Medical Teacher

ISSN: 0142-159X (Print) 1466-187X (Online) Journal homepage: informahealthcare.com/journals/imte20

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Flemming Jakobsen, Kristian Larsen & Torben Bæk Hansen

To cite this article: Flemming Jakobsen, Kristian Larsen & Torben Bæk Hansen (2010) This is the closest I have come to being compared to a doctor: Views of medical students on clinical clerkship in an Interprofessional Training Unit, Medical Teacher, 32:9, e399-e406, DOI: 10.3109/0142159X.2010.496009

To link to this article: https://doi.org/10.3109/0142159X.2010.496009

Published online: 26 Aug 2010.

WEB PAPER

This is the closest I have come to being compared to a doctor: Views of medical students on clinical clerkship in an Interprofessional Training Unit

FLEMMING JAKOBSEN[1,2], KRISTIAN LARSEN[1,2] & TORBEN BÆK HANSEN[1,2]
[1]Orthopaedic Research Unit, Holstebro Regional Hospital, Denmark, [2]Aarhus University, Denmark

Abstract

Background: The need for interprofessional education has been apparent for decades and in 2004, we established the first Interprofessional Training Unit (ITU) in Denmark. Nursing, occupational therapy and physiotherapy students were in the ITU for its first 2 years and in 2006, medical students joined in. The students in collaboration run a ward with eight beds under the supervision of trained personnel.

Methods: A questionnaire consisting questions concerning the interprofessional meetings, the rounds, teaching, learning about own profession, learning about other professions and finally an overall assessment of their stay in the ITU was filled in by 55 medical students. To validate and deepen the questionnaire, 22 medical students participated in a group interview concentrating on the students' evaluation of fulfilment of the goals for the ITU. The transcripted interview and the written comments in the questionnaire were analysed using Systematic Text Condensation.

Results: Our results showed that the medical students in the ITU developed their professional knowledge and capability simultaneous with the learning of interprofessional collaboration. The students valued the teaching methods because the students were in the forefront and treated as professionals. The students demanded more homogeneous instruction and a better introduction to the ITU.

Conclusion: A stay in an ITU with a safe learning environment can increase both uniprofessional and interprofessional learning for medical students. The students stressed the importance of supervision before and after carrying out a hospital task.

Background

The need for interprofessional education (IPE) has been internationally apparent for decades (World Health Organisation 1988, 2010; Barr et al. 2005). In the Nordic Countries, Sweden has played a leading role in introducing IPE in the clinical field in health education (Fallsberg & Wijma 1999; Ponzer et al. 2004). In Denmark, IPE is explicitly mentioned in the executive order on Bachelor degrees for example in nursing, physiotherapy and occupational therapy. The purpose of introducing IPE in the programmes is to teach the students to cooperate with respect for and recognition of the responsibilities and competences of own profession as well as those of other health professions according to interprofessional collaboration (Retsinformation 2008). One of the goals of the clinical course in medicine and surgery at the Faculty of Health Science in Aarhus is the intention that the students during the course acquire skills and knowledge concerning collaboration with other professions (Aarhus Universitet 2005).

The Interprofessional Training Unit (ITU) was, as the first of its kind in Denmark, established in 2004. During the first 2 years, the ITU was manned with occupational therapy students, physiotherapy students and nursing students and in 2006, the medical students joined in.

Practice points

- Interprofessional clinical education contributes to effective learning.
- It is possible to combine uni- and interprofessional learning when being in a safe learning environment.
- Students values to be in the forefront and to be treated as professionals.

The ITU consists of eight beds, an office and several teaching rooms as part of a normal orthopaedic ward with 36 beds. The students, under supervision from trained personnel from their own future profession, handle the daily running of the unit with regard to the care and rehabilitation of the patients. The teaching methods include that the students work as professionals with necessary tutoring before, under and after action. The focus is on the

Correspondence: F. Jakobsen, Orthopaedic Research Unit, Holstebro Regional Hospital, Laegaardvej 12, Indgang N, 7500 Holstebro, Denmark. Tel: 45 2063 1797; fax: 0045 99125397; email: flemming.jakobsen@vest.rm.dk

ISSN 0142–159X print/ISSN 1466–187X online/10/090399–8 © 2010 Informa UK Ltd.
DOI: 10.3109/0142159X.2010.496009

patient instead of on the profession and the workload is used as a paedagogic tool. The intention of these teaching methods is to challenge the students and demand that they take professional responsibility for the patients while working as trained personnel.

Teaching and learning take place in an environment in which new methods of coordinating and integrating clinical and theoretical interprofessional teaching and learning are developed and tested.

In the ITU, emphasis is put on training professional competency because this is considered necessary for interprofessional collaboration. In the morning meeting, which is considered very important for planning the day's work and the patients' courses, all the professions are expected to account for their plans for the patients in question. This means that the students must explain what, why, how and when they will perform the necessary tasks. After the meeting, the students start by performing their jobs, which for the medical student means going on rounds and performing other house officer jobs. Traditionally in Denmark, a nurse and a doctor go on rounds together, in the ITU however, it was decided to let the medical student go on rounds alone only shadowed by the associate professor. This was done to train the medical student in communicating with the patient and to take responsibility for performing the tasks agreed on in the interprofessional morning meeting and to communicate back to the other students, if necessary, after having completed rounds.

The aims of this article were: (1) to investigate to what extent the medical students' stay in the ITU contributes to developing the student's professional knowledge and capability (professional handling of the patient – communicating with the patient – having an overview of the patient's course – taking responsibility – being able to make decisions – having insight into ethical issues – dictating and other administrative tasks) as preparation for their clinical work in the future internships (Aarhus Universitet 2005), (2) to investigate to what extent the medical students' stay in the ITU contributes to teaching the student's interprofessional collaboration (learning about other professions – knowledge about working procedures in a ward – ability to work together with other professions – communication with other professions) as preparation for the clinical work in their future internships (Aarhus Universitet 2005) and (3) to evaluate the teaching and learning environment with special focus on the supervision given by the clinical associate professors and to find areas for further development of the supervision.

Materials

During the period of September 2006–January 2008, medical students (55) as participants in an interprofessional team in a unit with eight orthopaedic patients carried out the work of a medical doctor under supervision of associate professors and other trained personnel. Other students were nursing (118), physiotherapy (46) and occupational therapy (41).

Methods

Questionnaire for the 55 medical students

The medical students were in the ITU in the autumn of 2006 (20 students), the spring of 2007 (13 students) and the autumn of 2007 (22 students).

A questionnaire was distributed to the students on their last day in the ITU and filled in before the students went home that day. The questionnaire consisted of questions concerning the daily interprofessional meeting, the rounds, teaching, learning about own profession, learning about other professions and finally an overall assessment of their stay in the ITU. Each question was followed by a tick box going from 'yes, absolutely' to 'to some extent' followed by 'yes and no', 'to a lesser extent' and 'no, not at all'. After marking, the students were asked for any supplementary comments to each question.

In analysing the written comments, we used Systematic Text Condensation (Malterud 1993, 2003). As the intention of the analysis was to give a description of the students' attitudes to fulfilment of the goals for their stay in the ITU, the written comments were coded by discriminating meaning units in the preselected themes 'interprofessional', 'uniprofessional' and 'teaching and learning environment'. Each of the decontextualised text groups was subsequently moved to a new document, making additional coding possible and sorting of the meaning units into subgroups. These subgroups were analysed to determine common meaning, and the common meanings were expressed as concepts, which were used for clarification and validation of results from the quantitative part of the questionnaire. Coding and analysis were performed by Flemming Jakobsen, after which Kristian Larsen went through the material. All interpretations were discussed until an agreement was reached. Even though the Systematic Text Condensation is a qualitative analysis, a quantitative element was implicated, so that statements that were mentioned several times outweighed to a certain extent statements mentioned only once (Malterud 1993, 2003).

Questionnaire and qualitative semistructured group interview of 22 students

The 22 students from the autumn of 2007 were interviewed at the end of their 20-week semester in Holstebro Regional Hospital in January 2008. The students were informed that the purpose of the interview was to explore the students' view on clinical clerkship in the ITU and that it were voluntary for the students to participate in the interview. Citations and other results from the interview would be anonymous. The students accepted these conditions.

Before starting the interview, the students were asked to write three statements about 'What was most important of what I learned in the ITU'. The student statements were sorted into the preselected themes 'interprofessional' and 'uniprofessional' and were used for elaboration and validation of the answers in the questionnaire filled in by all 55 students.

The interview concentrated on the students' stay in the ITU and their evaluation of the fulfilment of goals for the students'

Table 1. Students' answers to the questions concerning outcome of internship in the ITU.

	Yes, absolutely	To some extent	Yes and no	To a lesser extent	No, not at all
Was it profitable to participate in the meetings?	71	18	7	4	0
Was there opportunity to ask questions?	87	7	5	0	0
Did you get involved in the discussions at the meetings?	80	18	2	0	0
Was it profitable to take part in the round?	78	18	2	2	0
Is it your impression that the ITU had planned your stay?	75	16	4	5	0
Did you get an introduction to the unit?	49	29	5	7	9
Did you feel to be part of the community in the unit?	73	18	7	2	0
Were you called upon in connection with possible practical tasks?	18	22	12	25	24
Did you get more experience in performing manual tasks?	20	38	20	15	7
Did you get more experience in handling patients?	69	24	5	0	2
Did you learn more about the nurse's field of work?	64	29	5	2	0
Did you learn more about the occupational therapist's field of work?	73	22	5	0	0
Did you learn more about the physiotherapist's field of work?	67	25	5	2	0
Did you learn more about interprofessional collaboration?	65	29	5	0	0
Are you more aware of your own role as a doctor?	65	29	2	4	0

Note: Answers (in per cent) from 55 medical students who had a stay of 5–10 days in the ITU during the period of September 2006–June 2007.

clinical stay, which was to prepare the students for their future internships. Furthermore, the students were asked for their evaluation of the teaching and learning methods in the ITU. Interviewing and transcription were performed by Flemming Jakobsen. In the transcription, we used 'The slightly modified verbatim mode', in which units without meaning, breaks and repetitions were omitted, and at the same time emphasis was put on catching the intention of the informants' message (Malterud 2003). To validate the transcription, TBH was present, but out of sight, when the interview was performed.

The interviews of the 22 students were analysed by using the method described above, and the results were used for elaboration and validation of the questionnaire filled in by all 55 students.

Results

The medical students were together with students from nursing, physiotherapy and occupational therapy professions in the ITU for an average of 5.5 days (2–9). Fulfilment of aims and other findings of this study will be described by: (1) the findings in the answers from the quantitative questionnaire filled in by 55 medical students; (2) the comments given in the same questionnaire; (3) the written answers given by 22 of the 55 students 'What was most important of what I learned in the ITU?' and (4) by the focus group interview of the 22 students.

Professional knowledge and capability

From the questionnaire filled in by 55 medical students, it appears that the majority of the students during their stay in the ITU absolutely or to some extent became more aware of their role as a doctor (Table 1). This awareness of the role as a doctor may have been promoted by the fact that the students were involved in discussions at meetings, and that they, all things considered, found it profitable to take part in the meetings and in going on rounds (Table 1).

Approximately, 40% of the students stated that they always or to some extent were called upon in connection with possible practical tasks, whereas the others were only seldom or not at all called upon (Table 1). Approximately 60% of the students during their stay in the ITU had absolutely or to some extent gained more experience in performing manual tasks (Table 1). The majority of the students expressed that they absolutely or to some extent had gained more experience in handling patients (Table 1).

> *Great, that with these short patients' courses you can really recognise a pattern* (*Comment from medical student number* 44)

The short, planned elective courses of treatment, involving relatively healthy patients, gave the students the opportunity to concentrate on the basic aspects of their training, examination, adjustment of medicine, communicating, decision taking, dictating, etc.

In the comments to the questionnaire filled in by 55 students, the students stressed the importance of the interprofessional morning meeting as a secure learning environment where the medical students got insight in the patients' situation and in the other professions job. In the comments, they expressed the following: In the morning meeting, a thorough review of the patient took place. Representatives from each profession told about the plans s/he had for the day for the patient in question. The medical students got a good insight into the patients' situation and into the other professions' work, which they would not otherwise have paid attention to, for example, medication and change of medicine compared with how long the patient was in the rehabilitation phase of treatment. During the interprofessional morning meeting, all students had equal rights and were challenged to the same degree.

> *I appreciate being responsible for a number of patients, this is the closest I have come to being compared to a doctor* (*Comment from medical student number* 5)

Table 2. Students' statements concerning 'the most important I learned in the ITU'.

Theme	
Interprofessional cooperation	36
Rounds	21
Pain treatment and other postoperative treatment	23
Independence and ability to make decisions	16
Others	3

Note: Statements (in per cent) from 22 students who were asked to write three statements about 'What was most important of what I learned in the ITU?', sorted into groups.

It was educational to be responsible for the ward round; it was a good training in professionalism and patient contact.

> *Decision-making, confrontations, responsibility, considerations, possibility to ask questions* (*Comment from medical student number* 7)

Likewise, in the answers to the question 'What was most important of what I learned in the ITU', the students emphasised learning professional competency in the form of going on rounds, pain treatment and other postoperative treatment and independence and ability to make decisions (Table 2).

In the written answers to the question, 'What was most important of what I learned in the ITU?', it is seen that 21% of the given answers were about the rounds (Table 2). The students stated that they learned the working procedure regarding the rounds, including communicating with the patient and taking responsibility for the patient's treatment. Furthermore, they learned how to dictate notes for the patient's hospital chart and how to dictate a discharge summary. Pain treatment and other postoperative treatment counted for 23% of the answers (Table 2). Pain treatment included dosing of medicine, side effects and pain management. Other postoperative treatments included postoperative examination, what is important for a patient newly operated on and greater insight into the hospital course (Table 2). Independence and ability to make decisions means that the students felt they were being trained to make use of their time and acquire an overview even if there were many patients. They learned to take independent decisions and to take responsibility. This theme accounts for 16% of the answers (Table 2). Summing up the three statements covering professional knowledge and capability: The rounds, pain treatment and other postoperative treatment, and independence and ability to make decisions counted for approximately 60% of the answers concerning 'What is the most important I learned in the ITU'.

> *In fact I felt quite comfortable, because both when I communicated with students and with supervisors, they treated me as if I already had graduated* (*Medical student in interview*)

The experience of being accepted as a professional apparently helps in building up the students' identity as members of the medical profession.

In summary, it can be said that by taking part in the morning meetings, the students learned professional competency by being challenged and held responsible for the medical part of the patients' hospital course. On the rounds, the students learned professional competency by being responsible for the patient's hospital course and taking decisions and performing practical tasks, as for example, dictating.

Interprofessional collaboration

From the questionnaire filled in by 55 medical students, it appeared that the majority of the medical students learned about the area of work of occupational therapists, physiotherapists and nurses, and the same picture was seen when looking at the students' learning interprofessional collaboration (Table 1).

> *It has been very instructive to take part in the morning meetings. It has given extensive insight into other professions' working methods as well making it easier to assess the patients with a view to pain management* (*Comment from medical student number* 24)

Most of the students found it very profitable to participate in the morning meetings, and they felt it gave the opportunity to ask questions and to be involved in discussions (Table 1). In the written answers to 'What is the most important of what I learned in the ITU?', 36% of the given answers were about interprofessional collaboration. The students stated that they learned by listening and discussion at meetings and that other professions had great influence on the treatment of the patients. The medical students learned to interact, to cooperate, to communicate and to make team-based decisions.

> *I think it would be good to do the rounds together with the nurse and maybe the physiotherapist. So many things are said in the morning meeting, it can be difficult to remember it all, if we were together, we could help each other* (*Medical student in interview*)

Some of the students missed the other professions on the rounds, both to help them remember what was said at the meeting and to discuss with, but also because the nurses and the other staff knew the patients better because they were in the unit for more hours, per day, than were the medical students. Other students said that they preferred to go on rounds themselves only shadowed by an associate professor or another trained doctor. They argued for this because they considered it unethical if too many students and supervisors examined and discussed the patient at the same time. Another reason for the wish of going on rounds with only the supervisor was that they got more training in independent decision taking and communicating with the patient.

> *The stay in the ITU has given a good insight into the other professions' way of working and how we could collaborate and learn from and about each other* (*Comment from medical student number* 25)

Even though some of the medical students missed the other professions when going on rounds, it emerged very clearly that the students learned about the other professions and about interprofessional collaboration (Tables 1 and 2). Moreover, one of the students imagined that if cooperation in 'normal' wards was like that in the ITU, the working environment for all professions would be better; there would be no arrogance because of hierarchy and there would be room for questioning and learning from each other and independently.

> *I think it would be a good idea if we as medical students could watch the other professions work for shorter periods, for example following the physiotherapist working, maybe just for half an hour* (*Medical student in interview*)

Direct collaboration between medical students and other students in the ITU mainly took place in the morning meeting. Even though the students clearly expressed that they learned from and about each other, some of them wished for more information about the others' field of work, by watching them in action. The medical students expressed in the interview that they were not interested in directly taking part in other professions; but, they only wanted to watch or to get fairly short explanations and teaching. The reason for this attitude was mentioned to be that the period in the ITU was part of the short period of 4 weeks they had to learn about orthopaedic patients and if they used too much time on being together with the other students, this would take time from learning professional competency, for example, by working in the outpatient clinic or in the operating theatre.

In summary, it can be said that the students expressed that they learned interprofessional cooperation at the morning meeting and in connection with discussions and communication with the other professions after the rounds. Some of the students missed the other professions on the rounds and wanted more information about the other professions' field of work.

Teaching and learning environment

The teaching and learning that took place in connection with the meetings and the rounds were perceived to function well (Table 1).

> *In other wards you can hide yourself; here you are forced to come forward and that is positive* (*Medical student in interview*)

The interprofessional context also pressed the students who felt they were on fire when they had to explain their plans and choices to the students from the other professions. If a student asked the associate professor or one of the other supervisors how to handle a certain situation, the question was often sent back to the students supplemented with: 'You are the professional, where and how can you find an answer to that question?'

By taking part in planning and monitoring of the patient's hospital course, the students got a more realistic picture of the length of a course of treatment, here they not only saw the medical, but also a whole hospital course.

> *All professions participated actively and all students were asked relevant and challenging questions regarding their own professional field. It was nice that the clinical tutors also addressed to students from other professions* (*Comment from medical student number* 7)

The students felt they were equal in status and felt they were in a safe learning environment that gave them the courage to state their proposals for care and treatment of the patient. By putting questions to students from other professions, the clinical tutors acted as role models for students regarding interprofessional collaboration.

> *Too many details on less important issues. Too much about how one or another exercise is to be performed, why not just give a report as on other wards. Overview is lost, and it ends up your not getting much you can use* (*Comment from medical student number* 33)

A few of the students now and then found the teaching methods in the meetings longwinded and to some extent boring and ineffective when comparing to what they called 'normal meetings'.

> *There was a big difference in the way we were instructed, depending on who the doctor was; the associate professors normally knew how to instruct and how to give us a little time to think before we answered, while some of the other doctors took over all too soon* (*Medical student in interview*)

The associate professors were dedicated to solving the paedagogic challenge in supervising the students by keeping themselves in the background as long as possible and not interrupting the students unless necessary. And on interrupting the student, the associate professor made clear his perspective regarding whether he was teaching by telling the student what to do, or he was teaching by asking challenging or reflective questions. Other doctors were influenced by the 'normal' teaching environment, in which students are told or showed what to do and these doctors either did not have the capability or the will to challenge the students and give the students time for reflection.

The students also commented on the teaching and learning environment in which it was expected that the students were up front and were the ones who communicated with the patient and took the decisions, while the associate professor stayed in the background and only intervened if necessary.

> *Some doctors dominated and did not let the students do the job, they seemed stressed. Others were good at it, especially the associate professors* (*Comment from medical student number* 51)

Due to logistics, it was necessary that medical doctors other than the associate professors acted as supervisors for the students. The students expressed dissatisfaction when the

supervisor did not show patience and let the students do the job themselves.

> *I missed introduction to expectations concerning notes in the patient's chart and in the discharge summary* (*Comment from medical student number* 50)

Some of the students wanted more teaching with clear explanations about how to do things. Other students wanted more clear feedback on their performing and especially on their written notes. In general, the students were well satisfied with the supervision they got from the associate professors. Supervision from other medical doctors was in some cases characterised as very good and in other cases as less good. A few supervisors were characterised as poor with regard to going on rounds.

Most students found that their stay in the ITU had been prepared, while a few found that they got an insufficient introduction to the unit (Table 1).

> *It was not so easy to find out exactly what your tasks were at the morning meeting, this may be due to lack of an introduction* (*Comment from medical student*)

Some of the students were uncertain about their role in the morning meeting either because of lack of instruction or just because of the uncertainty caused by being in a new setting.

Even though the medical students were for a shorter time in the ITU than the other students, most of the students felt that they were a part of the community in the unit (Table 1).

In summary, it can be said that the medical students appreciated the challenging and demanding learning environment in which they were expected to act as qualified doctors. Some of the students found the meetings to be too detailed and some wanted more introduction and more homogeneous instruction.

Discussion

Method

The qualitative statements given by the medical students as written comments as a supplement to quantitative questionnaires and in interviews were used for systematic collection, organisation and interpretation of incidents and thoughts experienced by the medical students in the ITU, and these interpretations were used to provide a deeper description of the students underlying options and attitudes. Though preconceptions are not the same as bias, unless the researcher fails to mention them, the analysis and interpretation of a qualitative text are among other things affected by the researcher's background and position (Malterud 2001). Flemming Jakobsen had a special interest in the result of this study because he was employed as a project manager in the ITU during the research period. This was also true for Torben Bæk Hansen as head of the Clinic of Orthopaedics and an associate professor in the ITU, but not for Kristian Larsen because he was employed in Orthopaedic Research Unit which had nothing to do with the ITU. The preconceptions were challenged by searching through the material for competing conclusions. This resulted among other things in making visible a need for a more thorough introduction of students to the ITU.

The combination of quantitative and qualitative results in this study, in which the results support and strengthen each other, makes the results transferable to other similar settings, and this can be further validated by similar results found earlier (Fallsberg & Wijma 1999; Ponzer et al. 2004; Hylin et al. 2007).

Professional knowledge and capability

Practical competence is a part of professional competence and is one of the qualities a medical student must develop to be able to reach their ultimate goal of helping patients (Dornan et al. 2007). There is no doubt that the students in the ITU learned practical competence in the form of communication and decision making by being a part of the interprofessional team during the daily morning meeting. A motivating force for student learning was that the meeting was about patients with real-life problems needing real-life solutions that were considered essential for the patient's rehabilitation. The questions asked by other students and supervisors encouraged the medical students' thinking by helping them to link their existing knowledge to new knowledge, to develop problem-solving skills and to gain a deeper understanding of the patient's hospital course (Parsell & Bligh 2001).

Another part of professional competence includes confidence, motivation and a sense of professional identity (Dornan et al. 2007). At the morning meeting, the student got the necessary time for reflection and was listened to, and the student was the one who took the final decision about discharging the patient. During rounds, the medical student was in the forefront and was the one who discussed with the patient and gave the necessary information. Being considered a professional, taken seriously and listened to contributed to building up a sense of identity as a doctor, which again motivated the students to do their best.

The question 'Were you called on in connection with possible practical tasks' was answered 'yes, absolutely' or 'to some extent' by only approximately 40% of the students (Table 2). But we did not gain so much information from this answer because the question had an imprecise formulation. In fact, two questions were included in the sentence: (1) were there any practical tasks? and (2) were you called on? Furthermore, because of the many short (2–4 days) planned hospital courses in the ITU, there were very few practical tasks for the medical students to do on the ward.

Interprofessional collaboration

Interprofessional collaboration between the medical students and the other students took place during the morning meeting and after the rounds. As the interprofessional morning meeting is unique for the ITU, the students could not have achieved the same learning about the other professions elsewhere. Also unique for the ITU, the medical students worked in the same office as the other students and here had the possibility to communicate with the other students. During the morning meeting, the students learned with, from and about each other

to improve collaboration and quality of care (Barr et al. 2005). The students also trained interprofessional collaboration by communicating with the other professions about changes or other decisions carried out during rounds.

Practical interprofessional collaboration in the ITU was to some extent rather common between occupational therapy students, physiotherapy students and nursing students, whereas medical students did not take part in the practical cooperation. One reason for this is that in the ITU, it is considered important that the students to a great degree as possible adopt the practices of their own profession in their daily work. And it is easier to find practical daily tasks for the patient that the other three professions can relate to in a professional way than it is to find such tasks for the medical student. Another reason for this difference in how to train interprofessional collaboration is that the time the medical students are in the ITU is taken out of the short period of only 4 weeks that the students are in the orthopaedic clinic and every day they must also take part in joint teaching with all the other medical students in the hospital, which leaves fewer hours to take part in the work in the ITU.

The last reason for not letting the medical students take part in patient care was our early experiences with this during which some of the medical students stated that they were not studying medicine to learn general patient care. Difficulties in developing professional roles and professional identities together with too few profession-specific tasks are a risk when blurring the professional roles by letting medical students take part in general patient care (Hylin et al. 2007).

Teaching and learning environment

The medical students' programme for internship in their eighth semester has a duration of 20 weeks. The students' clerkship in the ITU was taken out of the only 4 weeks in the orthopaedic clinic and some of the students came to the ITU in the beginning of the 20 weeks while others came later and with more experience. To give appropriate challenges to the students, the clinical associate professors had to adjust their paedagogic approach to the present situation so that the students got the possibility of building up professional competence, confidence, motivation and professional identity as a doctor (Dornan et al. 2007). The clinical associate professors job is complex and includes clinical, supervisory, teaching and supporting roles (Parsell & Bligh 2001). The associate professors obviously succeeded in challenging the students as it was described by the students as a positive and unique experience and that it was not possible to hide oneself in the ITU like in other wards.

Different types of clinical teachers were distinctly observed and described by the students, who in the questionnaires and in the interviews described their ideas of inadequate and adequate teaching. Describing inadequate teaching, it was not lack of the teachers' professional competence which was the problem, but lack of time, ability or patience to let the students reflect on questions and letting the student be in the forefront and the one who communicated with the patient during rounds. Describing adequate teaching with regard to rounds, the students wanted prior planning and preparation in the form of discussion, advice and teaching before going in to the patient; they wanted to be in the forefront when examining the patient, but with the possibility of being taught if necessary; and they wanted time for reflection and feedback on their professional emergence and their notes in the record (Parsell & Bligh 2001).

The student expression 'normal meetings' is interesting because it indicates that the meetings in the ITU were not normal. One might think that it would be better if the working procedure in the ITU reflected the reality the students were on their way into. But on the contrary, it was an active decision from the ITU to test new ways of caring out working procedures with the objective of creating an active interprofessional teaching and learning environment simultaneous with training and testing interprofessional collaboration.

The learning and teaching concept in the ITU entailed that the students' questions to the supervisor were often sent back to the student. This and the working method in the interdisciplinary meeting, where all disciplines had to accurately explain from their own professional view what kind of actions they were going to perform and why they found these actions necessary, were appreciated by most of the students, but a few found this working method longwinded and boring. For those who expressed displeasure, the benefit apparently did not live up to the expectations.

The lack of sufficient introduction to the ITU described by the students calls for an intensified effort within this area. To some extent, electronic information is already available to the students, but is seemingly not visible to all students. The information ought to be revised and to a certain extent moved to the Personal Digital Assistant which is at the students' disposal while they are in the Clinic of Orthopaedics.

Conclusions

The students appreciated their stay in the ITU, where they developed their professional knowledge and capability simultaneous with learning interprofessional collaboration. Likewise, the students valued the teaching methods which made them make up their own minds and make decisions regarding the treatment of the patients. The students stressed the importance of the supervision before and after carrying out a hospital task. The students wanted the tutor to keep himself in the background so that it was the student who had first contact and responsibility towards the patient.

Focus areas for the medical students stay in the ITU in the future are: (1) more homogeneous instruction of the medical students and (2) adjustment and improvement of introduction to the ITU.

The combination of quantitative and qualitative methods used in this study, in which the results support and strengthen each other, together with similar findings elsewhere make the findings described transferable to other clinical clerkship settings.

Acknowledgements

All authors participated in the design of the study. Flemming Jakobsen was responsible for the survey and conducted the

interview. Torben Bæk Hansen validated the transcript of the interview and Kristian Larsen validated the analysis of the transcripted interview. Flemming Jakobsen drafted the manuscript, Kristian Larsen and Torben Bæk Hansen contributed to the improvement of the manuscript. All authors read and approved the final manuscript.

Declaration of interest: The authors declare that they have no competing interests'.

Notes on contributors

FLEMMING JAKOBSEN is an Educational Consultant at the ITU and the Orthopaedic Research Unit at Regional Hospital, Holstebro, Denmark, and a PhD student at the Faculty of Health at Aarhus University. His research interests are in the field of interprofessional teaching, learning and organisation.

KRISTIAN LARSEN is a Senior Researcher at the Orthopaedic Research Unit at Regional Hospital, Holstebro, Denmark, and an Associate Professor at the Faculty of Health at Aarhus University. His research areas include fast-track hip and knee arthroplasty and rehabilitation before and rehabilitation after hip and knee arthroplasty.

TORBEN BÆK HANSEN is a Consultant Orthopaedic surgeon at Regional Hospital, Holstebro, Denmark, and an associate Professor at Faculty of Health at Aarhus University. His research areas include general orthopaedics and hand/wrist surgery.

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