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## ORIGINAL RESEARCH PAPER

# Pedagogical Processes in Healthcare: An Exploratory Study of Pedagogic Work with Patients and Next of Kin

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## ABSTRACT

**Background:** Care and education have much in common, and work in the healthcare sector is closely associated with learning and teaching. It is felt that many in the healthcare and medical services are not aware of their pedagogic skills and how they can be developed.

**Frame of reference:** Belonging to a community of practice means that you share perspectives, methods and language.

**Objective:** The aim is to describe the pedagogical discourse by identifying pedagogical processes and studying the staff's awareness of such processes or situations in which a pedagogical approach would be useful in their work with patients and next of kin.

**Method:** A qualitative study based on individual and group interviews. The analysis is directed by grounded theory.

**Results:** The pedagogical processes varied in length and quality. Most were unplanned and were usually embedded in treatment. The pedagogical process is linear (planning, goal setting, teaching and evaluating) in an educational setting but we found that the beginning and end can be unclear and the goals can be vague or non-existent. The pedagogical process is best described using the concepts Read, Guide and Provide learning support.



**Discussion:** The pedagogical discourse in healthcare is almost silent. Data indicate that at the collective level there is very little support for professional development of pedagogical ability. Tacit knowledge may therefore remain silent even though it may be possible to formulate and describe it.

**Conclusions:** There is a strong need to focus on the pedagogical parts of the work and to encourage and support the development of professional pedagogical knowledge.

**Keywords:** Pedagogical processes, professional competence, professional-patient relationships, health education, learning support, pedagogical discourses

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## Background

Society is undergoing great changes that affect healthcare and medical services in many ways. For example, people live longer and an increasing number live with multiple diseases. People are better educated and better informed. They travel more and thus come into contact with unusual illnesses. New technology has become increasingly more integrated into medical care, making it into a high-tech field, and the time patients spend in hospitals is becoming shorter. Most of these changes demand a deeper cooperation between different healthcare professions (Barr et al., 2005; Batalden et al., 2006).

There is also an expressed political desire for patients to help make decisions on their health and the care that may be required. The patient should be an active partner, not a passive recipient of care (Labonte, 1994; Anderson & Funnell, 2005). This trend can also be seen within education. Students are expected to be active seekers of knowledge. Problem-based learning (PBL) is a good example of one of these ideas of student-active pedagogy (Poikela & Nummenmaa, 2006).

Several researchers (e.g. Redman, 1997) promote the idea that care and education have much in common, but where are the similarities? It is felt that many in healthcare and medical services are not aware of their pedagogic skills or how to develop them (Turner et al., 1999). This is most apparent among recent graduates, who concentrate primarily on their practical skills while their communicative and pedagogic skills are less focused and articulated (Kelly & Courts, 2007). Friberg (2002) has studied nurses in Sweden and found that they disassociate themselves from teaching, which is defined as the transfer of knowledge. Yet, in their work, nurses normally act in accordance with this idea of teaching. Friberg explains this by saying that the nurses fall back on their experiences as students, even if such an approach is not in harmony with the idea of empowering patients (Ball et al., 2007; Jordan & Osborne, 2007). Gregor (2001) studied experienced surgical nurses and found that their intention was to “produce both understanding of health and illness practices and compliance with institutional policies and procedures.” In this context, it is important to investigate the extent to which there exists a conscious knowledge development of pedagogic work in healthcare on an organisational as well as an individual level.

The goals of teaching are mainly cognitive, affective and/or psychomotoric. In order to achieve such goals, someone must plan for and support the student's work while learning. Several researchers have described the pedagogical process as consisting of the phases of planning, goal setting, teaching and evaluation (see e.g. Schulman, 1987; Uljens, 1997). This definition of a pedagogic process has much in common with the occupational therapist (Turner et al., 2003) and the nursing processes (Yura & Walsh, 1983). All these processes have a beginning and an end, and are planned.



## Theoretical and methodological frame of reference

*Communities of practice and identity formation:* According to Wenger (1998), a community of practice consists of persons engaged in work sharing goals, values and repertoires of behaviour. This contributes to the creation and formation of an identity. Belonging to a community of practice means that one shares a perspective and a way of explaining things. The identity is formed through participation and is constituted through recognition of common relationships in practice. In healthcare and medical services, a person can be part of several communities of practice. These are likely to be within the profession or comprise members of the profession in the workplace and in the treatment team(s). Bauman (1991) claims that identity undergoes continual movement and negotiation. Wenger (1998) states that identities are both single and multiple at the same time. We share these perceptions. By considering identity building as trajectories, they can be perceived as movements in time. The course of these movements can vary and they do not always follow given routes since they are affected by the influences a person experiences and embraces.

*Discourses:* Discourse can be considered as use of language as a social practice that is both constituted and constituting. It is also a method of communication that gives meaning to the experiences one has from a given perspective (Fairclough, 1995). In a socio-cultural perspective of learning (Vygotsky, 1986; Lattuca, 2002), understanding requires familiarity with cultural traditions and communicative patterns. There is interplay between the collective and the individual level in regard to what is achieved in a culture and what the individual members can take in, how collective knowledge is reproduced in the individual and how much of the collective knowledge the individual members can utilize. Knowledge, however, is not just a question of local context since local practices depend on other practices and discourses in greater and broader constellations.

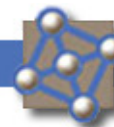
For our study, this means that the attitudes and perceptions of the individual subject as well as those of the interviewed groups indicate how pedagogic discourses work in healthcare and medical services. This makes it possible to highlight and map out the pedagogic discourse in individual communities of practice and to identify the interplay between them.

## Objective

Within this context the aim of our study was to describe the pedagogical discourse by identifying pedagogical processes and examining the staff's awareness of such processes or other situations in which a pedagogical approach would be useful in their work with patients and next of kin.

## Method

*Design and data collection:* Our study is based on interviews. The first round of data collection was done with two doctors, two nurses and two occupational therapists who were interviewed individually over the course of a few months, three times each, for approximately one hour at the end of a workday. The interviews were open and each one began with the question "Can you describe your workday?" When the interviewer felt that the subject had described a situation that had or could have had a pedagogic purpose, the person was asked to provide more details about that part of the day's work. The interviewers had the same professions as the interviewees. One year later we interviewed the doctors and nurses again, asking them about their work and what the interviews had meant for them.



For a broader elucidation of the pedagogic work of healthcare and medical service staff, there were also three focus group interviews, one for each profession. Each group (five physicians, four nurses and three occupational therapists) was interviewed for approximately 90 minutes. The groups could talk freely about their views of the pedagogic tasks in their work. They were also asked to talk about work using terms that the individual interviews highlighted as central to pedagogical processes in healthcare. Finally, the groups read a summary of the individual interviews for their respective professional group and were asked to indicate whether they felt it applied to them and if some parts of their pedagogic work tasks or attitudes were missing.

There were also two treatment team interviews with a rehabilitation team (physician, psychologist, nurse, physiotherapist, almoner, occupational therapist, assistant nurse, speech therapist and medical secretary), and a team from a medical ward (physician, dietician, assistant nurse and two nurses). The main questions in these interviews were “Are there pedagogic components in your work?” and “Who does what in the team?” The two teams were interviewed for 90 and 60 minutes.

All interviews were recorded and transcribed verbatim. Ethical consent for this study was not required at our institution at the time of the research application.

*Data analysis:* This study is qualitative and the approach is directed by grounded theory (Glaser & Strauss, 1999). The first part of the data collection (the individual narrative interviews) was conducted in parallel with interview transcription and coding. The methods used for analysing the interviews were concentration and categorisation (Kvale, 1996).

The focus group interviews primarily focused on studying whether there was a saturation effect on the individual interviews for each of the three professional categories studied.

The team interviews were designed to study how members of actual treatment teams work with pedagogical tasks and how they cooperate within the team. Analysis of these interviews focused on the questions “What do you do?”, “How do you do it?” and “Who does what?”.

## Results

In the interviews, a number of situations with a pedagogical aspect were described. The locations and premises at which pedagogical work is performed can be of a type that is arranged and designed for such purposes, but is often on site in a ward, a corridor, a kitchen or the like. In the following, we focus on the pedagogical work associated with patients and next of kin. We use the word pedagogic instead of andragogic because the staff are working both with children and adults, and pedagogic is a broader concept than andragogic.

*The pedagogical process:* Models of a pedagogical process indicate a rational process with a beginning and an end. These can adequately describe what happens in a pedagogical context, but probably do not offer the most relevant descriptions of pedagogic work as it relates to healthcare. When talking about the pedagogical aspects of daily work, interviewed staff members seldom talk about a process from planning to evaluation. The interviews show that the beginning and end can be unclear and the goals of a pedagogical process can be vague or non-existent. If there is a goal, it can be perceived differently by those involved.



*I think that people, I at any rate, are unclear about goals....There is a...a term...in the chart, goals... that I use too little I think. It is something I need to develop more (Occupational therapist A1 in team interview, p 7).*

*Everyone knows which direction they want to start off with and what the goal is, but you can't be sure that the patient or those working with the patient really understand. They might have different goals (Nurse A in team interview, p 17).*

*Reflection comes when I'm biking home – No, that's what I should have done (Doctor B in team interview, p 16 speaking about evaluation).*

In the analysis of situations in which there could be a pedagogical purpose, we reviewed which verbs were used to describe the pedagogical work. The verbs hint at what happens and what the purposes and ambitions are. The verbs used in the interviews to describe the staff members' pedagogical work have been used to develop a model which describes pedagogical processes in relation to healthcare. We have chosen to describe the pedagogical work, the pedagogical process as it relates to healthcare, using the concepts *Read, Guide and Provide learning support* (see table 1). The reason for this is that the descriptions the staff members give of their work show that they read a situation rather than clearly plan it, and they guide rather than set clear goals. Furthermore, their learning support is normally embedded in care and treatment activities that have goals other than teaching and learning. The interviewees, when talking about pedagogical issues, seldom mentioned evaluation.

**Table 1: Components of the pedagogic process in healthcare**

Read	Guide	Provide Learning Support
Examine	Influence	Demonstrate
Explore	Aim at	Support
Form an opinion	Prioritise	Develop
Evaluate	Plan	Instruct
	Set goal	Teach
		Inform
		Explain
		Supervise

*Examples of pedagogical situations and the embedded pedagogical dimension:* The most common pedagogical situation we found is a conversation in which a staff member provides information to a patient or the patient's next of kin with the aim of calming the person or getting this person to do and act as he or she has been told.

*I asked the patient about her habits, what she eats, how much she exercises, her pain...I could see that she was in bad condition today, and she was a bit worried so we talked about her situation and I explained that what she was feeling and what was happening with her body was typical for ulceration when you are old (Nurse 1, interview 2, p 6).*

In the interviews we also found several examples of situations in which the healthcare and medical service staff tried to get someone to understand or change attitudes or values, or to change lifestyle.

*I give the patients time to respond to what they understand and I think the patients understand better when you demonstrate to them how to do something and what it means. Then one can connect the information given to them with what it should be used for. They shall use the information for avoiding some movements and then it will be natural for them to use an activity*



*even if it is I who perform. And after that is the time for evaluating, when she is doing the same movements, so I explain in words and I demonstrate using myself as the demonstration object, and then she practises...and I can see if she has understood (Occupational therapist 2, interview 1, p 5-6).*

The interviews clearly showed that the pedagogical aspects of the work are embedded in care and treatment and they are normally the focus. This interplay between the pedagogical process and the healthcare process can be described as two intertwined processes. We have chosen two situations to illustrate the embedded pedagogical work. The following quote provides an example of a situation where staff members seize opportunities on the fly, which seems to be very common in healthcare.

*Then there was a blood pressure reading. Yeah, on my own initiative I took a blood pressure reading, which proved to be elevated. He had checked it once before, it was elevated, but it was a little better today. It wasn't anything you needed the doctor for. We spoke a lot about lifestyle... We talked about him coming twice a week, we talked a bit about the importance of physical activity and that you can lower mildly elevated blood pressure with, for example, daily walks. He jumped at that... That he and his wife would start taking walks, both to [inaudible] so he would come back in a few weeks to check his blood pressure again. So, I started a bit then – not giving everything right away - a lot about self-care. And he accepted it (Nurse 2, interview 2, p 5).*

The example shows how, while taking a blood pressure reading and evaluating it, the nurse could read the situation and determine that it was possible to influence the man's behaviour and habits. A table of the two intertwined processes can illustrate the situation (see table 2).

**Table 2: An example of the intertwined medical and pedagogical process**

Medical process	Pedagogical process
Make a medical diagnosis	
	Read the man's life-style
Decide about blood pressure reading	
	Decide about teaching the man how to live a better life
Do a blood pressure reading	
	Teach the man how to get a better life
Evaluate the blood pressure reading	
	Make an agreement about physical exercise
Make an agreement about iterative blood pressure readings because of medical reasons	
	Make an agreement about iterative blood pressure readings because of motivational reasons

Another situation focuses on the discharge of a set of premature twins. This is a situation familiar to the doctor. The doctor uses the medical examination as a learning situation helping the parents to understand and feel secure. She examines the children, but another important aim is to help the parents understand the body function of the children and to make the parents feel safe. This is an example of a situation that is planned in advance, in which the doctor has both a medical and a pedagogical aim, and the two processes are intertwined.



*Staff's awareness of and knowledge about the pedagogical work:* The pedagogical part of the work seems to be something that everyone often does without reflecting much about it or discussing it with colleagues. Further, when pedagogical work is performed at a location not designed for such purposes, the work is often unplanned.

*[The interviews you had with me] have, as a result, made me think, I have thought, thought a little more pedagogically about what I do everyday, it has made me aware of what I was unconscious of (Doctor 1, follow-up interview, p 1).*

*Today things have been pretty much unplanned from the start, but I sometimes have a question in mind (Occupational therapist 1, interview 1, p 3).*

In one of the treatment team interviews, the interviewees discussed how much must be explained to a dialysis patient in order for him/her to have an idea and understanding of what is happening. One of the nurses reported a conversation with a patient with a kidney disease in which he explained his attitude towards the disease. He felt that since the kidneys and the disease were his, he was responsible for deciding what should be done.

*Nurse B: I don't think a lot of our patients look at it that way*

*Interviewer: What do you think is the reason for that?*

*Nurse B: I don't know. Some may not really get the chance. We do too much for them. We don't really know how to help them take on greater responsibility themselves (Nurse B in team interview, pp 8-9).*

Another nurse describes the lack of knowledge about helping patients to learn and understand.

*And when it comes to self-care for example, we have seen that we are very ignorant of how to inform the patients about how to take care of themselves at home. If, at the end of the care period, you ask things like 'How should you care for yourself when you get home?' No idea. 'What symptoms should you watch out for and when should you contact a doctor?' No idea. And I think we have failed if we can't give the patients something that is actually pretty basic (Nurse A in the focus group interview, p 2).*

## Discussion

Pedagogical processes with patients and next of kin are better described by using the concepts Read, Guide and Provide learning support than by using traditional educational terminology like planning, goal setting, teaching and evaluation. The reasons for this are that the pedagogical process is, in many cases, embedded in care and treatment, the room is seldom arranged for teaching and there is not always enough time for planning. The results we present in this article confirm what Hall wrote in 1966, namely that when it comes to work with patients, the focus is on care and treatment, and teaching and learning are often embedded within that care and treatment. We have also confirmed what Milazzo (1980) and Gregor (2001) reported, that teaching and learning in healthcare and medical services often comprise unplanned teaching, which is spontaneously directed toward the health learner.



Our main contribution to the field is probably when we try to describe what the pedagogical discourse looks like when reading what the interviewees say and do not say, and how they describe what they have done and how they work. What exactly is a pedagogic discourse in healthcare and medical services? Just as there are a number of communities of practice in healthcare, there are several pedagogical discourses. However, the interview material indicates that this is an almost silent discourse. At the end of the interviews, people spontaneously commented that it was interesting and “eye opening” to get to talk about the pedagogical aspects of their work. This is something that is rarely done.

The verbs we identified from the interviews as indicators of pedagogical activity were used more seldom when talking about conversations within the professional group or in the treatment team. This part of the work does not seem to have been systematically put under the microscope, reflected upon or categorised in the collective arena. The clinical aspects of the work are discussed and analysed while the pedagogical aspects seem to be mostly left to the individual. In order to develop skills, the opportunity must be given to reflect in as well as on action (Schön, 1983; Wimpenny et al., 2006; Morley, 2007). If this does not happen, the result can be that:

*the whole process of seeing-as and doing-as may proceed without conscious articulation (Schön, 1987, p 67).*

Training in analysing and discussing a knowledge area also creates a more nuanced and developed language. The interviews indicate that the subjects do not have a developed language for the pedagogical aspects of their work. This could be because matters of a pedagogical nature are seldom discussed in professional groups and are thus not brought to light. Seizing opportunities on the fly characterizes much of the work in healthcare, but the need to perform spontaneous, unplanned work is something that is difficult and demanding. Pedagogical work that is not planned requires awareness of the learning conditions and of the support that can be given to help the person learn. An important condition for good pedagogical work that occurs spontaneously is that the employee has good pedagogical schooling. This must be updated, challenged, analysed and reflected upon both individually and with others. Our data indicate that at the collective level there is almost no support for professional development of pedagogical ability, and, as a result of this, the knowledge may remain silent or tacit, as Polanyi (1966) has described.

In the interviews, several situations were described that could have been developed into an opportunity for staff's skill development, but the opportunity was lost. The healthcare workday is often stressful, making it difficult to utilise opportunities to reflect and learn together. What is interesting is not pointing out that opportunities had been missed, but the fact that the interviewed staff members did not comment on and reflect on the fact that opportunities for skill development had gone to waste. We think that the lack of training in discussing pedagogical issues in order to talk about learning, understanding, and skill development, is a factor that explains why healthcare and medical service personnel all too seldom recognize opportunities for learning in situations that arise. These opportunities involve both patients and those in the profession.

*Limitations:* This study has some limitations worth mentioning. It is an exploratory study and generalisation of the results is restricted by the limited number of participants. In the individual interviews, the interviewer constantly had to decide if there was a need for further information to clarify or more deeply describe the pedagogical work and/or the awareness of the pedagogical dimension.



## Conclusions

Pedagogical processes are usually embedded in parts of the curing and caring processes in healthcare. Our data indicate that there is a strong need to focus on the pedagogical parts of the work and to encourage and support professional knowledge in this field. We agree with Dandavino and colleagues (2007) that medical students need to learn how to teach. To teach students in a healthcare profession about learning and teaching is one way of preparing them for their coming profession. We think that staff can improve their pedagogical knowledge by analysing situations which contain pedagogical problems and use some of these situations for a short discussion about pedagogical issues.

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