimatainen, L., Kettunen, T., Nurses' self-reflection via videotaping to improve communication skills in health counselling. *Patient Education and Counseling*, 1999. 36: 3-11.
141. Arborelius, E., Bremberg, S., What Can Doctors Do to Achieve a Successful Consultation? Videotaped Interviews Analyses by the 'Consultaion Map' Method. *Family Practice*, 1992. 9(1): 61-66.
142. Hawkins, P., Shohet, R., *Supervision in the helping professions*. 1989, Open Universiy Press: Buckingham and Bristol.
143. Pendleton, D., Schofield, T., Tate, P., Havelock, P., *The consultation: an approach to learning and teaching*. 1984: Oxford University Press.
144. Melander Marttala, U., *Innehåll och perspektiv i samtal mellan läkare och patient. En språklig och samtalsanalytisk undersökning (Content and perspective in doctor-patient conversations. A linguistic and conversation analytic investigation)* (Thesis) Institutionen för Nordiska Språk. 1995, Uppsala Universitet.
145. Daniel, W., *Biostatistics: a foundation for analysis in the health sciences. Seventh edition*. 1999, New York: John Wiley & Sons, Inc.
146. Ong, L.M.L., de Haes, JCI., Hoos, AM., Lammes, FB., Doctor-Patient Communication: A Review of the Literature. *Social Science and Medicine*, 1995. 40(7): 903-918.

147. Elwyn, G., Edwards, A., Mowle, S., Wensing, M., Wilkinson, C., Kinnersley, P., Grol, R., Measuring the involvement of patients in shared decision-making: a systematic review of instruments. *Patient Education and Counseling*, 2001. 43(1): 5-22.
148. Boon, H., Stewart, M., Patient-physician communication assessment instruments: 1986 to 1996 in review. *Patient Education and Counseling*, 1998. 35: 161-76.
149. Mead, N., Bower, P., Measuring patient-centeredness: a comparison of three observation-based instruments. *Patient Education and Counseling*, 2000. 39: 71-80.
150. Cohen, L., Manion, L., *Research methods in education*. 1994, London and New York: Routledge.
151. *Users Guide*, QRS NUD\*IST . 1997, Scolaris, Sage Publication Software.
152. Sandberg, J., Are phenomenographic results reliable? in *Reflections on phenomenography. Toward a methodology?*, Dall'Alba, G., Hasselgren, B., (Eds.) 1996, Acta Universitatis Gothoburgensis.
153. Benner, P., Tanner, CA., Chesla, CA., *Expertkunnande i omvårdnad. Omsorg, klinisk bedömning och etik (Expertise in Nursing Practice. Caring, Clinical Judgement and Ethics)*. 1999, Lund: Studentlitteratur.
154. Morse, J.M., Theoretical Congestion. *Qualitative Health Research*, 2000. 10(6): 715-16.
155. Wahlström, R., Dahlgren, LO., Tomson, G., Diwan, VK., Beerman, B., Changing Primary Care Doctors' Conceptions - A Qualitative Approach to Evaluating an Intervention. *Advances in Health Science Education*, 1997. 2: 221-36.
156. Thorne, S., Paterson, BL., Health care professionals support for self-care management in chronic illness: insights from diabetes research. *Patient Education and Counseling*, 2001. 42(1): 81-90.
157. Andersson, S.-O., *Time and general practice consultations - aspects of length, attendance and quality*. (Thesis) Dpt. of Family Medicine. 1995, University of Umeå.
158. Brown, C., Belfield, CR., Field, SJ., Cost effectiveness of continuing professional development in health care: a critical review of the evidence. *British Medical Journal*, 2002. 324: 652-55.
159. Peterson, B.-O., Vahlne, L., *Handledning - ett vårdpedagogiskt verktyg (Supervision - a pedagogic tool for health care)*. 1997, Lund: Studentlitteratur.
160. Lauvås, P., Handal, G., *Handledning och praktisk yrkesteorier (Supervision and professional theories for practice)*. 1993, Lund: Studentlitteratur.
161. Skinner, T., Cradock, S., Empowerment: what about the evidence? *Practical Diabetes International*, 2000. 17(3): 91-95.
162. Carlson, A., Rosenqvist, U., *Locally developed plans for quality diabetes care: worker and consumer participation in the public health care system*. Health Education Research, 1990. 5(1): p. 41-52.
163. Sarkadi, A., Rosenqvist, U., Study circles at the Pharmacy - a New Model for Diabetes Education? *Patient Education and Counseling*, 1999. 37(1): 89-96.
164. Sarkadi, A., Rosenqvist, U., Field test of a group education program for type 2 diabetes: measures and predictors of success on individual and group levels. *Patient Education and Counseling*, 2001. 44: 129-39.
165. Lindberg, E., Rosenqvist, U., Managing complexity: acknowledge the attraction patterns by supporting sense making and allowing the quality system to serve as the panoptic system. *The Journal of Quality Assurance in Health Care*, in press.
166. Lonka, K., Ahola, K., Activating instruction: How to foster study and thinking skills in higher education. *European Journal of Psychology of Education*, 1995. 10(4): 351-68.