ÖGHD
Österreichische Gesellschft
für Hochschuldidaktik

MEDIZINISCHE UNIVERSITÄT
INNSBRUCK

19. Grazer Konferenz

Innsbruck | 23. - 25. April 2015

20 years Graz Conference -
Impact on Medical Education

1995 *2015*

20 Years
Graz Conference

Graz - Innsbruck- Vienna - Salzburg - Timisoara

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KARL-FRANZENS-UNIVERSITÄT GRAZ

UNIVERSITÄTS-KINDERKLINIK

EINLADUNG

WORKSHOP

"QUALITÄT DER LEHRE (in der Medizin)"

Leitung:
Jörg-Ingolf STEIN, Universität Graz
Richard UHER-MÄRZ, Universität Wien

19.-21. Oktober 1995
Universität-Wallgebäude
Merangasse 70, 8010 Graz

In Zusammenarbeit
mit der Medizinkommission der Bundeskonferenz des wissenschaftlichen und künstlerischen Personals an den österreichischen Hochschulen,
der Österreichischen Gesellschaft für Hochschuldidaktik
und
der Medizinischen Fakultät der Universität Graz

Conference Venue:

Medizinische Universität Innsbruck
Innsbruck, Austria
Anichstraße 35, 6020 Innsbruck, Austria
Haus/Building 5

Organisers: Medizinische Universität Innsbruck
Österreichische Gesellschaft für Hochschuldidaktik

Scientific Program:

Jörg-Ingolf Stein, Innsbruck
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C. . . Seminarraum/Seminar Room (G0-107/8)

G0. . . Ground Floor
G1. . . First Floor

Workshop 1a, 23. 4. 2015, 14:30

The Crucial Role of Feedback for Bedside Teaching

Jan Breckwoldt

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Bedside teaching (BST) is a powerful teaching format, if not the most powerful one in respect to patient - physician interaction. However, BST tends to get neglected, because it is often not used to its full potential. One important element of BST is the delivery of specific and timely feedback. Therefore, this workshop will focus on the ways of effective feedback delivery during BST. This will be based on a process-orientated concept of BST.

We will work on a practical example of teacher training for BST. Participants will be provided with a pragmatic approach to train young faculty for BST at their home institutions.

Workshop 1b, 23. 4. 2015, 14:30

Kurz-Feedback für klinische Tätigkeiten

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Inhalt: Feedback (FB) ist eine der nachweislich wirksamsten Lehrmethoden in der medizinischen Ausbildung sowie Teil der ”Communication Skills”, die von (Veterinär-) MedizinerInnen erwartet werden.
Trotz der großen Bedeutung sind Frequenz und Qualität von Feedback oft ein Problem im klinischen Kontext. Studierende wünschen sich häufiger Feedback, aber fühlen sich dabei unwohl, FB zu erbitten. Lehrende vermeiden Feedback, da sie unter Zeitdruck stehen, wenig Selbstvertrauen in dieser Technik haben und selten eine Ausbildung dieses Kommunikationswerkzeuges erhalten haben. Die ”Clinical Encounter Card” ist ein Werkzeug für StudentInnen, um ein Feedback selbst zu initiieren und von den Lehrenden ein kurzes, strukturiertes Feedback zu bekommen und damit ihre klinische Ausbildung zu verbessern.

Dieser Workshop bietet neben einem kurzen Input von wissenschaftlichem Basiswissen über Feedback und seine Bedeutung für eine erfolgreiche Lehre, die Trainingsmöglichkeit für ein kurzes, strukturiertes Feedback im klinischen Alltag mit Studierenden. Eine Videosequenz bietet Material für gemeinsame Erarbeitung von den verschiedenen Aspekten eines möglichen Feedbacks sowie die Grundlage für verschiedene Varianten von Feedback-Übungen.

Eine ”Clinical Encounter Card” als Werkzeug für StudentInnen, um ein selbst initiiertes Feedback zu bekommen, wird vorgestellt und diskutiert.

Lernziele: Am Ende des Workshops können die TeilnehmerInnen . . .

- Kriterien für gutes Feedback (FB) benennen.
- den Aufbau eines kurzen
- FBs beschreiben
- zielgerichtet FB geben
- den Aufbau und Funktion einerClinical Encounter Card (CEC) verstehen.

Workshop 1c, 23. 4. 2015, 14:30

Didactic Basics of Technology Enhanced Learning at Vienna University of Technology

Gottfried Csanyi

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Vienna University of Technology (TUW) is proud to provide face-to-face education and not to be a distance university. Yet TUW is used to technology enhanced teaching and learning for many years and supports a number of ICT-based services for educational purposes. Beyond that our students, like students all over the world, prefer mobile learning towards studying in lecture halls.

For the last ten years, the central element of our technological infrastructure was Moodle, a widley used and very powerful learning management system. The TUW specific adaptation of Moodle is called TUWEL and provides some additional features serving the needs of technical education. Since approximately four years Moodle is complemented by tools for recording and streaming lectures (LectureTube / LectureTube Live – based on the open cast software Matterhorn) and video conferencing (TU Connect / Adobe Connect).

Based on these services (which are maintained and supported by the Teaching Support Center) a great variety of didactic concepts is realised by individual teachers who apply, amongst others, assignments, tests and selftests, sophisticated assessment concepts, podcasts, recorded and streamed lectures (e.g. for mobile learning). The latter could already be supported by video conferencing and classroom response systems (like Ars Nova). This is, at present, still a vision of the near future, but hopefully a realistic one.

This workshop will provide a short overview of didactic scenarios at TUW, and open the opportunity for participants to draft didactic solutions for the intended learning outcomes in their own courses – based on the technological infrastructure provided by their universities.

Workshop 2a, 24. 4. 2015, 15:15

Using high-tech equipment in (Medical) Education

Karl Kremser[1,3], Ismo Ripatti[2], Herbert Plass[3]

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Teaching with technology can help to deepen learning. But does it always support instructional objectives?

The list of what can be used is very long: Presentation software, lecture capture tools, classroom clickers, web poll, learning platforms, smartphones, tablets, laptops, PCs, whiteboards, dummies (AMT, Resuscitation...) – skills labs.

New topics like "seamless learning" or MOOCs also need to be taken into consideration. In this workshop we will define the methods and we will also try to find out, what works best, what is most efficient and where the pitfalls might be.

Furthermore we will discuss, which tools different universities are using and how satisfied they are with them.

Workshop 2b, 23. 4. 2015, 14:30

Integrated care - role in medical education

Liesbeth Borgermans

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Since 2012, the University of Brussels (Belgium) has launched a reform of the medical curriculum towards the integration of the concepts of person-centered and integrated care. Experiences with this reform will be discussed, as well as barriers and facilitators to its implementation.

Workshop 2c, 23. 4. 2015, 14:30

Peer-Teaching

Michael Ross

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Peer-teaching has always been important in medical education, and there is a substantial body of evidence for the potential benefits for peer tutors, tutees and the institution. There are, however, many challenges to realising these benefits, such ensuring all students or trainees can participate, all peer tutors are adequately trained and supported, and content is aligned to the curriculum. At The University of Edinburgh, as part of our efforts to ensure all medical students learn to teach, it is now compulsory for fourth year students to participate in some form of peer-teaching and then write a satisfactory reflective report about their experiences and insights gained. Along with an overview of the literature and principles of peer-teaching, and some practical examples from our experiences in Edinburgh, workshop participants will discuss the challenges to peer-teaching they have encountered, and share practical strategies and approaches for addressing them.

4 Lectures, Panel Discussion

Alle Veranstaltungen finden im Auditorium statt
All events will take place in the Auditorium

23. 4. 2015, 11:15

20 Years Graz Conference on Medical Education: Why was it held the first time in 1995 and why did it continue?

Richard Marz
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Two main causative factors can be identified when examining the origins oft the "Graz Conference" on Medical Education, though in practice they are not always easy to separate: structural and personal.

Structural were the known deficits of the training of medical students in Austria: Long duration (9+ years), heavy on theory but lacking the practical skills necessary for the clinical demands of their next stage of training, no consensus – not even discussions – on the outcomes of the educational process among the faculty, no quality standards, an examination system that invited the learning/forgetting cycle and demanded no integration of the material learned, no training in communication skills, no attention to questions of student's attitudes and other aspects of the demands of their future professional life, inadequate preparation for research, to name but a few.

Structural were also existing platforms of communication, which made the discussion of curricular issues possible: Each faculty had an elected curriculum committee ("Studienkommission"), which, however, focused on day-to-day issues and rarely looked at the over-all process. Neither was the Austrian central curriculum committee, the "Gesamtösterreichische Studienkommission" a useful driving force of change. Much more pertinent was another central structure, the "Medizinkommission der Bundeskonferenz des wissenschaftlichen und künstlerischen Personals (BUKO)", which under the leadership of Kurt Grünewald provided an effective discussion forum for all Austrian Medical Faculties and was also willing to examine educational issues. And then there was the Austrian Society for Didactics in Higher Education (ÖGHD), a private association but supported by public funds, which for a few years made curricular reform in medicine their focus of attention. Finally a German conference series organized by Florian Eitel (Munich) "Qualität der Lehre" (which later morphed into the GMA annual meetings) played a very important part, since it was fundamental in introducing modern educational concepts into the German speaking medical world. On the other hand the annual AMEE conference was on the whole successfully ignored.

Personal factors were initially mainly Jörg Stein, Gottfried Csanyi, and myself. Jörg and I met through BUKO and in many discussions discovered common interests. But our (chance!) encounters in 1992 and again 1994 at the conferences organised by Florian Eitel made us decide to plan a similar event in and for Austria. Thus the first Graz Conference in 1995 slowly took shape with the three of us contributing to all aspects of the event. But each of us left over the years a special mark: Gottfried

Csanyi of ÖGHD was instrumental in giving the conference an agreeable, yet useful, structure, making it an event for networking but also for getting real work done – our workshops deserved their name from the beginning! Jörg Stein contributed the name “Graz Conference” - he was at the time a faculty member in Graz. For many years (while the conference actually took place in Graz) he was responsible for the local organisation and established a remarkable high standard of hospitality (and also managed to raise the money necessary to support everything). Jörg also edited the printed program and thus provided a useful long-term record of the activities. Only many years later Herbert Plass took over this essential part of conference organization and raised it to a work of art. I myself stuck to the high road whenever I could: planning the scientific program of the events became more and more my main responsibility, though here I also had a lot of help.

Why did it continue? Apparently the conferences filled a real need. Here we formulated the ideas, which became the basis for the new medical curricula in Vienna, Graz, and Innsbruck. And here we were introduced to new didactic approaches (like PBL and Team based Learning) to new ideas about quality control (like evaluation), to new examination methods, and to new ideas in curriculum design (like learning outcomes).

A welcome change in the last years has been the move from an Austrian to an international event and the inclusion of Veterinary Medicine – hopefully Pharmacy will be next.

23. 4. 2015, 12:00

Logbook for the clinical elective year at the University of Zurich

Jan Breckwoldt[1], Magdalena Dutkiewicz-Müller[1], Christian Schirlo[1], Rainer Weber[2]
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Background: Workplace-based learning in clinical electives is usually difficult to standardize. This situation is partially desired as it represents clinical variability, however, for the students it may not be clear which aspects of the training experience are thought to be essential by supervisors. A common instrument to facilitate self-regulated (and self-reflected) learning in this field is a logbook, which was introduced into the undergraduate clinical elective year at the University of Zurich in 2010. The logbook included sections derived from the Swiss Catalogue of Learning Objectives [1], in particular "General Skills", „Clinical Pictures" und „Problems as Starting Points for Training" for self-monitoring of learning progress. In addition, for each single elective a form for a formative Mini Clinical Examination Exercise (Mini-CEX) [2] was included.

Methods: All students of the first two implementation years were asked to complete a questionnaire in respect to usefulness of the different logbook sections, and in respect to the procedure of the Mini-CEX. Ratings were given on Likert scales from 1 to 6 (with "1" as the worst, and "6" as the best rating).

Results: From 430 students, 289 questionnaires could be included into analysis (67.2%). For support of learning, the chapters "General Skills" (mean 3.41, SD 1.40), "Clinical Pictures" (mean 3.53, SD 1.35) and "Problems as Starting Points for Training" (MW 3.58, SD 1.29) were rated neutral. Qualitative analysis of free comments showed, that students complained about practical examples of procedures and clinical pictures being to detailed. Also, they stated that they did not know for whom they were recording their learning experience. In respect to the Mini-CEX, it was stated to be "very fair", and that students received specific and constructive feedback (mean 4.86, SD 1.07).

Discussion: For the revised logbook version we eliminated the "clinical picture" section in favour of a self-reflective section for each elective rotation. We also reduced the number of "General Skills" to an essential set of tasks. In addition, we emphasized the self-regulatory aspect of the logbook within the introductory remarks, and during lectures in the term preceding the elective year. Mini-CEXes however, were encouraged to be performed more often, desirably every month.

References:

1. Bürgi H, et al. Swiss Catalogue of Learning Objectives for Undergraduate Medical Training. Geneve: Joint Conference of Swiss Medical Faculties (SMIFK); 2008. available from: http://sclo.smifk.ch/)
2. Norcini JJ, et al. The mini-CEX (clinical evaluation exercise): a preliminary investigation. Ann Intern Med. 1995;123:795-9.

23. 4. 2015, 16:15

Reports: Diploma Thesis and Scientific Projects

Adelheid Kresse[1], Erwin Petek[2]

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Diploma thesis and introduction to scientific research at the Medical University of Graz

There are three pillars any Medical University is built on: Patient care, science and education.

Whilst the diploma study program of Medicine clearly focuses over the years of study on reaching increasing levels of knowledge and skills concerning patient care, ongoing efforts seek to achieve that also the other two pillars equally grow with the development of our students.

Ability to teach and to pass on knowledge to other students is being supported by offering the opportunity of peer teaching (student tutors). Whilst all students need to deliver a master thesis, it was also clear that a number of students are perfectly suited and would greatly benefit in their further medical as well as scientific career if they were given a really early opportunity to immerse themselves into research activities with professional guidance.

Thus, scientific research abilities as they are required in order to deliver the mandatory master thesis to complete the study program are now being supported literally from the first semester on. Depending on the individual interest in scientific research – basic as well as clinical – students are given the choice to enter, work with, and earn credits in research groups of their interest whenever the feel like along their study progress, at best culminating in a diploma thesis that is already leading to one ore more peer-reviewed publications.

Dagmar Schaffler-Schaden, Mario Gimona

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Thesis and scientific research work at the Paracelsus Medical University Salzburg

Students enrolled in the study of Human Medicine at the Paracelsus Medical University (PMU) in Salzburg are required to submit a thesis. The data underlying the thesis are being compiled during a 4 month research trimester in the 4 academic year. For students to benefit most from their experience in a research laboratory, PMU has established a longitudinal teaching and training module termed WIKO (wissenschaftliche

Kompetenz or scientific competences) that accompanies students throughout their 5 years at the University. From the beginning of their study, students are exposed to various reseach institutions within or associated with the University and receive training related to the conduct of scientific research, the planning and execution of research work as well as instructions for thesis and paper writing.

At the University students have the opportunity to perform their trimester work also in laboratories outside the PMU. Specific focus in the educational program WIKO is thus also related to the student-supervisor relationship. Elements within WIKO not only aim at preparing students for their time in a research environment, but also to provide clear guidelines and information for supervisors with respect to our expectations and deliverables. Importantly, compliance with the current regulations for graduation at the PMU must be acknowledged by the supervisors that have a role as mentors for PMU students.

Several other instruments have been implicated to assists students throughout their diploma work. A forum for the collection and distribution of research trimester themes has been established; here students can select those research themes that best match their own current and future interests (both scientifically and geographically). To further facilitate the smooth conduct of the thesis work we have also compiled checklists for supervisors and students that allow all involved parties to monitor progress and to spot problems at an early stage. The overall layout of the 5 year WIKO module as well as some selected items related to the research trimester for students of Human Medicine at PMU in Salzburg will be presented and discussed.

Gerhard-Johann Zlabinger

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The Way to Science in a Medical Curriculum – the Viennese Approach

When implementing the actual medical curriculum at the Medical University of Vienna, it was a great concern that also adequate scientific thinking should be trained during the undergraduate study period. In order to achieve this goal, students have to pass several special study modules (SSMs) devoted to imparting different skills that build on each other so that they are well prepared when starting their diploma thesis. Furthermore particular quality criteria have to be obeyed when students plan, register, pursue and submit their diploma thesis. After approval of the thesis, students have to pass a defensio in order to show their capabilities to present and discuss the results from their scientific work.

24. 4. 2015, 09:00

Short Lectures: The challenge posed by EU-Membership to curriculum design and the medical system in Hungary, Romania, and Slovenia

Ferenc Bari

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Curriculum design and the medical system in Hungary: changes since our EU membership started in 2004

In the 4 medical schools in Hungary (Budapest, Debrecen, Pecs and Szeged) every year 1100 freshmen enter the six- years graduate education program. Since the general need for physicians has been growing throughout the world more and more graduates leave our country expecting better salaries and working conditions. First important issue is to find solution for the conflict between the high number of students and maintenance of the quality of teaching. Inventing a quality control system was based on the experiences of former EU countries. There is ongoing need and will to reshape the curriculum. All medical schools put more and more efforts on the modern technologies like molecular biology, medical informatics, imaging techniques etc. New medical skill centers were established at the four medical schools. Most of the curriculum development was conducted by the help of EU grants. Similarly, a great number of changes were achieved by EU support (bilateral, cross border grants: Hungarian –Rumanian projects or multi-lateral grants: Hungarian-Rumanian-Austrian or German consortiums). More and more common platforms have been constructed for students' and teachers' exchange (Erasmus and Erasmus+ programs), multi- and bilateral agreements promote the collaboration of medical schools in Europe. The system of summer schools is getting more and more popular and attracts a great number of students. There is also a growing number of international post-graduate programs. The medical education is changing to more and more international at almost all levels. The lecture points out the factors promoting and hindering harmonized European medical education.

Simona Dragan

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Challenges of medical curriculum design in Romania

Romania is a full member of the European Union, since 2007. The Law of Education enacted in 2011 promotes competition to achieve higher academic qualifications, focusing on the quality and quantity of the scientific output. Initially based on extremely demanding scientometric indicators used only at national level, not by the European or international scientific community, it has gone through several changes in the up-

coming years. Value increase has been obtained, but the application of such criteria has been considered untimely. Full compliance with Directive EC36/2005, related to the programmes of study in the medical-pharmaceutical area, is conditional for the recognition of professional qualifications of our students in Europe and is stipulated in Art. 94 of the Charter of the University of Medicine and Pharmacy Victor Babes Timisoara adopted in 2011. We consider medical education and training as a dynamic process. Between January 2011-December 2013, our University was leader of the POSDRU/86/1.2/S/63815 Project: "European Quality and Professional Competence in Medical Education and in the Management of Educational Activities", in partnership with the Medical Universities Cluj-Napoca, Iaşi, Târgu-Mureş and Craiova, having as external partners the Universities of Medicine Vienna and Szeged. The main objective of the POSDRU Project was to improve medical education in our University and in Romania. The results of the project are presented.

Dusan Suput

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Medical education in Slovenia before and after joining the EU

Before joining EU the study of medicine and dental medicine at the Faculty of Medicine, University of Ljubljana (ULMF) consisted of the classical three years of basic science and three clinical years. Pathology, Pathophysiology and Pharmacology in the third year were the "bridge" between the pre-clinics and clinics. On average the students graduated within 7,5 years after the enrollment. International collaboration and student exchange has been well organized for decades, but the opportunities for the incoming students were quite limited.

After Slovenia had joined the EU no dramatic change in the medical study occurred. The modernization of the curriculum has been planned even before that, and the only dilemma was whether to follow the example of a few EU countries that adopted the 3+3 years "Bologna" study or to insist on the uniform 6 yrs. study. The position of the ULMF was clear and we insisted on the one-cycle 6 years study.

The curriculum reform was independent of the membership in the EU. It was used to reinforce the good practices, to eliminate unnecessary repetitions (coordination between different "Life sciences" subjects) and reinforce the clinical bed-side teaching in even smaller groups than before (1 to 5 stdents).

The main impact on the medical education of our EU membership was the Erasmus programme that formalized the existent bilateral agreements and facilitated new connections and exchanges by providing additional funding. The number of incoming students increased and presently the main challenge is how to organize the English courses as our legislation requests that the teaching must be in Slovenian language.

The financial crisis has a severe impact because of the ever increasing pressures on the clinical teachers to do more clinical work and less teaching. Until now, fortunately, we were able to resist such political an economical pressures.

24. 4. 2015, 11:15

Integrated care - role in medical education 1st experience with implementation in a running curriculum

Liesbeth Borgermans

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Integrated and person-centered care are considered an essential response to the challenges Europe's health and social security systems are facing: an ageing population and an increase of multi-morbidity. Despite there is no universally accepted definition of integrated and person-centered care, there is growing insight to the essential components of both inter-related concepts and their effectiveness on multiple outcomes of care. A better understanding of person-centered and integrated care is essential to the medical curriculum and post-graduate training of medical doctors.

24. 4. 2015, 12:15

Research ethics and permission

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We all strive to behave ethically in our practice, and to share our experiences and insights through publication, yet a surprisingly high number of otherwise-good manuscripts are rejected by journals on ethical grounds. Common reasons include insufficient detail on the ethical issues considered, a failure to seek an independent opinion from an ethics committee or other body, or lack of informed consent from participants. Most of these rejections and could be prevented with better planning and consideration of ethical issues at an early stage.

This lecture presents an editorial perspective on ethics and permissions for medical education research, with practical examples and requirements from The Clinical Teacher journal, and offers a clear strategy to help ensure your research would be considered ethical, and your manuscripts more likely to be accepted for publication.

24. 4. 2015, 14:45

The Graz Conference – grown up - standing alone?!

Jörg Ingolf Stein

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When we started “Die Grazer Konferenz” in 1995 it was not just because of our being interested in medical education, but we were convinced that Austria should not stay behind and be denied the developments from around the world, or more precisely, in Germany. We also were dedicated to changing the Austrian medical curriculum which had been unchanged for a century in writing, but had of course at each university – Graz, Vienna and Innsbruck – a totally different “hidden” curriculum. Moreover we had the chance to legally design a new currciulum for dentistry due to European law enforcing Austrian authorities to do so.

Therefore we started very blue-eyed with our friends from those “modern” countries with “modern” curricula and theoretically we came up with all their ideas and tried to form our own “Austrian currciulum” out of them!
Pretty soon we perceived the major Austrian obstacle – the legal frame work with unlimited access of students to whatever curriculum chosen.
Anyway over the years we then – thanks to “federalism” and “new liberal university legislation” - designed our three different curricula for the three public universities. Overall almost all elements of modern teaching and learning methods as well as evaluation and examination systems can be found, not in one but ... yes throughout those three different curricula.

Fortunately we were able to spread the information and ideas and put the “virus” of permanent curriculum discussion into our faculties and the understanding that curriculum design is an ongoing process – which it always has been also in the time when no changes had been written down!

Now 20 years later having reached the 19th conference – we are legally grown up and the process over the years has broadened not only our own mind but also the basis of the conference. Like students we had our exchange programme visiting neighbouring countries and incorporating them, and we also learned that a broader perspective does need a broader ground to stand on and therefore the cooperation with possible associations in this field was tried on a personal and invitational base and if institutionalised will bring a new step to further development of both – the “Graz Conference” and medical education!

4. 4. 2013, 9:15

Clinical Reasoning – A special case of scientific reasoning

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Clinical reasoning: A Special Case of Scientific Reasoning and Argumentation?

Can clinical reasoning be considered a unique form of scientific reasoning and argumentation in practice? A generic model of scientific reasoning will be presented, and science-based reasoning in practice will be discussed

The current literature on clinical reasoning and methods for instructional support, and the question of domain-specific needs for training and practice, will be critically reviewed. A special focus of the talk will be on the need for a model for collaborative clinical reasoning and the potential of scripts to foster diagnostic, communicative, and collaborative competencies.

At the end of this session, participants will be able to:

- Define scientific reasoning and argumentation and describe their relationship to clinical reasoning
- Discuss models of general and domain-specific clinical reasoning
- Explain future challenges for instructional interventions to foster clinical reasoning as a mixture of diagnostic, communicative, and collaborative competencies

4. 4. 2013, 10:00

Grazer Konferenz – Quo vadis? Aussichten für die Zukunft

Matthäus Grasl[1,3], Karl Kremser[2,3], Herbert Plass[3]

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Grundlegend halten wir fest dass die „Grazer Konferenz“ ein Markenname der Österreichischen Gesellschaft für Hochschuldidaktik (ÖGHD) ist und auch bleibt.

Was wollen wir erhalten?
Die organisatorische Strukturierung hat sich bisher gut bewährt Der Termin kurz nach Ostern, Donnerstag bis Samstag sollte möglichst beibehalten werden, da damit eine Planungskonstanz erreicht wird. Die englische Sprache unterstreicht die internationale Ausrichtung der Konferenz. Die Vielfalt der Präsentationen mit Lectures, Short Lectures, Workshops, Round Table, Poster Party hat sich bestens bewährt. Inhaltlich bleibt die Thematik in Richtung der forschungsbegleiteten Verbesserung der medizinischen Ausbildung - retrospektiv und prospektiv - führend. Wesentlicher Aspekt ist aber auch die politische Wahrnehmung der universitären Lehre und der Einfluss der Politik und der sozialen Veränderungen auf das Bild der medizin-nahen Berufe. Der Wirkungsbereich der „Grazer Konferenz” ist bevorzugt in Deutschland und Österreich. Eine besondere Verbindung besteht zu unseren Nachbarn in Ost- und Südosteuropa.

Welche Neuerungen streben wir an?
Engere Kooperationen zu allen Medizinischen Universitäten/Fakultäten in Österreich sowie zur GMA-Austria. Mit der Austragung der „Grazer Konferenz“ in ost- und südeuropäischen Ländern möchten wir deren Universitäten vermehrt in die grundlegenden Visionen der „Grazer Konferenz” einbinden. Welche Mittel stehen zur Verfügung?
Mitgliedsbeiträge, gegebenenfalls Einnahmen aus der „Grazer Konferenz”, sowie aus Fortbildungs- und Schulungsangebote, öffentliche Förderungen und Sponsoren.

5 Posters

Posterparty: Donnerstag, 23. 4. 2015, 18:00, “Haus C”, Foyer
Die Poster können Donnerstag zwischen 09:00 und 12:45 Uhr aufgehängt werden und müssen bis Freitag 14:30 Uhr entfernt sein!

Posterparty: Thursday, 23. 4. 2015, 18:00, “Object C”, Lobby
Please mount your posters on Thursday between 09:00 and 12:45 and remove them at the latest by Friday 14:30!

Didactic Video as a Tool of Clinical Skills Learning - Students' Perspective

[1]Hebar Timea, [1]Muršič Ines, [1]Rižnik Petra [1,2]Bevc Sebastjan
[1]Centre for Medical Education, Faculty of Medicine, University of Maribor – Taborska 8, 2000 Maribor, Slovenia
[2]Clinic for Internal Medicine, University Medical Centre Maribor – Ljubljanska 5, 2000 Maribor, Slovenia

INTRODUCTION

The students' desire for additional literature and new ways of learning prompted us to conduct a survey to determine the opinions of students concerning the benefits of introducing didactic videos of clinical skills in Internal Medicine with Propaedeutics.

METHODS

A randomized, controlled trial was conducted in the Clinical Skills Laboratory (CLS) of the Faculty of Medicine at University of Maribor in January 2015. In the study 48 third year medical students were included and randomly divided into an experimental and a control group, 24 people each. Approximately 5-7 days after clinical seminars their knowledge of two clinical skills (vein puncture and infusion set-up) was assessed. Prior the 24 students in the experimental group had 24 hour access to a video of these two clinical skills to watch as often as they wanted. After the assessment those 24 students were given questionnaire.

The anonymous survey consisted of 5 closed questions and one open-ended question. The students' answers describe the importance of watching the videos on their success in the assessment, expressed their opinion about introducing didactic videos of clinical skills into Internal Medicine curriculum and define the role of peer-tutors work.

RESULTS

The results show that the majority of students (83%) watched the video about venipuncture once or twice, 67% of the students watched the video of infusion set up once or twice and 29% of them even 3 to 4-times.

The majority of student stressed that watching the videos had important influence on their success in the assessment of clinical skills (71% for vein puncture and 79% for infusion set-up, respectively).

Among the three options (practical demonstration, videos demonstration, and combination of both demonstrations) almost all students (96%) think that the most appropriate way to learn a new clinical skill is by combining didactic videos and practicing the clinical skill under the supervision of a peer-tutor.

The majority of students (92%) would include the teaching with didactic videos in the Internal Medicine curriculum (Graph 1).

All students shared the opinion that didactic videos cannot replace the peer-tutors work.

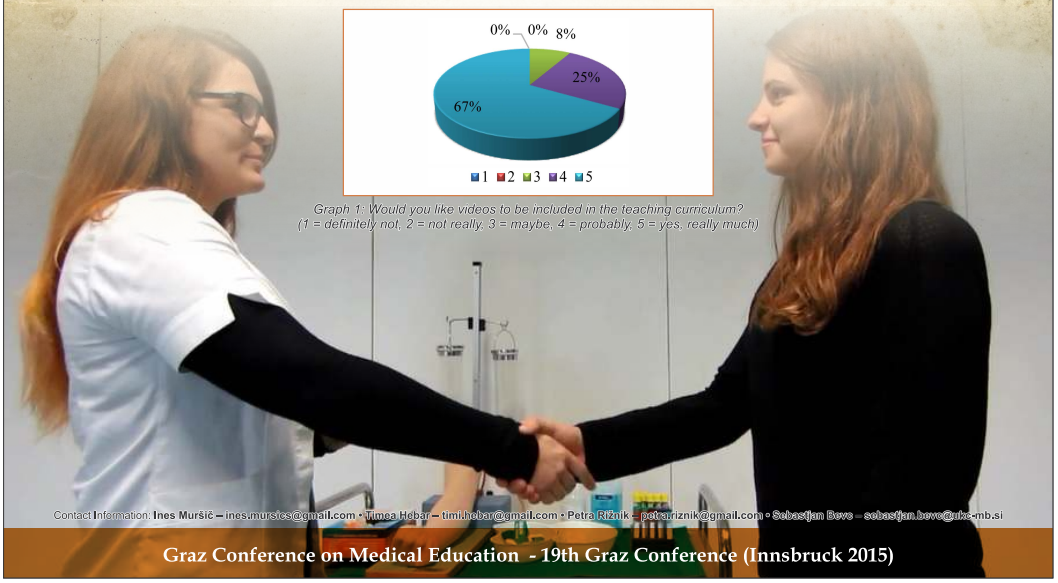
DISCUSSION

The difference of frequency of viewing of clinical skills was probably due to greater technical complexity of second clinical skill (infusion set-up). The students believed that immediate feedback from the peer-tutor, the ability to ask additional questions during the practice and improved memory of new clinical skill after practice are major advantages of peer tutoring versus watching didactic videos.

CONCLUSION

In student' opinion the didactic videos contribute to better education, but can never entirely replace the work of a peer-tutor.

Graph 1: Would you like videos to be included in the teaching curriculum? (1 = definitely not, 2 = not really, 3 = maybe, 4 = probably, 5 = yes, really much)



Contact Information: Ines Muršič – ines.mursics@gmail.com • Timea Hebar – timi.hebar@gmail.com • Petra Rižnik – petra.riznik@gmail.com • Sebastjan Bevc – sebastjan.bevc@ukc-mb.si

Graz Conference on Medical Education - 19th Graz Conference (Innsbruck 2015)

Poster 1

Didactic Video as a Tool of Clinical Skills Learning - Students' Perspective

Hebar Timea[1], Muršič Ines[1], Rižnik Petra[1], Bevc Sebastjan[1,2]

[1] Centre for Medical Education, Faculty of Medicine, University of Maribor – Taborska 8, 2000 Maribor, Slovenia
[2]Clinic for Internal Medicine, University Medical Centre Maribor – Ljubljanska 5, 2000 Maribor, Slovenia

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sebastjan.bevc@ukc-mb.si

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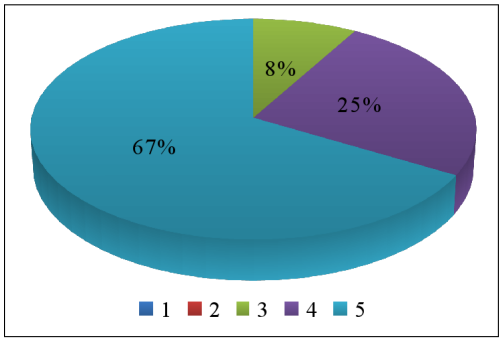
The anonymous survey consisted of 5 closed questions and one open-ended question. The students' answers describe the importance of watching the videos on their success in the assessment, expressed their opinion about introducing didactic videos of clinical skills into Internal Medicine curriculum and define the role of peer-tutors work.

Results:



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Conclusion: In student' opinion the didactic videos contribute to better education, but can never entirely replace the work of a peer-tutor.

Das Fach „Einführung in die Medizin“ im Spiegel von Studentenbefragungen an der Medizinischen Fakultät von der Universität Szeged

Dr. Erzsébet Kapocsi PhD, Dr. habil. Katalin Barabás MD, PhD, Gergely Tari Assistent
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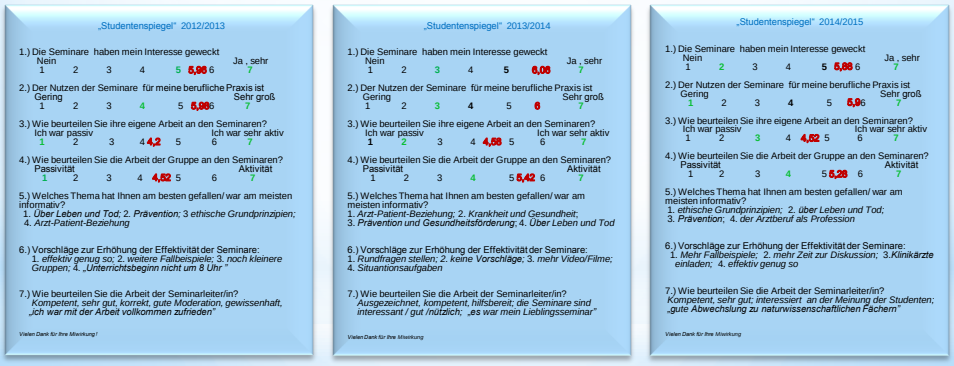
Einleitung: Das Fach "Einführung in die Medizin" zielt darauf ab, Studierenden der Medizin einen Überblick über die Geschichte, theoretischen Grundannahmen, Leitideen und ethischen Fragestellungen der Medizin zu geben. Neben der Vermittlung von Basiswissen verfolgt der Kurs den Zweck, den ansonsten überwiegend naturwissenschaftlich ausgebildeten Medizinstudenten kulturwissenschaftliche Methoden in ihrer Anwendung auf Probleme der Medizin nahe zu bringen. Parallel dazu sollen die Studenten auch eine entsprechende ärztliche Grundhaltung vermittelt bekommen.
Aufbau des Studiums: „Einführung in die Medizin" wird an der Medizinischen und an der Zahnmedizinischen Fakultät im ersten Semester als Pflicht-Wahlfach unterrichtet in insgesamt 30 Stunden; 15 (15X1) Stunden Vorlesungen, 15 (15X1) Stunden Seminare in Kleingruppen.

Hintergrund: Studentische Reflexion über Unterricht ist eine wichtige Grundlage für die Weiterentwicklung erfolgreicher Lehr- und Lernprozesse. Diesbezüglich kommt in unserem Institut den Studentenbefragungen eine große Bedeutung zu. So werden jedes Jahr nach Abschluss der Seminare die Studenten darum gebeten, einen kurzen Fragebogen anonym auszufüllen.
Zielsetzung: Es wurde untersucht, wie die Studierende den Seminarunterricht im Fach einschätzen. Die Items 1-4 im Fragebogen beziehen sich auf Interesse der Studenten, auf Nutzen für den Beruf, auf die persönliche Aktivität, auf die Aktivität der Gruppenmitglieder. Jede Aussage wird auf einer 7-Punkt-Skala bewertet. Zu den Items 5-7 können die Studenten ihre Meinungen, Vorschläge sowie ihre Einschätzung über die Leistung der Seminarleitern/innen in Form einer Freitextantwort angeben.
Methodik: In jedem Studienjahr von 2012/2013 bis 2014/2015 wurden jeweils 50 – 50 (insgesamt 150) „Studentenspiegel“ von cca. 250/Jahr random ausgewählt und analysiert. Wegen der Anonymität sind keine persönlichen Daten angegeben. Die Daten wurden statistisch analysiert; die Freitextantworten und -Kommentare wurden in inhaltliche Gruppen zusammengefasst.



„Studentenspiegel“ 2012/2013

1.) Die Seminare haben mein Interesse geweckt
Nein 1 2 3 4 5 **5,98** 6 Ja , sehr 7

2.) Der Nutzen der Seminare für meine berufliche Praxis ist
Gering 1 2 3 4 5 **5,98** 6 Sehr groß 7

3.) Wie beurteilen Sie ihre eigene Arbeit an den Seminaren?
Ich war passiv 1 2 3 4 **4,2** 5 6 Ich war sehr aktiv 7

4.) Wie beurteilen Sie die Arbeit der Gruppe an den Seminaren?
Passivität 1 2 3 4 **4,52** 5 6 Aktivität 7

5.) Welches Thema hat Ihnen am besten gefallen/ war am meisten informativ?
1. *Über Leben und Tod;* 2. *Prävention;* 3 *ethische Grundprinzipien;* 4. *Arzt-Patient-Beziehung*

6.) Vorschläge zur Erhöhung der Effektivität der Seminare:
1. *effektiv genug so;* 2. *weitere Fallbeispiele;* 3. *noch kleinere Gruppen;* 4. *„Unterrichtsbeginn nicht um 8 Uhr “*

7.) Wie beurteilen Sie die Arbeit der Seminarleiter/in?
Kompetent, sehr gut, korrekt, gute Moderation, gewissenhaft, „ich war mit der Arbeit vollkommen zufrieden”

Vielen Dank für Ihre Mitwirkung !

„Studentenspiegel“ 2013/2014

1.) Die Seminare haben mein Interesse geweckt
Nein 1 2 3 4 **5** **6,08** Ja , sehr 7

2.) Der Nutzen der Seminare für meine berufliche Praxis ist
Gering 1 2 3 **4** 5 **6** Sehr groß 7

3.) Wie beurteilen Sie ihre eigene Arbeit an den Seminaren?
Ich war passiv **1** 2 3 4 **4,88** 5 6 Ich war sehr aktiv 7

4.) Wie beurteilen Sie die Arbeit der Gruppe an den Seminaren?
Passivität 1 2 3 4 5 **5,42** 6 Aktivität 7

5.) Welches Thema hat Ihnen am besten gefallen/ war am meisten informativ?
1. *Arzt-Patient-Beziehung;* 2. *Krankheit und Gesundheit;* 3. *Prävention und Gesundheitsförderung;* 4. *Über Leben und Tod*

6.) Vorschläge zur Erhöhung der Effektivität der Seminare:
1. *Rundfragen stellen;* 2. *keine Vorschläge;* 3. *mehr Video/Filme;* 4. *Situationsaufgaben*

7.) Wie beurteilen Sie die Arbeit der Seminarleiter/in?
Ausgezeichnet, kompetent, hilfsbereit; die Seminare sind interessant / gut /nützlich; „es war mein Lieblingsseminar”

Vielen Dank für Ihre Mitwirkung

„Studentenspiegel“ 2014/2015

1.) Die Seminare haben mein Interesse geweckt
Nein 1 2 3 4 5 **5,88** 6 Ja , sehr 7

2.) Der Nutzen der Seminare für meine berufliche Praxis ist
Gering 1 2 3 **4** 5 **5,9**6 Sehr groß 7

3.) Wie beurteilen Sie ihre eigene Arbeit an den Seminaren?
Ich war passiv 1 2 3 4 **4,62** 5 Ich war sehr aktiv 6 7

4.) Wie beurteilen Sie die Arbeit der Gruppe an den Seminaren?
Passivität 1 2 3 4 5 **5,26** 6 Aktivität 7

5.) Welches Thema hat Ihnen am besten gefallen/ war am meisten informativ?
1. *ethische Grundprinzipien;* 2. *über Leben und Tod;* 3. *Prävention;* 4. *der Arztberuf als Profession*

6.) Vorschläge zur Erhöhung der Effektivität der Seminare:
1. *Mehr Fallbeispiele;* 2. *mehr Zeit zur Diskussion;* 3.*Klinikärzte einladen;* 4. *effektiv genug so*

7.) Wie beurteilen Sie die Arbeit der Seminarleiter/in?
Kompetent, sehr gut; interessiert an der Meinung der Studenten; „gute Abwechslung zu naturwissenschaftlichen Fächern”

Vielen Dank für Ihre Mitwirkung

Zeichenerklärung: **X** = Durchscnittswert X = niedrigste Punktzahl / höchste Punktzahl 1. 2. 3. … Häufigkeit der Angaben

Ergebnisse: Sowohl der Nutzen dieser Veranstaltung für die berufliche Praxis als auch das Interesse der Studenten werden etwa gleichermaßen beurteilt (beide 5,9-6,1 Punkte). Die Leistung der Kommilitonen wird in jedem Jahrgang positiver bewertet (4,5-5,8 Punkte) als die eigene, persönliche Aktivität (4,2-4,8 Punkte). Die Freitextantworten zeigen große Variabilität, die Kommentare enthalten größtenteils positive, anerkennende Bemerkungen. Negative Beurteilung, direkt kritische Anmerkungen sind selten, stattdessen keine Kommentare.
Fazit: Die Studentenbefragungen unmittelbar nach dem Abschluß der Seminare sind als „Blitzaufnahmen“ über den Ist-Zustand zu bewerten. Weitgehende Folgerungen können nur vorsichtig gezogen werden. Für die weitere Gestaltung der Seminare sollten sie aber berücksichtigt werden um die Qualität der Lehrveranstaltungen zu fördern.
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Poster 2

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Erzsébet Kapocsi, Katalin Barabás, Gergely Tari

Universität Szeged, Fakultät für Medizin, Institut für Verhaltenswissenschaften.

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Basics of ECG interpretation – *"Keep it simple!"* as a successful academic teaching concept

Medical University of Graz

Mounir Khafaga[1], Simone Manhal[2], Egbert Bisping[1], and Helmut Brussee[1]

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[2] Office of the Vice-Rectorate for Studies and Teaching, Medical University of Graz, Harrachgasse 1/VI/603, A-8010 Graz, Austria

mounir.khafaga@medunigraz.at; simone.manhal@medunigraz.at; egbert.bisping@medunigraz.at; helmut.brussee@medunigraz.at

Background:

An electrocardiogram or ECG is a record of the electrical activity of the heart. Basic ECG interpretation is a key skill relevant to healthcare professionals in all disciplines of medicine, not only for practicing cardiologists. The complexity of ECG interpretation for beginners is often overwhelming and in many cases underestimated by ECG experts. Therefore, we aimed to design and apply a "keep it simple" teaching concept that allows all medical students regardless of their future specializations to master the most important basics of ECG interpretation.

Teaching concept:

Our introductory ECG course focuses on the assessment of rhythm, calculating heart rate, determining the heart's electrical axis, measuring relevant time and amplitude parameters, and critical evaluation of wave and segment morphology to detect abnormal and dangerous findings. We provide the students with a one-page handout that serves as guide and checklist summarizing the six key analysis steps. Following such a checklist encourages to structured analysis and prevents overlooking important findings. Mnemonics help the students remember important details. Several practical exercises serve to reinforce the lesson's content.

Systematisches Befundungsschema

1) Rhythmus
2) Frequenz
3) Lagetyp
4) Zeit/Voltparameter
5) Erregungsbildung
6) Erregungsrückbildung

Figure 1: six key analysis steps

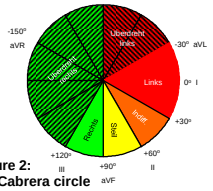

Figure 2: the Cabrera circle

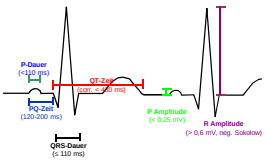

Figure 3: schematics simplify..

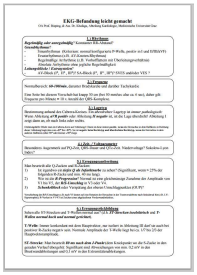

Figure 4: the one-page handout

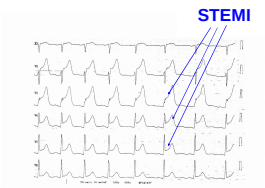

Figure 5: ST elevation myocardial infarction

Figure 6: examples of mnemonics used for illustration

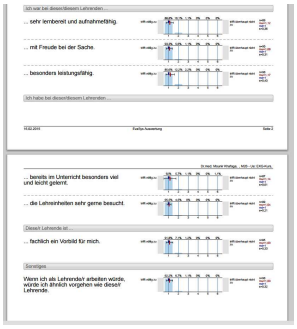

Figure 7: Excerpt of the survey analysis

Evaluation:

During the winter semester 2013/14, the summer semester 2014, and the winter semester 2014/15, students at the Medical University of Graz (mostly third and fourth year students) attended our ECG course within the framework of "Module 26". Surveys (10-20 students per group) have been performed, with a total of 258 questionnaires returned. Most students (up to 94.4% in the summer semester) strongly agreed that they had learned a lot throughout the course. Students' satisfaction with all three courses was very high (at least 95% strongly agreed/agreed that they enjoyed attending the seminar). The same was true for the assessment of clinical relevance of contents.

Conclusion:

- **Our "keep it simple!" teaching concept aimed to focus on the most important practically relevant aspects of ECG interpretation and was received with great acceptance by our medical students.**
- **This is a practical example which shows that teaching complex skills can be successfully simplified, resulting in high motivation on the students` part to learn even more about this important diagnostic tool.**

Poster 3

Basics of ECG interpretation – "Keep it simple!" as a successful academic teaching concept

Mounir Khafaga[1], Simone Manhal[2], Egbert Bisping[1], and Helmut Brussee[1]

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Background: An electrocardiogram or ECG is a record of the electrical activity of the heart. Basic ECG interpretation is a key skill relevant to healthcare professionals in all disciplines of medicine, not only for practicing cardiologists. The complexity of ECG interpretation for beginners is often overwhelming and in many cases underestimated by ECG experts. Therefore, we aimed to design and apply a "keep it simple" teaching concept that allows all medical students regardless of their future specializations to master the most important basics of ECG interpretation.

Teaching concept: Our introductory ECG course focuses on the assessment of rhythm, calculating heart rate, determining the heartś electrical axis, measuring relevant time and amplitude parameters, and critical evaluation of wave and segment morphology to detect abnormal and dangerous findings. We provide the students with a one-page handout that serves as guide and checklist summarizing the six key analysis steps. Following such a checklist encourages to structured analysis and prevents overlooking important findings. Mnemonics help the students remember important details. Several practical exercises serve to reinforce the lesson's content.

Evaluation: During the winter semester 2013/14, the summer semester 2014, and the winter semester 2014/15, students at the Medical University of Graz (mostly third and fourth year students) attended our ECG course within the framework of "Module 26". Surveys (10-20 students per group) have been performed, with a total of 258 questionnaires returned. Most students (up to 94.4% in the summer semester) strongly agreed that they had learned a lot throughout the course. Students' satisfaction with all three courses was very high (at least 95% strongly agreed/agreed that they enjoyed attending the seminar). The same was true for the assessment of clinical relevance of contents.

Conclusion: Our "keep it simple!" teaching concept aimed to focus on the most important practically relevant aspects of ECG interpretation and was received with great acceptance by our medical students. This is a practical example which shows that teaching complex skills can be successfully simplified, resulting in high motivation on the students' part to learn even more about this important diagnostic tool.

Case based learning:

Infective endocarditis presenting as lumbalgia

Medizinische Universität Graz

Karl-Patrik Kresoja[1], Mounir Khafaga[1], Dirk von Lewinski[1], and Albrecht Schmidt[1]

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Introduction:

The implementation of e–learning and the virtual medical campus (VMC) provides an ideal platform for clinical case-based learning. There is a growing need for a pool of good educational cases that teach students appropriate differential diagnosis and what mistakes to avoid in clinical practice.

Case report:

A 71-year-old patient with dilative cardiomyopathy and COPD was admitted to our emergency ward with lumbalgia and dyspnea. The patient had an ICD-CRT pacemaker system. Two weeks before admission, he was treated for pulmonary artery embolism. Upon transfer to our intensive care unit we immediately started with CPAP therapy and stabilized the patient`s cardiorespiratory state. After two days his dyspnea was under control and he could be transferred to the normal ward, yet his back pain was worsening and required morphine treatment.

The patient's son reported that his father was in psychotherapeutic treatment due to depression and psychiatric instability and that his father was just simulating the back pain to draw attention (factitious disorder). Despite this information we insisted on performing an abdominal CT scan to exclude an aortic dissection. There were no signs of aortic dissection or aneurysm, but a splenic infarction was found. In search for potential sources of embolism a transesophageal echocardiography was performed and showed infective endocarditis with floating vegetations on the anterior mitral leaflet and on the ICD-CRT lead. Blood cultures were positive for Enterococcus faecalis. The patient was transferred to the surgical department and underwent a mitral valve replacement and a pacemaker lead exchange. This prevented further embolic complications. After 6 weeks of ampicillin and gentamicin i.v. therapy the patient was released in good clinical state.

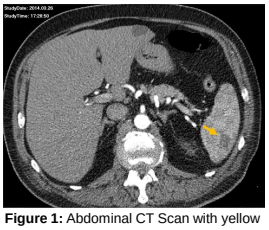


Figure 1: Abdominal CT Scan with yellow arrow indicating splenic infarction;

Lesson:

- **This case highlights the importance of taking expressed physical pain seriously, even in situations of potentially simulated pain expressed by patients with a known psychiatric history (factitious disorder).**
- **Excluding dangerous conditions underlying the pain in these patients is crucial and must not be neglected in favor of relying on analgesia and psychiatric treatment alone.**

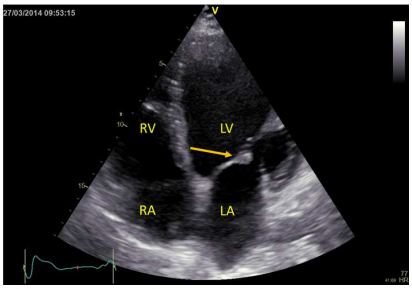


Figure 2*A*: Transthoracic echocardiography: Apical 4 chamber view; the yellow arrow shows a thickened anterior mitral leaflet

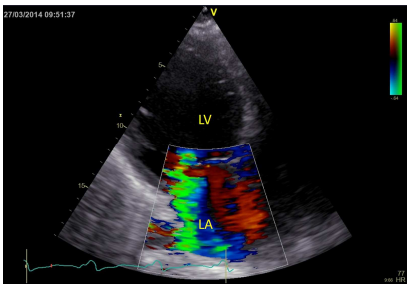
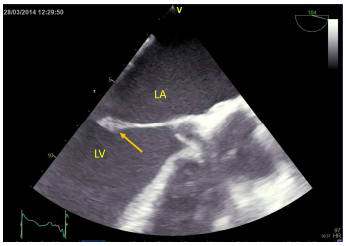


Figure 2*B*: Transthoracic echocardiography: Apical 2 chamber view. Color Doppler shows severe mitral regurgitation;

Figure 3*A*: Transesophageal echocardiography: The yellow arrow shows a vegetation on the mitral valve



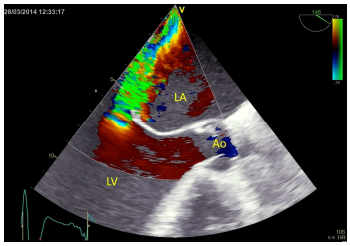


Figure 3*B*: Transesophageal echocardiography: The color jet indicates severe mitral regurgitation

Conclusion:

- **Case-based learning is an effective learning tool for medical students and practicing residents, as it gives insight into real life problems facing medical staff on a regular basis.**
- **Sophisticated cases like the one described here may be presented as virtual patients on an e-learning platform and formatted in a step-by-step approach (from symptoms to diagnosis) - thereby serving as good learning material and applied problem solving models for both medical students and medical staff.**

Poster 4

Case based learning: infective endocarditis presenting as lumbalgia

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Introduction: The implementation of e–learning and the virtual medical campus (VMC) provides an ideal platform for clinical case-based learning. There is a growing need for a pool of good educational cases that teach students appropriate differential diagnosis and what mistakes to avoid in clinical practice.

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Lesson: This case highlights the importance of taking expressed physical pain seriously, even in situations of potentially simulated pain expressed by patients with a known psychiatric history (factitious disorder). Excluding dangerous conditions underlying the pain in these patients is crucial and must not be neglected in favor of relying on analgesia and psychiatric treatment alone.

Conclusion: Case-based learning is an effective learning tool for medical students and practicing residents, as it gives insight into real life problems facing medical staff on a regular basis. Sophisticated cases like the one described here may be presented as virtual patients on an e-learning platform and formatted in a step-by-step approach (from symptoms to diagnosis) - thereby serving as good learning material and applied problem solving models for both medical students and medical staff.

Medical University of Graz

Relevance and educational quality of teaching hospitals compared to medical university

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[2]Institute of Pathophysiology and Immunology, Medical University of Graz, Heinrichstraße 31a, 8010 Graz, Austria

Background Clinical training is one of the most important parts in medical education. The main purpose of this training is to improve practical skills of young students and to prepare them perfectly for their medical career. In Austria, students may choose to pass their clinical training in external teaching hospitals. At the moment the relevance and quality of education in these hospitals compared to university hospitals remains unclear.

Objective The aim of this study was to investigate the current relevance and teaching-quality of external teaching hospitals.

Methods Between March 2013 and February 2014 an anonymous and voluntary survey among medical students at the Institute of Pathophysiology and Immunology, Medical University of Graz, was conducted. Participating students were requested to answer a questionnaire including ten items concerning their opinion about the necessity of clinical training and the relevance and quality of teaching hospitals compared to university hospitals. Questionnaires were returned personally, by post or per mail and evaluated anonymously.

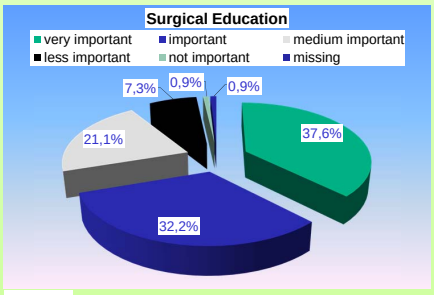

Fig. 1

Conclusion Teaching hospitals represent an important possibility to improve practical skills in high educational quality. Clinical training, especially in surgery, represents a main part in medical education for students.

Results Overall 121 participating students returned their questionnaire. 109 (90.1%) questionnaires of students in their second year of medical education were included into the statistical evaluation, 12 (9.9%) questionnaires were excluded for missing experience of these students with teaching hospitals. According to the opinion of all students, the proportion of clinical training in medical education should be 42.4%. Surgical training was seen as very important or important in 69.8% (figure 1). 86.3% of the students evaluated external hospitals as very important or important locations for their clinical training; the quality of medical education was evaluated as very good or good in 69.8% compared to university hospitals (figure 2 and 3). Clinical training in operating theatres was very important or important in 67.8% and in 66.1% in outpatient units respectively. Bedside teaching was important in 51.4%. Practical training should be the main part in these units (>50% practice) compared to theory.

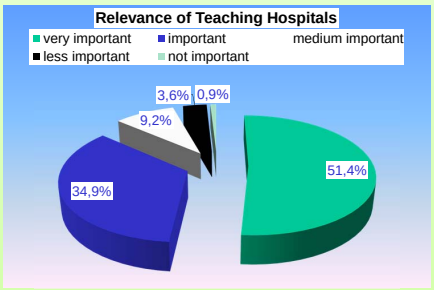

Fig. 2

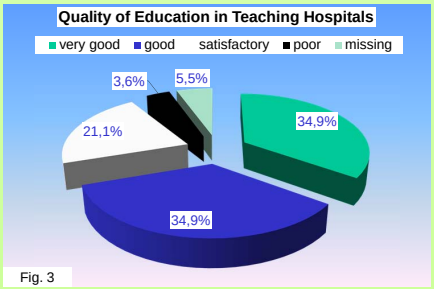

Fig. 3

Poster 5

Relevance and educational quality of teaching hospitals compared to medical university

Karl Mrak[1], Sandra Wallner-Liebmann[2]

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Introduction: Clinical training is one of the most important parts in medical education. The main purpose of this training is to improve practical skills of young students and to prepare them perfectly for their medical career. In Austria, students may choose to pass their clinical training in external teaching hospitals. At the moment the relevance and quality of education in these hospitals compared to university hospitals remains unclear.

Methods: Between March 2013 and February 2014 an anonymous and voluntary survey among medical students at the Institute of Pathophysiology and Immunology, Medical University of Graz, was conducted. Participating students were requested to answer a questionnaire including ten items concerning their opinion about the necessity of clinical training and the relevance and quality of teaching hospitals compared to university hospitals. Questionnaires were returned personally, by post or per mail and evaluated anonymously.

Results: Overall 121 participating students returned their questionnaire. 109 (90.1%) questionnaires of students in their second year of medical education were included into the statistical evaluation, 12 (9.9%) questionnaires were excluded for missing experience of these students with teaching hospitals. According to the opinion of all students, the proportion of clinical training in medical education should be 42.4%. Surgical training was seen as very important or important in 69.8% (figure 1). 86.3% of the students evaluated external hospitals as very important or important locations for their clinical training; the quality of medical education was evaluated as very good or good in 69.8% compared to university hospitals (figure 2 and 3). Clinical training in operating theatres was very important or important in 67.8% and in 66.1% in outpatients units respectively. Bedside teaching was important in 51.4%. Practical training should be the main part in these units (>50% practice) compared to theory.

Discussion: In literature there is no data about the relevance of teaching hospitals for medical students or the quality of education in these institutions. The presented study showed that the significance of teaching hospitals is high, maybe based on the fact that the possibility to choose a hospital for clinical training is important for students. However, the quality of education in teaching hospitals was rated excellent and absolutely comparable to university hospitals. Educational quality seems to be a main point in student´s decision for a teaching hospital.

Conclusion: Teaching hospitals represent an important possibility to improve practical skills in high educational quality for students. Clinical training, especially in surgery represents a main part in medical education.

Didactic Video as Teaching Tool for Clinical Skills Learning

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[2]Clinic for Internal Medicine, University Medical Centre Maribor – Ljubljanska 5, 2000 Maribor, Slovenia

INTRODUCTION

At the Faculty of Medicine at University of Maribor, internal medicine curriculum of third year medical students has obligatory clinical seminars, where they are taught basic clinical skills with the help of peer tutors. The students' desire for additional literature and new ways of learning prompted us to conduct a randomized, controlled study to determine the use of didactic videos to improve the students´ knowledge and skills.

METHODS

A randomized, controlled study was carried out at the Clinical Skills Laboratory (CLS) at our faculty in January 2015. In the study 48 third year medical students were included and randomly divided into an experimental and a control group, 24 students each. We selected venipuncture and setting up an infusion as assessed clinical skills.

Before the trial the participants attended clinical seminars in the scope of Intermal Medicine. The clinical skills were demonstrated by peer tutors and the students were then given the opportunity to practice them.

Approximately 5-7 days after completing their courses we assessed their knowledge of the two clinical skills. Prior the students in the experimental group had 24-hour access to a video of the two clinical skills and they were allowed to watch it as often as they wanted. We recorded the videos in the CLS on the same simulators we used for the assessment of the learned clinical skills.

The assessment of the clinical skills was carried out by seven peer tutors. All of them were given the same instructions and they evaluated the students using objective clinical examination.

RESULTS

The results of our Student's t-test show that the students in the experimental group gained statistically significant more points than the students in the control group for both clinical skills.

The time analysis shows that the students in the experimental group performed both clinical skills faster than the ones in the control group. However the difference in the average time needed was not statistically significant (Table 1).

DISCUSSION

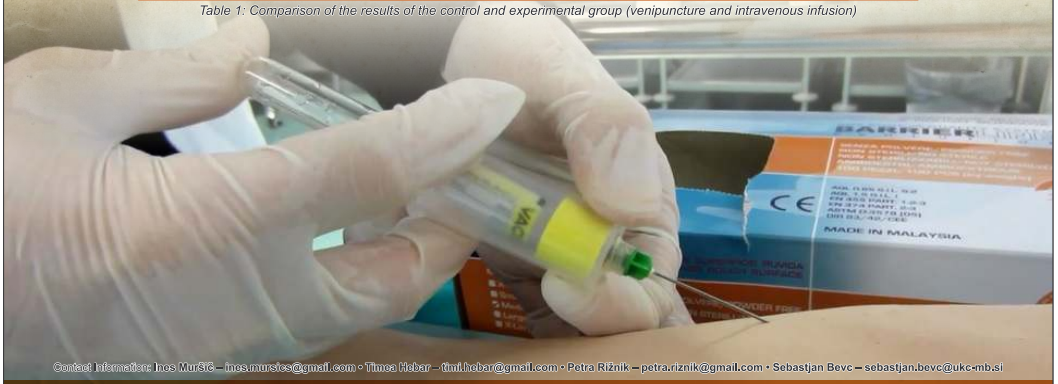
In the case of setting up an infusion the difference between the two groups was less significant probably due to less homogeneous results. These were either caused by higher technical complexity of this clinical skill, the structure of the examination sheet or the small number of participants.

CONCLUSION

Didactic videos represent a very useful complementary teaching tool for clinical skills learning. The presented results can serve as a guide for introduction of video teaching method into Internal Medicine curriculum.

			N	Mean	Std. Deviation	Std. Error Mean	Sig.
VENIPUNCTURE	POINTS (max. 30)	Control	24	25,73	3,029	0,618	**0,004**
		Exp.	24	27,79	1,334	0,272	
	TIME (max. 360 s)	Control	24	224,13 s	43,754 s	8,931 s	0,076
		Exp.	24	206,13 s	21,222 s	4,332 s	
INTRAVENOUS INFUSION	POINTS (max. 28)	Control	24	25,06	2,247	0,459	**0,026**
		Exp.	24	26,27	1,260	0,257	
	TIME (max. 300 s)	Control	24	252,83 s	45,244 s	9,235 s	0,508
		Exp.	24	245,50 s	29,170 s	5,954 s	

Table 1: Comparison of the results of the control and experimental group (venipuncture and intravenous infusion)



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Graz Conference on Medical Education - 19th Graz Conference (Innsbruck 2015)

Poster 6

Didactic Video as Teaching Tool for Clinical Skills Learning

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sebastjan.bevc@ukc-mb.si

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Medical University of Graz

E-learning: Traditional and case-based presentations of respiratory disorders at the Medical University of Graz

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INTRODUCTION

E-learning is an important component of the medical curriculum at the Medical University of Graz. Comparisons between different learning environments under controlled conditions are the basis for continuous advancement of the Virtual Medical Campus Graz and the implementation of effective and efficient E-learning formats. The aim of this study was to compare two different learning environments, (1) traditional and (2) case-based presentations of respiratory disorders. Our hypothesis was that case-based presentations lead to better learning results than traditional presentations.

METHODS

Two learning environments on two paediatric respiratory disorders (asthma and croup) were constructed. While the traditional environment consisted of the presentation of the disorders using text enriched with pictures and videos, the case-based environment had a problem-oriented structure. Both learning environments contained the same information including pictures and videos.

On day 1, medical students were randomly assigned to one of the two learning environments.

Then they sat a pre-test consisting of five multiple choice questions (MCQs) to test for previous knowledge (maximum score: 5 points).

Subsequently, students worked with the assigned objects whereat their times on task were assessed via log files.

Immediately thereafter, they sat a test (Assessment 1) consisting of 25 MCQs to objectively assess learning results (maximum score: 25 points). Students also had to answer questionnaires on intrinsic motivation, acceptance of the learning object, cognitive load, tolerance to ambiguity, and subjective learning success.

After four weeks, they sat another test (Assessment 2), again consisting of 25 MCQs, to assess sustained learning results (maximum score: 25 points). Power calculation, based on middle effects (difference of 0.5 standard deviations), one-sided testing, an alpha of 0.05, and a beta of 0.2, resulted in 51 students per group.

RESULTS

	Traditional group	Case-based group
	68 (41 female; 10 ± 3 semester)	60 (36 female; 10 ± 4 semester)
	Median (Range)	Median (Range)
Pretest score	1.5 (0-5)	1.5 (0-5)
Time in seconds for asthma	829 (13-4647)	877 (15-4382)
Time in seconds for croup	582 (36-1924)	520 (14-4439)
Assessment 1	12.6 (0-20.5)	12.1 (0-20.9)
Assessment 2	13.0 (3.3-21.8)	13.3 (6.3-21.3)

There were no differences between the groups regarding intrinsic motivation, acceptance of the learning environments, cognitive load, tolerance to ambiguity, and subjective learning success. While subjective learning results correlated with intrinsic motivation ($p=0.001$) and acceptance of the learning environments ($p<0.001$), objective learning results correlated with intrinsic motivation ($p=0.015$) and time spent in the learning environments ($p=0.001$).

CONCLUSIONS

While students may react differently to learning environments according to their intrinsic motivation, tolerance to ambiguity and learning styles, we found no major differences between the two groups with regard to objective learning results. Thus, none of the tested learning environments appears to be superior to the other.

Poster 7

E-learning: Traditional and case-based presentations of respiratory disorders at the Medical University of Graz

Andreas Pfleger[1], Johannes Bernhardt-Melischnig[2], Gilbert Reibnegger[3], Ernst Eber[1]

[1]Respiratory and Allergic Disease Division, Department of Paediatrics and Adolescent Medicine [2] Institute for Medical Informatics, Statistics, and Documentation [3] Institute of Physiological Chemistry Medical University of Graz, Graz, Austria

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128 students (77 female) participated in the study; 68 (41 female; 10 ± 3 semester) were randomised to the traditional group, and 60 (36 female; 10 ± 4 semester) to the case-based group. In the pre-test, the traditional group scored median (range) 1.5 points (0-5), and the case-based group 1.5 (0-5). Time (median, range) spent with the learning object for croup was 582 (36-1924) sec for the traditional group, and 520 (14-4439) sec for the case-based group; for asthma, it was 829 (13-4647) sec vs. 877 (15-4382) sec. Objective assessment of the learning results showed 12.6 (0-20.5) points for the traditional, and 12.1 (0-20.9) points for the case-based group; assessment of sustained learning results yielded 13.0 (3.3-21.8) vs. 13.3 (6.3-21.3) points. There were no differences between the groups regarding intrinsic motivation, acceptance of the learning environments, cognitive load, tolerance to ambiguity, and subjective

learning success. While subjective learning results correlated with intrinsic motivation ($p=0.001$) and acceptance of the learning environments ($p<0.001$), objective learning results correlated with intrinsic motivation ($p=0.015$) and time spent in the learning environments ($p=0.001$).

While students may react differently to learning environments according to their intrinsic motivation, tolerance to ambiguity and learning styles, we found no major differences between the two groups with regard to objective learning results. Thus, none of the tested learning environments appears to be superior to the other.

Good, better, the best?

Self-assessment as a tool of teamwork skills improvement

Univerza v Mariboru
Medicinska fakulteta

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BACKGROUND

Teamwork has become a major focus in healthcare. Together with effective communication, it offers increased productivity, improved efficiency and safer patient care.
The aim of our study was to evaluate medical students' self-assessment of their teamwork skills.

METHODS

For our study, we prepared clinical scenario of acute deterioration of chronic obstructive pulmonary disease (COPD) using iStan patient simulator. We included 18 year-6 medical students who were divided into six equal teams (T1-6). In every team each member was assigned a role (doctor, medical student and nurse). Three teams (T4-6) were given a lesson about communication in medical team (use of Situation Background Assessment Recommendation (SBAR) approach, Closed loops communication approach, importance of being a leader/follower). At the end of the simulation students had to evaluate their work in four aspects (competences of leader, competence of followers, team performance and team communication).
We compared medical students' self-assessment with our objective assessment of their teamwork skills. Furthermore, we compared the team assessments regarding the given communication lesson.

RESULTS

Teams (T1-6) assessed their work at the end of the simulation with 75%, 87.5%, 87.5%, 100%, 75% and 87.5% of points respectively. However, in our objective assessment, they reached 50%, 37.5%, 25%, 100%, 75% and 100% of points respectively. Teams with communication lesson (T4-6) gained higher scores comparing to other three teams. The self-assessment of all the groups was similar regardless of theoretical introduction on team communication (Figure 1).

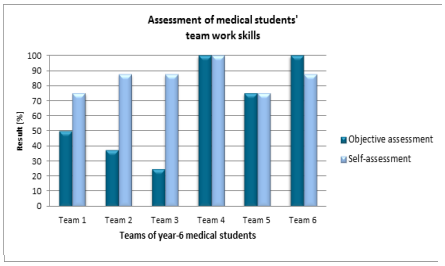

Figure 1. Assessment of medical students' team work skills. Teams 4-6 were given a lesson about communication in a medical team.

CONCLUSION

The teams with communication lesson were more attentive to the transfer of information between team members and their functioning as a team. Consequently, their self-evaluation was similar or even more strict that our objective assessment. Contrary, T1-3 evaluated themselves better in comparison to our appraisal because of lack of criticism related to lower team communication knowledge.
In order to improve teamwork and team communication together with self-assessment skills, we should give more attention to that subject already during undergraduate education.

Poster 8

Good, better, the best? Self-assessment as a tool of teamwork skills improvement

Petra Rižnik[1], Larisa Sabath[1], Sebastjan Bevc[1,2]

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Background: Teamwork has become a major focus in healthcare. Together with effective communication, it offers increased productivity, improved efficiency and safer patient care.
The aim of our study was to evaluate medical students' self-assessment of their teamwork skills.

Methods: For our study, we prepared clinical scenario of acute deterioration of chronic obstructive pulmonary disease (COPD) using iStan patient simulator. We included 18 year-6 medical students who were divided into six equal teams (T1-6). In every team each member was assigned a role (doctor, medical student and nurse). Three teams (T4-6) were given a lesson about communication in medical team (use of Situation Background Assessment Recommendation (SBAR) approach, Closed loops communication approach, importance of being a leader/follower). At the end of the simulation students had to evaluate their work in four aspects (competences of leader, competence of followers, team performance and team communication).
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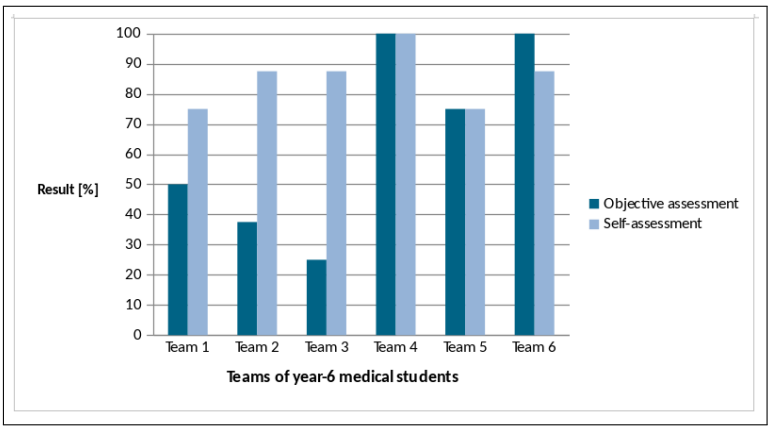

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Communication skills of year-3 medical students and clinical examination of patients on ward

Univerza v Mariboru
Medicinska fakulteta

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BACKGROUND

At our faculty, internal medicine curriculum of year-3 medical students (MS) has an obligatory 18-hour propedeutics clinical skills training (CST) in Clinical Skills Laboratory, held by peer-tutors. MS are learning history taking and physical examination on each other. At the end of CST they are evaluated using objective structured clinical examination (OSCE) and start their practice with teachers on ward. The aim of our study was to assess MSs' ability of effective communication with patients after completing CST.

METHODS

We evaluated communication skills of MS (N=30) while performing cardiovascular examination (CVE) on patients, hospitalized at University Medical Centre Maribor. Three aspects of communication (instructions to the patient, explanations to the patient and interaction between patient and MS in general) were observed by peer-tutor. Each aspect was categorized as excellent, very good, good or bad. After completing CVE, MS were asked to assess their overall communication with patient using the above mentioned categories (Figure 1).

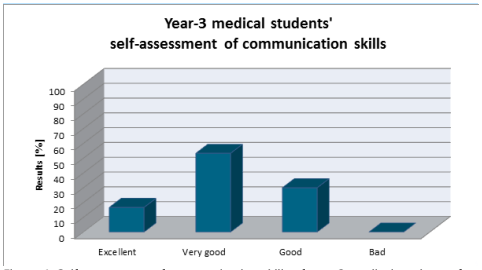

Figure 1. Self-assessment of communication skills of year-3 medical students after completing cardiovascular examination on ward.

RESULTS

MS reached 73.1% of overall points for their communication skills. They were given 75% of points on average for instructions and general interaction with patient and 69.2% of points on average for the explanations that were given to the patient during CVE. MS assessed their communication skills with 71.7% of points on average (Table 1).

COMMUNICATION SKILLS	RESULTS [% on average]
Explanations	69.2
Instructions	75
Interaction in general	75
Overall assessment of communication skills	73.1
Self-assessment	71.7

Table 1. Results of communication skills assessment of year-3 medical students during cardiovascular examination on ward. Overall assessment of communication skills has three aspects – instructions to the patient, explanations to the patient and interaction between patient and medical student in general.

CONCLUSION

Communication skills of year-3 medical students were satisfactory. Nevertheless, in the future peer-tutors should put more efforts in training all these aspects of communication. During CST, medical students usually do not feel the need to explain all the parts of the physical examination as they train on each other. Regarding medical students' self-assessment, it was comparable to peer-tutors evaluation of their communication skills.

Poster 9

Communication skills of year-3 medical students and clinical examination of patients on ward

Larisa Sabath[1], Petra Rižnik[1], Sebastjan Bevc[1,2])

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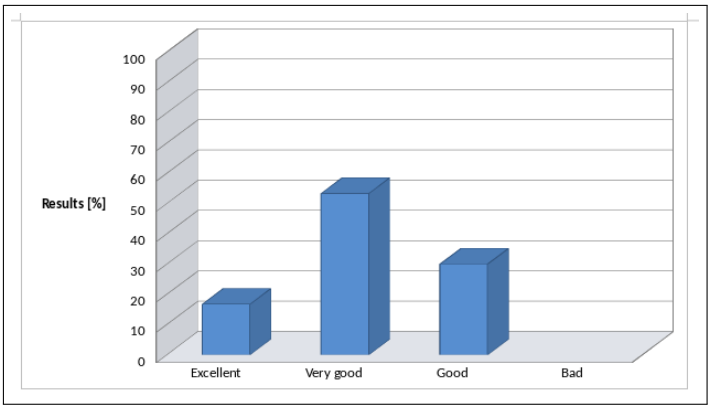

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Attitudes toward end-of-life decisions among medical students at the University of Szeged

Gergely Tari, Annabella Obál, Erzsébet Kapocsi, Katalin Barabás

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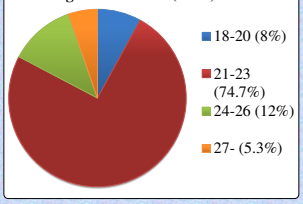
Introduction

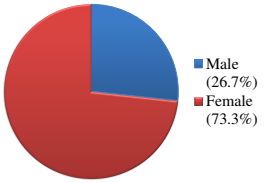
Professional and social discourse on end-of-life decisions is inevitable considering the rapidly increasing prevalence of chronic diseases and the progress in medical care. In Hungary, according to the Act CLIV of 1997 on Health, terminally ill people have the right to refuse life-supporting and life-saving treatments. However, the social support of euthanasia is still far from unequivocal.

Target population

Age Distribution (n=75)



Gender Distribution (n=75)



Aim of the Study

The attitudes toward end-of-life decisions among Hungarian medical students have not been studied recently. We believe that exploring the attitudes of the next generation of medical professionals on passive and active euthanasia and physician assisted suicide (PAS) is essential, and it should complement similar studies focusing on health care workers (e.g. physicians, nurses).

Method

We used an online questionnaire survey to record the answers of 1st to 5th year medical students (n=75) on active and passive euthanasia and PAS. We applied polar questions by which we investigated the acceptance of the main types of end-of-life decisions. In addition we provided space for further thoughts and arguments to each question. The data were analyzed using statistical methods.

Results

In 2002 a study investigated Hungarian medical students' (n=86) attitudes to PAS, in which 78% of the respondents generally supported the right to die. In our recent research, the support of the "right to refuse life-supporting and life-saving treatments", i.e. the right to die, was 86.7% (n=65), furthermore 57.3% (n=43) would extend this right without any age limitation. Interestingly, rewording the previous question, the support of "passive euthanasia" is just 73.3% (n=55), hence we presume, that using the term of "euthanasia" could decrease the willingness to support the right to die. Active euthanasia was supported by 57.3% (n=43), however, 78.7% (n=59) would accept legislation making euthanasia possible, if cooperation was left at the physician's discretion. The majority of the respondents, 53% (n=40) supported PAS, too.

Acceptance of end-of-life decisions (n=75)

Attitude	Right to die	Passive	Active	PAS
Support	86.7%	73.3%	57.3%	53.3%
Oppose	13.3%	26.7%	42.7%	46.7%

Subjective willingness to perform (n=75)

Attitude	Right to refuse treatment	Active	PAS
Accept	90.7%	32%	41.3%
Refuse	9.3%	68%	58.7%

Attitudes on age restrictions (n=75)

Attitude	Right to refuse treatment	Passive	Active	PAS
Only for adults	42.7%	52%	50%	62%
Support without any age restriction	57.3%	40%	36%	21%
Other (e.g. ban, unsure)	-	8%	14%	16%

Conclusion

In summary, while the acceptance of the investigated end-of-life-decisions' is not unequivocal (the objections are mainly based on traditional ethical principles), the majority would support the right to die on the basis of the patients' autonomy.

References: (1) Act CLIV of 1997 on Health, Section 20: *The Right to Refuse Healthcare*.
www.patientsrights.hu/dokumentumletoltes.php?tip=letoltesek_eng&kod=1&file=1997_cliv_tv_eng.pdf
(2) S. Fekete, P. Osvath, A. Jegesy: *Attitudes of Hungarian students and nurses to physician assisted suicide*. Journal of Medical Ethics. 2002;28:126.

Poster 10

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Gergely Tari, Annabella Obál, Erzsébet Kapocsi, Katalin Barabás
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Students Perspective of Teaching Skills in Team-based Learning

Hubert Wiener, Herbert Plass, Richard Marz

Science and International Relations,
Department for Medical Education, Medical University of Vienna, Austria

Purpose

Previously we described the implementation of Team-based Learning (TBL) at the Medical University of Vienna (*Wiener H, Plass H, Marz R, Croat Med J. 50; 69-76, 2009*). The present study examines the students perspective of desirable teaching skills for facilitating TBL.

Methods

The narrative evaluation approach in which students respond with their own statements to open-ended questions was used. Multiple statements were encouraged. Paper-based surveys were distributed to students at the end of TBL courses in the 4th year of the medical curriculum in the academic year 2012/13. Open-ended survey responses were qualitatively analysed according to Miles and Huberman (*Miles MB, Huberman AM. Qualitative Data Analysis: an expanded Sourcebook. 2nd edn. Thousand Oaks, California: Sage Publications 1994*). Subjects emerged from open coding and frequency counts.

Table 1: Medical students perspective of teaching skills in TBL – content analysis of responses to open-ended questions.

Effective TBL Instructor		Ineffective TBL Instructor	
	%*		%*
Personal characteristics		**Personal characteristics**	
Enhance motivation through personal enthusiasm	43	Behave arrogant and dictatorial	36
Appreciative of and sensitive to student achievement	33	Signal low interest in teaching	24
Demonstrate humor in context	25	Unfriendly and impatient to all students	21
Show strong interest in teaching	23	Create an intimidating atmosphere	20
Friendly to all students	12	Have no sense of humor and are boring	19
Respectful behaviour	12	Poor time management and lack of accuracy	19
Exhibit fairness and objectivity	10	Lack of understanding and intuition	18
Accuracy in all course activities	10		
Teaching competencies		**Teaching competencies**	
Communicate effectively and are rhetorically skilled	54	Show poor rhetoric qualification	51
Provide clear and focused explanations	42	Provide unclear and confuse explanations	35
Demonstrate mastery of the subject	40	Demonstrate inadequate expert knowledge	23
Qualified in various didactic strategies	37	Incompetent in didactic practice	16
Create relevant course content	36	Unskilled in presentation techniques	16
Provide helpful feedback	24		
High standard of presentation techniques	23		

* Percentage of students (n = 115) who formulated the aspect; multiple statements were encouraged

Results and Conclusion

147 students participated in the courses. The response rate was 78% (n=115, 54% females). Most commonly listed characteristics of effective TBL instructors were "Communicate effectively and are rhetorically skilled" (54%), "Enhance motivation through personal enthusiasm" (43%) and "Are appreciative and sensitive to student achievement" (42%). The most important characteristics of ineffective TBL instructors were identified as "Show poor rhetoric qualification" (51%), "Behave arrogant and dictatorial" (36%) and "Provide unclear and confused explanations" (35%). Thus our results indicate that even in 4th year students style is valued more highly than substance.

Poster 11

Student´s Perspective of Teaching Skills in Team-based Learning

Hubert Wiener, Herbert Plass, Richard Marz

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6 Teilnehmer/Participants

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