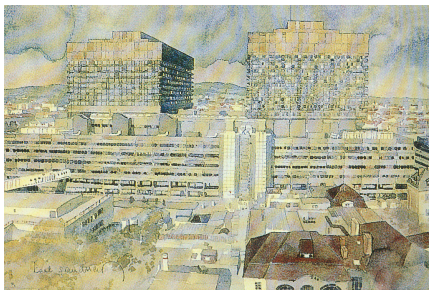
ÖGHD
Österreichische Gesellschft
für Hochschuldidaktik

MEDICAL UNIVERSITY OF VIENNA

17. Grazer Konferenz

Vienna | 4. - 6. April 2013

Teaching Medical Skills



Unter dem Ehrenschutz von

Dr. Erhard Busek

Vorsitzender des Universitätsrates der Medizinischen Universität Wien
und
Vorsitzenden des Inst. für den Donauraum und Mitteleuropa

Conference Venue:

General Hospital of Vienna
Vienna, Austria
Währinger Gürtel 18-20, A-1090 Wien, Austria

Organisers: Medical University of Vienna
Österreichische Gesellschaft für Hochschuldidaktik

Conference Program:

Matthäus Ch. Grasl, Medical University of Vienna
Karl Kremser, Medical University of Vienna, ÖGHD

Local Organisers:

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1 Inhalt/Contents

2 Programmübersicht - Program Overview

Donnerstag - Thursday 4. April 2013		
9:00	Registration	
10:30	Begrüßung/Welcome	Stein, Gutierrez-Lobos, Grasl
11:00	Lecture	Beckers
12:00	Coffee	
12:30	Lecture	Grasl
13:00	Lunch	
14:00	Lecture	Blacky
14:30	Workshops 1	a) Beckers b) Grasl c) Blacky
16:30	Coffee	
17:00	Posterparty	Stein, Grasl (Moderation)

Freitag - Friday 5. April 2013		
9:00	Lecture	Binder-Fritz
9:45	Coffee	
10:15	Workshops 2	a) Fialka-Moser b) Hladschik-Kermer c) Sützl-Klein
12:15	Lunch	
14:00	Lecture	Fischer
15:00	Coffee	
15:15	Workshops 3	a) Fischer b) Kremser, Plass
19:30	Reception at City Hall Vienna	

Samstag - Saturday 21. April 2012		
10:30	Lecture	Hellwagner
11:30	Lecture	Rieder
11:45	Coffee	
12:00	Panel Discussion	
13:45	Abschluß/Closing Remarks	März
14:00	End of Conference	

3 Workshops

Workshop	Facilitator	Location
Donnerstag/Thursday 14:30		
1a	Beckers	Hörsaal C
1b	Grasl	Hörsaal A
1c	Blacky	Hörsaal D
Freitag/Friday 10:15		
2a	Fialka-Moser	Hörsaal B
2b	Hladschik-Kermer	Hörsaal C
2c	Sützl-Klein	Hörsaal D
Freitag/Friday 15:15		
3a	Fischer	Hörsaal B
3b	Kremser, Plass	Hörsaal C

Workshop 1a, 4. 4. 2013, 14:30

Requirement for a Skills Lab

Stephan Beckers
University Hospital Aachen, Rheinisch-Westfälische Technische Hochschule, Aachen, Germany

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The participants of the workshop should elaborate the different steps of planning, further development and establishment of an interdisciplinary faculty-wide skillslab facility. They should try to transfer the results of this workshop to their own institution. Additionally it should be shown – based on the experiences in Aachen – how such a skillslab offers potential effects for educational research.

Workshop 1b, 4. 4. 2013, 14:30

Skills Training for Groups of 30 Students

Matthäus Ch. Grasl
Department for HNO, Medical University of Vienna, Vienna, Austria

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For introduction to this topic please c.f. abstract to the lecture on page 23.

In this workshop the participants have to engage in solving the question in which learning environment students can learn clinical skills best. Especially the question which group size is the best one under which condition should be further analyzed.

Workshop 1c, 4. 4. 2013, 14:30

Basic Medical Skills – Linking Teaching and Assessment

Ingrid Preusche[1], Alexander Blacky[2]
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[2]Clinical Institute of Hospital Hygiene,
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At the Medical University of Vienna, basic medical skills in year 2 are taught in three lines (basic clinical skills, history taking skills, physical examination skills), and are practiced and assessed in a fourth line in a practical examination. The hands-on workshop is designed for participants who want to learn more about important aspects that help align teaching and assessment of basic medical skills. For example, considering the frame of reference, which equals the level of education, is essential, as it informs the topics and contents of teaching and sets the standard for assessment. But how to set the frame of reference and link teaching and assessment? Participants will meet this challenge by (a) developing a short checklist or global rating scale, (b) experiencing and participating in a standard setting procedure, and (c) putting themselves in the raters' shoes and rating students' basic medical skills. Finally, tips for a standardized rater training, incorporating the experienced topics, are presented and discussed.

Workshop 2a, 5. 4. 2013, 10:15

Disability in Clinical Practice

Veronika Fialka-Moser
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In order to respond to a growing diversity among students and patients, medical education needs to include information about disability and disadvantage. The workshop provides insight into integrating disability into the Viennese curriculum and what lecturers can do to make a difference. Another topic is the needs of patients with disabilities. Strategies and methods are presented and discussed.

Workshop 2b, 5. 4. 2013, 10:15

Organising Communication-Training

Birgit Hladschik-Kermer
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Communication skills training in challenging situations:
A patient consults a physician and demands an alternative medical treatment;
A man has died of acute heart failure – now the relatives need to be informed;
A patient repeatedly comes to consultation hours because of hypertension, but the intake of recommended medication remains inconsistent.
A routine examination with the unexpected incidence of malignancy – the diagnosis has to be disclosed to the patient.

These situations and similar ones are part of every physician's clinical routine and often pose a real challenge. About half of a patient's health problems are not mentioned in a common doctor-patient-conversation. In more than half of the consultations, physician and patient disagree on where the main medical problem of the patient really lies. Psychosocial problems and mental illnesses are often not identified.

After having consulted a physician, patients frequently do not remember everything they were told about their illness or recommended therapy. Public criticism regarding physicians is not directed towards their clinical abilities, but their insufficient communicative competence.

In this workshop we will practise communicative skills with a simulated patient and work on constructive feedback.

take-home messages:

- communicative skills are learnable (Kurz,Silvermann, Drapper 2005)
- physicians' communicative competences can be best improved by video recording and feedback (Fallowfield, Lancet, 2002)
- "learning by doing" combined with feedback ist most effective (Aspergren,1999)

This workshop will be held in German only.

Workshop 2c, 5. 4. 2013, 10:15

What Should a Medical Doctor Know About CAM (Complementary and Alternative Medicine)?

Hedda Sützl-Klein

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Department for energy and environmental technologies, Federal Ministry for Transport, Innovation and Technology, Austria

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Integrative health services and CAM play an increasing role in health markets (Roland Berger Strategy Consultants 2010). In Europe some 250 Million European Citizens demand for CAM and at least 330.000 CAM practitioners (150.000 medical doctors) with CAM-certifications provide CAM (see CAMBRELLA: www.cambrella.eu).

What is the role of Medical Doctors of the Future?

Patients want their doctors to know CAM methods and to be able to provide serious information and advice – and probably also to provide CAM treatment.

In the introduction we present:

- Consumers' needs and attitudes regarding CAM: core findings of the FP 7 project CAMbrella (2010-2013) and a representative poll in Austria on CM (Karmasin 2011)
- CAM definition, CAM methods, characteristics of CAM interventions
- CAM research: results of the first Austrian survey on CAM research and prominent research examples to build the scientific basis for European CAM
- CAM education: Examples of CAM-integration in the medical education.

In the workshop we will discuss the integration of CAM in medical education:

- What issues of CAM should be integrated?
- How should CAM beintegrated?

Workshop 3a, 5. 4. 2013, 15:30

e-Learning and Skills Training: Contradiction or the Perfect Blend?

Martin Fischer
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Participants will have the chance to discuss what is needed and what should be avoided to create a successful e-learning course to teach clinical skills. Examples are provided for critical analysis in groups with respect to their strengths and weaknesses.

Take home messages:

- E-learning can and should be used to cognitively prepare learners for clinical skills as it can increase patient safety and allows for better preparation
- Embedding e-learning modules in an instructional model is essential
- E-learning can support educational standards across institutions and learners

Workshop 3b, 5. 4. 2013, 15:30

Interactive Teaching - Interactivity in the Classroom

Karl Kremser, Herbert Plass
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Audience participation is a key to any successful presentation. Generation Y or generation I* students' attention may drop after 7 – 10 minutes. So, what can be undertaken to promote active participation during lectures and which methods have been shown to improve retention rates of factual information?

After a short introduction, in small goups, participants will discuss scenarios leading to insufficient attention and find out which are common problem situations adherent to different teaching methods. Based on this discussion participants will search for solutions and develop strategies to keep students alert.

There will be ample space for feedback to the developed ideas and open discussion.

*derived from i-phone,...

4 Lectures, Panel Discussion

Alle Veranstaltungen/All events in “Hörsaal A”

	Tag Day	Zeit Time
Beckers	Donnerstag/Thursday	11:00
Grasl	Donnerstag/Thursday	12:30
Blacky	Donnerstag/Thursday	14:00
Binder-Fritz	Freitag/Friday	9:00
Fischer	Freitag/Friday	14:00
Hellwagner	Samstag/Saturday	10:30
Rieder	Samstag/Saturday	11:30
Panel	Samstag/Saturday	11:45

4. 4. 2013, 11:00

The Aachen Skillslab "AIXTRA"

Stephan Beckers
University Hospital Aachen, Rheinisch-Westfälische Technische Hochschule, Aachen, Germany

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In this talk the different steps of planning, further development and establishment of an interdisciplinary faculty-wide skillslab facility will be described. In addition, another focus of this presentation will lie on how such an institution – based on the experiences in Aachen – offers potential effects for educational research within such a teaching side.

4. 4. 2013, 12:30

From Practical Training to Skills Lab: 20 Years Skills Lab at the Department of Otorhinolaryngology of the Medical University in Vienna

Matthäus Ch. Grasl, Michael Hanisch

Department of Otorhinolaryngology Head & Neck Surgery Medical University of Vienna, Spitalgasse 23, Vienna, Austria

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Introduction: "Twenty years ago we did not realize what a Skills Lab is but we already had one" With the emigration into the New Vienna General Hospital in 1993 the students' education in otorhinolaryngology had to be arranged in a new design.

Material and Methods: The spatial and technical requirements were established by adaptation of a preexisting lecture room and by installation of equipment for seven ear, nose and throat (ENT) examination chairs. Since then more than 15.000 students have been taught the technique of the indirect ENT-mirror examination to first practice it among themselves and then use it on patients. Up to 30 students were instructed simultaneously by only one person, usually the author himself, supported by an administrator responsible for all organizational matters including the supply of the devices. By this means, students are prepared for their clinical practice in 8 x 45 minutes. A mixture of didactic elements are applied: assessment of basic ENT anatomical knowledge before starting with practical exercises, the four steps method based on Peyton, Peer-teaching, feedback during the practical training by a specialist, mutual recitation and last not least lots of fun.

Results: With this didactic concept available today which has grown over the years students especially learn the indirect ENT mirror technique in a short, concentrated course. As a result, all students are widely able to perform an examination of a patient in the following practical course. Students' evaluations which are held at regular intervals attest this teaching concept at the Department of Otorhinolaryngology at the Medical University of Vienna to be useful.

Discussion: Group sizes of not more than six are considered best to learn practical skills. We could demonstrate that in the presented configuration even 30 students can learn simultaneously, clinical skills such as the indirect ENT-mirror technique instructed by only one teacher.

Conclusion: The ENT-skills Lab with its applied teaching is a capable institution enabling students to learn the basic practical knowledge of the indirect ENT-mirror examination even in groups of up to 30 participants.

References:

Peyton JWR (1998) ed. Teaching and learning in medical practice. Silver Birches: Manticore Europe;

4. 4. 2013, 14:00

Basic Medical Skills – Linking Teaching and Assessment

Alexander Blacky[1], Ingrid Preusche[2]
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[2]Department for Medial Education,
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For Medical University of Vienna´s students in their second year basic medical skills are trained and practiced in three synergetic lines. These include basic clinical skills, history taking skills and physical examination skills. Finally, acquired skills and knowledge are assessed in a fourth line in encompassing a practical examination. The evolution of this lines started in the old medical curriculum with compulsory (practical) training in hospital hygiene, where the students were thought, e.g. how to draw blood, in due consideration of infection prevention and control principals. This form of practical training was in a marked contrast to the pure theory based academic teaching of those days. The rationale for this approach was the understanding that infection control will not only be successful based on knowledge alone, but knowledge needs to go hand in hand with practice.

The following modules have been developed: to place an urinarytractcatheter, to draw blood, to administer i.v. medication, correct handling of central venous catetherlines, to perform correct hand hygiene practices including hand washing, hand disinfection and correct use of medical and surgical gloves.

The fundamental principle is to integrate each step into overall clinical workflow for instance, hand disinfection alone maybe trained rapidly, however, the correct sequence and details may be completely different during a complex clinical procedure. Therefore, not only demonstrating how hands are disinfected, but also when they should be disinfected is of equal importance.

5. 4. 2013, 9:00

Diversity & Transcultural Teaching

Christine Binder-Fritz
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In the context of world wide migration European countries have become more diverse on several levels, including ethnic origin, legal status, socio economic situation, religious beliefs and cultural background. The increasing diversity of patient populations poses new challenges for our health care system and hospitals, as the present health services are not sufficiently prepared to accomodate this social, ethnic and cultural diversity.

There is growing evidence of how important it is for health care providers to recognize the value of and respond appropriately to the diversity among their health care consumers as well as their health care staff.

Transcultural competence has become a 21^{st} century imperative for those responsible for providing health care services in multi ethnic societies to be more effective in developing relationships and in communicating with patients of different ethnic groups.

Socio-cultural differences between doctors and their clients, all too often result not only in deficiencies of care but also of health outcomes. Therefore medical and nursing students have to be educated in such ways that will enable them to provide appropriate treatment and care, which is both, efficient and culturally congruent. Apart from basic knowledge about the diverse ethno , socio and cultural client groups that are being served , the medical interventions have to be tailored appropriately to the patients, their families and their communities. Comprehensive approaches to health and health care are the most effective. Among other strategies community participation and insider perspectives are essential to sustain efforts. On the other hand it is important that medical students, clinicians and other health care professionals become aware of personal attitudes, beliefs, biases and behaviors that may influence (consciously or unconsciously) the treatment and care of patients and the interactions wiht professional colleagues and staff from diverse ethnic and sociocultural background.

This lecture will discuss relevant topics that have to be an integral part of medical education and vocational training courses and give some examples to demonstrate their clinical implications. In addition the new Master Course (Universitätslehrgang) on "Transcultural Competence and Diversity Care" at the Medical University of Vienna will be shortly presented.

5. 4. 2013, 14:00

Learning clinical skills via e-Learning: How far can we travel this route?

Martin Fischer
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Clinical skill need practical training and feedback for learning them. To ensure patient safety is an important issue in this respect. Consequently, numerous skills labs have been established over the last decades. However, it is unclear, which skill can be learnt or prepared for practical clinical performance training by e-learning applications. In this presentation the background for this field of educational research and activities is described as well as examples for history taking and communication skills and clinical examination skills are presented. The use of e-learning to prepare for clinical experiences with standardized or real patients has led to better preparation of students, more standardized training and is also promising as a method for assessing the cognitive parts of clinical skills by means of key feature or situational judgement tests. Further studies are needed to explore the contributions of e-learning to teach and assess clinical skills.

6. 4. 2013, 10:30

Das Medizinstudium und seine Einbindung innerhalb der Gesundheitsberufe

Klaus Hellwagner
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The Bologna-Declaration of 19 June 1999 modifies the education in Medical and Health Professions. The medical studies are graduating since 2002 with the new master degree “Doctor medicinae universae”.

The former assistance medical professions (nurses, midwifes, physiotherapists, etc.) are upgrading to partner professions of acadamic level graduating also with a master or finally a doctors degree. This makes sense to deal with scientfic progress in these areas to increase and hold the high quality of these health professions.

On the contrary there is a high tendency oft the european universities to shorten the classic medical education. The old educational concept of medical studies in Austria since 1949 was a seperation in a six years scientific-theoretical study reaching a doctors degree, followed of at least three years clinical-practical education in hospital.(Medical students who started their studies before 2002 reached a doctors degree of equally wording.)

Now these scientific medical education will be shortend to five years followed by a clinical part of one year and also the postgradual hospital education of new medical doctors should be truncated.

There is now the paradox situation for former assistance professions which are increasing their educational requirements to cooperate with physicans whose educational requirements are changing in the contrary direction.

There will be a lot of consequences of these changes which are not discussed and solved until now. These consequences will start for example with a dispute about the adequate salary of the different academic health professions and will end up with the controversy about the new allocation of competencies between the medical and health professions.

If we are uncritically following these way to shorten medical education in scientific areas which are increasing their knowledge at least all five years, the new medical doctors (or "master of medicine ") will loose the control of medical management of their patients because of lack of knowledge. There will be in future no argumentation for the physicians reservations (german: "Arztvorbehalt ") if the medical education will not be equal or superior to the ECTS of other health professions.

Nevetheless we will have to establish a new model of cooperation between different academic medical and health professions in austria.

6. 4. 2013, 12:00

Panel Discussion: Das Klinisch Praktische Jahr - Erfahrungen in Österreich

Chair: Matthäus Ch. Grasl, Vienna

Introductory Lectures (L) and Diskussion (D)
This event will be in German language

Participants	
Matthäus Ch. Grasl (Chair)	Vienna
Waltraud Eder (L,D)	Salzburg
Norbert J. Mutz (D) Karen Pierer (L)	Innsbruck
Gilbert Reibnegger (L,D)	Graz

5 Posters

Posterparty: Donnerstag, 17:00, Halle
Die Poster können Donnerstag zwischen 09:00 und 12:45 Uhr aufgehängt werden und müssen bis Freitag 14:30 Uhr entfernt sein!

Posterparty: Thursday, 17:00, Main Lobby
Please mount your posters on Thursday between 09:00 and 12:45 and remove them at the latest by Friday 14:30!

LivePopups – effektive Kommunikation in Massenlehrveranstaltungen

Philip Anner, Thomas Niedermaier, Philipp Pavelka, Martin Winkler

MEDIZINISCHE UNIVERSITÄT WIEN
Department for Medical Education
DEMAW

An der Medizinischen Universität Wien werden Lehrveranstaltungen mit mehreren *hundert* Studierenden an *verteilten* Standorten zeitgleich über das Internet abgehalten. Das Moodle Modul LivePopups wurde entwickelt, um in diesem Szenario eine *effektive Kommunikation* zwischen Lehrenden und Studierenden zu ermöglichen. Durch seinen Einsatz konnte die Qualität dieser Lehrveranstaltungen merklich gesteigert werden.

Problem 1: Fehlender direkter Kontakt zum Lehrenden

In einem großen Hörsaal und bei verteilten Standorten können Studierende ihre Vortragenden nicht direkt kontaktieren, um Fragen zu stellen.
Mündlich gestellte Fragen werden von anderen Teilnehmern üblicherweise akustisch schlecht verstanden.

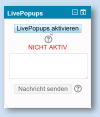
Problem 2: Übermittlung von Umfrageergebnissen

Während mancher Lehrveranstaltungen werden in allen externen Hörsälen Umfragen unter den Studierenden durchgeführt.

Die Umfrageergebnisse der Hörsäle müssen möglichst rasch an den zentralen Hörsaal übermittelt werden.

Lösung: Moodle Modul „LivePopups“

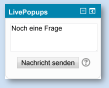
1 **Der Vortragende aktiviert die LivePopups in Moodle.**



2 **Ein Student schreibt eine Nachricht am Handy.**

3 **Die Nachricht erscheint sofort auf der Leinwand als kleines Popup über der PowerPoint Präsentation.**

4 **Eine Studentin tippt eine Nachricht auf ihrem Laptop innerhalb des Moodle Kurses.**



5 **Auch diese Nachricht erscheint unmittelbar danach auf der Leinwand.**

Technische Realisierung

Die LivePopups wurden mit modernen Webtechnologien (HTML5) umgesetzt. Die Lösung ist plattformunabhänig und zukunftssicher. Für Echtzeit-Antwortzeiten kann optional ein Server-Sent-Events Dienst verwendet werden.
LivePopups können einfach in jeden Moodle-Kurs integriert werden. Nachrichten müssen prägnant formuliert sein (<255 Zeichen) und werden zu Archivzwecken in Moodle gespeichert.

Nachrichten-Beispiele aus der Praxis

Inhaltliche Fragen
- „Hätte man das in der MR-Angio nicht gesehen?“
- „was ist die FACS Analyse, was kann das?“
- „was war im Pet CT im rechten humerus?“

Nachrichten technischer Natur
- „Bitte mit Maus zeigen! Im Stream sehen wir den Laserpointer nicht“

Organisatorische Nachrichten
- „georg ist in tulln“
- „Zu welchem fall sollen die untersuchungszuweisungen ausgefüllt werden?“

Take Home Message

- Innovativer Einsatz von e-Learning im Präsenzunterricht.
- Fragen können zeitnah und zum Inhalt passend eingebracht werden, ohne den Vortragenden zu stören. Dieses rasche Feedback weist den Vortragenden auf Unklarheiten hin.
- Studierende haben bei Fragen eine geringere Hemmschwelle.
- Mehr als 80% der Vortragenden empfanden LivePopups als Bereicherung der Lehrveranstaltung.

Kontakt: m3e@meduniwien.ac.at

Poster 1

LivePopups – effektive Kommunikation in Massenlehrveranstaltungen

Philip Anner[1], Thomas Niedermaier[2], Philipp Pavelka[1], Martin Winkler[2]

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Problemstellung: An der Medizinischen Universität Wien werden Lehrveranstaltungen[1, 2] mit mehreren hundert Studierenden an verteilten Standorten zeitgleich über das Internet abgehalten.

Einhergehend mit diesem Setting ergaben sich zweierlei Probleme:

1. Fehlender direkter Kontakt zum Lehrenden:
   In einem großen Hörsaal und bei verteilten Standorten können Studierende ihre Vortragenden nicht direkt kontaktieren, um Fragen zu stellen. Mündlich gestellte Fragen werden von anderen Teilnehmern üblicherweise akustisch schlecht verstanden.
2. Übermittlung von Umfrageergebnissen:
   Während mancher Lehrveranstaltungen werden in allen externen Hörsälen Umfragen unter den Studierenden durchgeführt. Die Umfrageergebnisse der Hörsäle müssen möglichst rasch an den zentralen Hörsaal übermittelt werden.

Lösung: Das Moodle Modul LivePopups wurde entwickelt, um eine effektive Kommunikation zwischen Lehrenden und Studierenden zu ermöglichen. Es erlaubt Studierenden von ihren Smartphones oder Laptops aus, zeitnahe Fragen und zum Inhalt passend an den Vortragenden zu schicken. Diese Nachrichten erscheinen unmittelbar in Form von dezenten Popups am PC des Vortragenden. Die Umfrageergebnisse externer Teilnehmer können nun ebenfalls effektiv an den Vortragsort übermittelt werden.

Mit den LivePopups bieten wir Studierenden einen direkten Kommunikationskanal zum Lehrenden trotz räumlicher Trennung. Etwaige Hemmungen der Studierenden in einem großen Hörsaal Fragen zu stellen werden genommen und somit wird auch besser zur Mitarbeit angeregt.
Durch den Einsatz der LivePopups konnte die Qualität der Lehrveranstaltungen merklich gesteigert werden.

Literatur:

[1] Praschinger, A., Stieger, S., & Kainberger, F. (2007). Diagnostic grand rounds in undergraduate medical education. Medical education, 41(11), 1107–8. doi:10.1111/j.1365-2923.2007.02888.x

[2] Stieger, S., Praschinger, A., Kletter, K., & Kainberger, F. (2011). Diagnostic grand rounds: a new teaching concept to train diagnostic reasoning. European journal of radiology, 78(3), 349–52. doi:10.1016/j.ejrad.2009.05.015

Poster 2

Usage Behavior of students in a moodle online course called "case-based learning"

Johannes Bernhardt-Melischnig

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"Internet-based education permits learners to participate at a time and place convenient to them..." is one advantage of web-based learning described by David A. Cook in 2008. We tried to figure out, if our students really make use of this flexibility.

The Medical University Graz has a modular and integrative curriculum consisting of five-week modules. Additionally, the students have to attend a number of special study modules (called SSMs). Our special study module called "SSM47 - Case-based learning" is an online course and the source of the data collected by us. It consists of 138 WBTs covering the most important topics of medical education (the main topics were internal medicine, dermatology, pediatrics and ophthalmology as well as some minor fields).

In the winter semester 2010/2011 230 students completed this special study module. We recorded and exported all log-files from the entire course. About 39000 log-entries were saved in a database, then adjusted, filtered and converted. 216 students studied medicine, 14 others health-related studies. 124 were female and 106 male

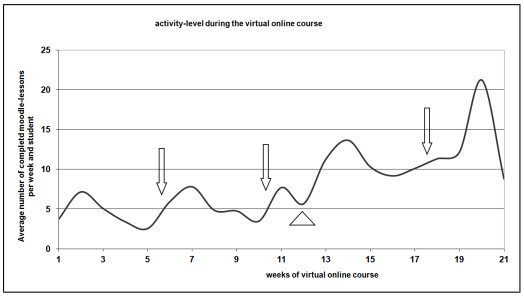

Figure 1: The activities were varying throughout the first ten weeks, with low activities at the end of both module periods, when final exams took place (arrow). After the christmas holidays around the 12th calender week (triangle), the acitivities were clearly rising until the end of the third (and last) module-period in this winter semester. At the end of the course an expected last peak was recorded.

In these 21 weeks of the course the activities per week were between 587 and 4875 completed WBTs (mean 1862), or recalculated between 2,6 and 21,2 (mean 8,1) per student (SD 4,4). Significant differences between female and male students could not be detected. The students spread their work-load between one and 14 weeks (mean 4,2 weeks), between one and 14 weeks (mean 4,3) for female and between one and 12 (mean 4,0) for male students.

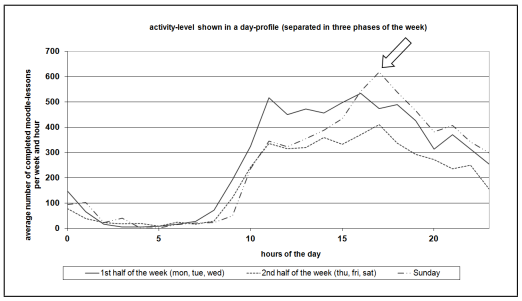

Figure 2: Studentsáctivities in a 24h-profile (hour 1 to 24 on the x-axis): Students were very motivated in the first half of the week, less motivated in the second half and on Sundays they started working more intensely again in the afternoon.

In the mean, students had 8,9 days of active working on WBTs (between 1 and 39) and completed in average 29,1 WBTs per day (between 5,1 and 142,0). In our analysis exactly three students did their full work-load in one single day. Another 15 students needed less than two days. The number of students who took more than a week time was 107, which is nearly half of our observed group of students.

Data and diagrams showed, that students took their chance to complete this virtual online course in a very flexible way. Their activities in this course changed constantly depending on the progress/status of other modules and lectures. Additionally, they invested a lot of time during holidays, suggesting they tried to catch up with unfinished work. They even worked on Sundays, which also shows their flexible use of time.

17th Graz Conference on Medical Education 2013 - Teaching Medical Skills

A SUCCESSFUL TRADITION OF INNOVATION ANAMNESEGRUPPEN & INTERDISCIPLINARITY

Paul Ferstl[1,2], Laura Pirgie[2], Klaus Spiess[2], & the TAs of the Anamnesegruppen Wien

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BACKGROUND Founded more than 25 years ago, the Anamnesegruppen at the Medical University of Vienna have conducted more than 5000 patient interviews. Each year more than 200 students apply for admission. May 2008 „MUW Teacher of the Month"-Award.

The Anamnesegruppen combine features of the peer group concept, bedside teaching, and international undergraduate journals, blogs, websites, conferences, and workshops for the constant development of their teaching concepts. The interdisciplinarity has been strongly increased in the last years.

INNOVATION Our approach facilitates an ongoing discussion concerning concepts of the interaction between causality, empathy, cultural patterns, poetics and suspense, and the resulting ethics. In the two semester course students learn to use the perspectives of the other disciplines as a tool – enriching their sensitivity for the many aspects of a patient's utterances.

Poster 3

A Successful Tradition of Innovation – Anamnesegruppen & Interdisciplinarity

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Founded more than 25 years ago, the *Anamnesegruppen* at the Medical University of Vienna have conducted more than 5000 patient interviews. Each year more than 200 students apply for admission. May 2008 "MUW Teacher of the Month"-Award.

The *Anamnesegruppen* combine features of the peer group concept, bedside teaching, and international undergraduate journals, blogs, websites, conferences, and workshops for the constant development of their teaching concepts. The interdisciplinarity has been strongly increased in the last years.

The Interdisciplinary Teaching Methodology:
In the patient interview,

1.) we recognize and connect medical symptoms. Medical students supply the medical knowledge to understand the patients' physical reality of suffering. Thinking professional behavior is mainly measured in effects, medical students often avoid to be moved by sentimentality or sympathy.

2.) we empathize. Students of Psychology focus on the participants' emotions. Behavior, self-esteem or aggression are important issues. Students often disclose the patients' emotions however only can do so because they are professionally not obliged to touch the patients' wounded body.

3.) we observe traditions, rituals & rules. Students of Social Anthropology help us recognize the underlying patterns in human grouping and biopolitics that constitute the doctor-patient communication, accepting various healing archetypes of doctors (also tricksters/comedians).

4.) we tell stories. Storytelling is a basic human mode of information transfer. Whatever we do, storytelling is part of it. Literary studies & Narratology increase our understanding that each doctor-patient interaction is constructed as a narrative plot.

5.) we play roles. Surprise, horror, katharsis, pathos, heroes or non-heroes, a desired taste of death – all needed to interact with a theatrical audience – offer a

new perspective on doctor-patient interaction. Students of Acting & Directing enrich the Anamnesegruppen in this regard.

The 3)4)5) students work with a general ethics of healing society as a whole and thus beyond medicine's professional pressure to heal or help the individual patient.

Our approach facilitates an ongoing discussion concerning concepts of the interaction between causality, empathy, cultural patterns, poetics and suspense, and the resulting ethics. In the two semester course students learn to use the perspectives of the other disciplines as a tool – enriching their sensitivity for the many aspects of a patient's utterances.

GENDER GAP IN MEDICAL ADMISSION TEST

Medizinische Universität Graz

Habersack M, Dimai HP, Ithaler D, Reibnegger G

Medical University Graz

Introduction

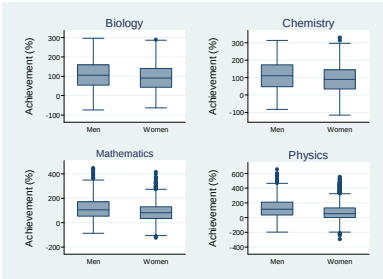
In the scientific discussion about medical college admission processes, differences in the test results of women and men are already portrayed as fact [1,2]. The results of the medical college admission tests in Austria demonstrate the slightly worse performance of women. As explanatory models for a gender gap are cited: the type of the selected test format, the design of the test items, the scientific orientation in the school of origin, the stereotyping of "hard" natural sciences as male domain, a basic science knowledge gap and the factor of *time*. In the context of the factor *time* theory approaches point e.g. to the short answering period available in connection with a multiple choice test or point to the factor of *time* in the framework of the entire course of medical studies [3-5]. Until now, the factor *time* has rarely been discussed in context of the question, whether the point of *time* of taking the Medical College Admission Test could imply a decrease of the basic-science knowledge gap.

Methods

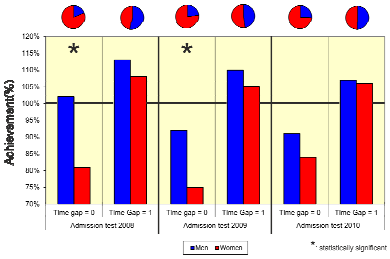
Observational investigation of the results of the admission test for the study of human medicine and dentistry at the Medical University of Graz, 3405 applicants (over three years) were included in the study. Statistical analyses were performed by routine methods (Chi-square test, Student's t test) using STATA 11 software (StataCorp. LP, College Station, TX, USA).

Aims

- To investigate a basic science knowledge gap among female candidates of the admission test at the Medical University of Graz.



- To investigate whether the point of time of taking the examination has an influence on the test results.



Results

- A clear trend to increasing gender gap according to the order (1) Biology, (2) Chemistry, (3) Mathematics, (4) Physics is noticeable: Austrian women perform particularly worse in physics. In biology, the difference between female and male Austrian applicants is smaller, but still statistically significant.

- Men as well as women improved their results when they passed the admission test one year after completing their secondary education. The improvement of performance in women was so pronounced that the gender gap (significant in the group who took the admission test during the year they were completing their secondary education) could not be substantiated in this group.

Discussion

A basic science knowledge gap in the Austrian applicants can be confirmed. Similarly, the variable time can be interpreted as an opportunity for the reduction of a basic science knowledge gap. It has to be assumed, however, that not time per se is responsible for the minimization of the gender gap in the test results, but the approximation to equally prepared applicants.

References
1. Fields HW, Fields AM, Beck FM. 2003. The Impact Of Gender On High-Stakes Dental Evaluations. Journal Of Dental Education 67:654-660.
2. Callahan CA, Hojat M, Veloski J, Erdmann JB & Gonnella JS. 2010. The Predictive Validity Of Three Versions Of The Mcat In Relation To Performance In Medical School, Residency, And Licensing Examinations: A Longitudinal Study Of 36 Classes Of Jefferson Medical College. Academic Medicine 85:980-987.
3. Cuddy MM, Swanson DB, Clauser BE. 2008. A Multilevel Analysis Of Examinee Gender And USMLE Step 1 Performance. Academic Medicine 83:58-62.
4. Sternberg RJ. 2012. College Admissions: Beyond Conventional Testing. Change: The Magazine Of Higher Learning 44:6-13.
5. Schwank I. 1994. Zur Analyse Kognitiver Mechanismen Mathematischer Begriffsbildung Unter Geschlechtsspezifischem Aspekt. Zentralblatt Für Didaktik Der Mathematik 31-40.

Poster 4

Gender Gap in Medical Admission Test

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Introduction: In the scientific discussion about medical college admission processes, differences in the test results of women and men are already portrayed as fact [1,2]. The results of the medical college admission tests in Austria demonstrate the slightly worse performance of women. As explanatory models for a gender gap are cited: the type of the selected test format, the design of the test items, the scientific orientation in the school of origin, the stereotyping of "hard" natural sciences as male domain, a basic science knowledge gap and the factor of time. In the context of the factor time theory approaches point e.g. to the short answering period available in connection with a multiple choice test or point to the factor of time in the framework of the entire course of medical studies [3-5]. Until now, the factor time has rarely been discussed in context of the question, whether the point of time of taking the Medical College Admission Test could imply a decrease of the basic-science knowledge gap.

Aims:

- To investigate a basic science knowledge gap among female candidates of the admission test at the Medical University of Graz.
- To investigate whether the point of time of taking the examination has an influence on the test results.

Methods: Observational investigation of the results of the admission test for the study of human medicine and dentistry at the Medical University of Graz, 3405 applicants (over three years) were included in the study. Statistical analyses were performed by routine methods (Chi-square test, Student's t test) using STATA 11 software (StataCorp. LP, College Station, TX, USA).

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FACTORS BEHIND
Medical College Admission Test Scores

Habersack M, Luschin G, Dimai HP

Medical University Graz

The selection of students is increasingly becoming a (socio)political discussion point. Especially the selection process for medical college is criticized with regards to (un)fairness, discrimination of socially disadvantaged population groups, perpetuation of a gender gap or simply maintenance of a desired status quo [1, 2].

A systematic, critical literature search was carried out in EMBASE, Medline, Pascal, ERIC and PsyINFO. Limits were the last 10 years as well as the languages German or English.

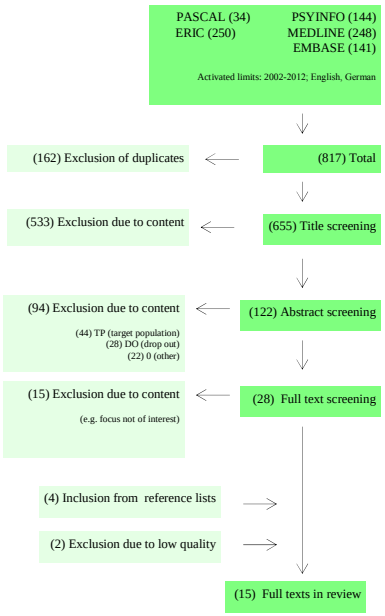
The review excludes studies that deal with drop-out and/or statistical correlations between Medical College Admission Test (MCAT) -scores and study success. Full texts were evaluated regarding methodological & theoretical rigor by means of the applicable quality checklist of the Alberta Heritage Foundation for Medical Research [3].

28 publications remained for further evaluation. Four additional articles were included from the reference lists. Two articles had to be excluded due to low quality (quality score <0.75). Ultimately, 15 publications met the inclusion criteria and were subjected to further analysis and evaluation.

Two factors associated with MCAT-scores are discussed in the literature.
1. MCAT´s do not – and that with regards to
- design, construction, weighting
- construction of the items and
- statistical depiction of results –

succeed in invalidating arguments of discrimination in the broader sense [4, 5].

2. The second category, discussed in the literature, comprises factors that are linked to the socio-economic status, as for example
- inequality of opportunities depending on the allocating college or
- programs and actions that are (occasionally) performed to decrease “uneven distributions” at the university or college level.



References
1 Cohen JJ. The consequences of premature abandonment of affirmative action in medical school admissions. Jama. 2003 Mar 5;289(9):1143-9.
2 Emery JL, Bell JF, Vidal Rodeiro CL. The BioMedical Admissions Test for medical student selection: issues of fairness and bias. Medical teacher. 2011;33(1):62-71.
3 AHFMR. Standard Quality Assessment Criteria for Evaluating Primary Research Papers from a Variety of Fields. HTA Initiative. 2004;2004 (02).
4 Tiffin PA, Dowell JS, McLachlan JC. Widening access to UK medical education for under-represented socioeconomic groups: modelling the impact of the UKCAT in the 2009 cohort. Bmj. 2012;344:e1805.
5 Alexander C, Chen E, Grumbach K. How leaky is the health career pipeline? Minority student achievement in college gateway courses. Academic Medicine. 2009 Jun;84(6):797-802.

Poster 5

Factors behind - Medical College Admission Test Scores

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Background: The selection of students is increasingly becoming a (socio)political discussion point. Especially the selection process for medical college is criticized with regards to (un)fairness, discrimination of socially disadvantaged population groups, perpetuation of a gender gap or simply maintenance of a desired status quo [1,2].

Methods: A systematic, critical literature search was carried out in EMBASE, Medline, Pascal, ERIC and PsyINFO. Limits were the last 10 years as well as the languages German or English. The review excludes studies that deal with drop-out and/or statistical correlations between Medical College Admission Test (MCAT) - scores and study success. Full texts were evaluated regarding methodological & theoretical rigor by means of the applicable quality checklist of the Alberta Heritage Foundation for Medical Research [3].

Results: 28 publications remained for further evaluation. Four additional articles were included from the reference lists. Two articles had to be excluded due to low quality (quality score <0.75). Ultimately, 15 publications met the inclusion criteria and were subjected to further analysis and evaluation. Two factors associated with MCAT-scores are discussed in the literature: (i) The MCAT´s do not – and that with regards to design, construction, weighting, construction of the items and statistical depiction of results – succeed in invalidating arguments of discrimination in the broader sense [4, 5]. (ii) The second category, discussed in the literature, comprises factors that are linked to the socio-economic status, as for example inequality of opportunities depending on the allocating college or programs and actions that are (occasionally) performed to decrease “uneven distributions” at the university or college level.

Conclusions: In order to be able to invalidate the mentioned arguments against medical college admission tests, a systematical examination of the mentioned categories is needed.

References:

1 Cohen JJ. The consequences of premature abandonment of affirmative action in medical school admissions. Jama. 2003 Mar 5;289(9):1143-9.

2 Emery JL, Bell JF, Vidal Rodeiro CL. The BioMedical Admissions Test for medical student selection: issues of fairness and bias. Medical teacher. 2011;33(1):62-71.

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Medical University of Graz

CSR I: Teaching Psychosocial and Psychosomatic Medicine at the Medical University of Graz

Nina Hörlesberger[a], Eva-Maria Trapp[a], Michael Trapp[a], Peter M. Rohrer[a], Josef W. Egger[a]

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Background: The track **CSR** means **C**ommunication – **S**upervision – **R**eflection and has been introduced in the curriculum of the Medical University of Graz to integrate biopsychosocial aspects in the education of medical students to internalize a multidimensional way of treatment in their future daily medical practice.
Medical students start in the third semester of education to learn and improve communicative skills for a biopsychosocial "holistic" /multidimensional diagnosis.

CSR 1 focuses on education of Psychosocial and Psychosomatic Medicine. Currently following goals and skills are of importance:

Goals:

- ✓ To get basical skills of professional communication
- ✓ To establish a cooperation in doctor-patient-relationship
- ✓ To use special techniques to get a broad information about patient's anamnesis
- ✓ To appreciate the patient as subject *and* as object including his or her environment
- ✓ To understand health and disease multidimensional based on the biopsychosocial model
- ✓ To learn multidimensional diagnosis with respect to the physical, psychological and eco-social situation

Skills: Students learn and practice basics for a professional medical conversation. They also get information how to diagnose problems of this communication and get tools how to modify or solve it. Practical skills to get a biopsychosocial diagnosis are exercised.

Future Perspectives: In order to guarantee a permanent adaptation and improvement/upgrade of the curriculum it is planned to modify the CSR Track:

- ✓ Introduction of the course "doctor-patient-communication" (former CSR1, 3rd – 4th Semester)
- ✓ Soft skill training
- ✓ Individual feedback by teachers based on a logbook where contacts with patients are documented

Further adaptations are planned concerning CSR 2-4:
CSR2 (former: "Ethics in Medicine") > (1) "Ethics and Medicine" and (2) "Law and Medicine"
CSR3 (former: "Psychotherapeutic Medicine") > "Professional Medical Interaction/Doctor patient communication"
CSR4 (former: "Health Psychological Aspects of the Medical Profession") > "Psychosocial Career Preparation"

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M. Trapp, E.M. Miggitsch, M.D. Linder, L. Wurst, P.M. Rohrer, J.W. Egger, TRACK CSR (COMMUNICATION – SUPERVISION – REFLECTION) Cognitive-emotional and ethical accounts to the contemporary medical education in human medicine. 14th Graz Conference - Quality of Teaching 2010 - New Horizons in Teaching and Learning.

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Egger JW, 2008, Gesundheitspsychologische Aspekte des ärztlichen Berufs. Psychologische Medizin 19, 44-47.

MUG. Track KSR - Kommunikation/ Supervision/ Reflexion. https://online.medunigraz.at/mug_online/webnav.navigate_to?corg=16033

17th Graz Conference, Vienna, April 4-6, 2013

Poster 6

CSR - Teaching Psychosocial and Psychosomatic Medicine at the Medical University of Graz

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peter.rohrer@bpsmed.net Josef.Egger@medunigraz.at

Background: Track CSR means Communication – Supervision – Reflection and has been introduced in the Curriculum of the Medical University of Graz to integrate biopsychosocial aspects in the education of medical students to internalize a multidimensional way of treatment in their future daily medical practice. Medical students start in the third semester of education to learn and improve communicative skills for a biopsychosocial "holistic"/multidimensional diagnosis. CSR 1 focuses on Education of Psychosocial and Psychosomatic Medicine. Currently specific goals and skills are relevant.

Future Perspectives: In order to guarantee a permanent adaptation and improvement/upgrade of the curriculum it is planned to modify the CSR1 Track (3^{rd} – 4^{th} Semester):

- Introduction of the course "Doctor-patient-communication" instead of CSR 1
- Soft skill training
- Individual feedback by teachers based on a logbook where contacts with patients are documented

Further adaptations are planned concerning CSR 2-4:
CSR2 (former: "Ethics in Medicine") > (1) "Ethics and Medicine" and (2) "Law and Medicine"
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CSR4 (former: "Health Psychological Aspects of the Medical Profession") > "Psychosocial Career Preparation"

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Der Ethikunterricht im Spiegel von Studentenbefragungen an der Medizinischen Fakultät von der Universität Szeged

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Einleitung: Die Auseinandersetzung mit ethischen, rechtlichen und sozialen Aspekten von Themenkomplexen der medizinischen Ethik/Bioethik sowie Fähigkeit zur eigenständigen ethisch-moralischen Reflexion ist für Medizinstudenten von großer Wichtigkeit. Medizinethik/Bioethik wird an der Medizinischen Fakultät der Universität Szeged im sechsten Semester als Pflichtfach unterrichtet in insgesamt 45 Stunden; 15 (7x2) Stunden Vorlesungen, 30 (15X2) Stunden Seminare in Kleingruppen. Ziel der Seminare ist neben intensiver Wissensvermittlung die jeweils thematisierten Problemstellungen kritisch zu analysieren, zu bewerten, für relevante Fallbeispiele Lösungskonzepte zu entwerfen. Das Studium soll dazu beitragen, adäquate ärztlich-ethische Einstellung und Grundhaltung einzunehmen.
Hintergrund: Qualitätsentwicklung in Studium und Lehre ist ein wichtiges Bestreben der Mitarbeiter unseres Instituts. Diesbezüglich kommt den Studentenbefragungen eine besondere Bedeutung zu. So werden jedes Jahr im Sommersemester, nach Abschluss der Seminare, die Studenten darum gebeten, einen kurzen Fragebogen anonym auszufüllen.
Zielsetzung: Es wurde untersucht, wie die Studierende den Seminarunterricht in Medizinethik/Bioethik 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 2006/2007 bis 2011/2012 wurden jeweils 30 – 30 (insgesamt 180) „Studentenspiegel" von cca. 200 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" 2006/2007

1.) Die Seminare haben mein Interesse geweckt
Nein 1 2 3 4 5 **5,8** 6 7 Ja , sehr
2.) Der Nutzen der Seminare für meine berufliche Praxis ist
Gering 1 2 3 4 5 **5,8** 6 7 Sehr groß
3.) Wie beurteilen Sie ihre eigene Arbeit an den Seminaren?
Ich war passiv 1 2 3 4 **4,95** 6 7 Ich war sehr aktiv
4.) Wie beurteilen Sie die Arbeit der Gruppe an den Seminaren?
Passivität 1 2 3 4 5 6 **6,4** 7 Aktivität
5.) Welches Thema hat Ihnen am besten gefallen/ war am meisten informativ?
1. Abortus, 2. Transplantation, 3.IVF, 4.Euthanasie, 5. Humanexperimente, 6.Patientensicherheit, 7. Allokation
6.) Vorschläge zur Erhöhung der Effektivität der Seminare
1. Mehr Fallbeispiele, 2. effektiv genug so, 3. mehr Video/Filme, 4. Mehr Zeit für Fallbesprechnungen
7.) Wie beurteilen Sie die Arbeit der Seminarleiter/in?
Kompetent, gut, sehr gut, korrekt, gute Moderation, gewissenhaft, „hat interessante Seminare gehalten"
Vielen Dank für Ihre Mitwirkung !

„Studentenspiegel" 2007/2008

1.) Die Seminare haben mein Interesse geweckt
Nein 1 2 3 4 5 **5,9** 6 7 Ja , sehr
2.) Der Nutzen der Seminare für meine berufliche Praxis ist
Gering 1 2 3 4 5 **5,8** 6 7 Sehr groß
3.) Wie beurteilen Sie ihre eigene Arbeit an den Seminaren?
Ich war passiv 1 2 3 4 **4,8** 5 6 7 Ich war sehr aktiv
4.) Wie beurteilen Sie die Arbeit der Gruppe an den Seminaren?
Passivität 1 2 3 4 **5** 6 7 Aktivität
5.) Welches Thema hat Ihnen am besten gefallen/ war am meisten informativ?
1.IVF, 2. Abortus, 3. Euthanasie, 4. Humanexperimente, 5. Allokation, 5. Transplantation, 6. Patientenrechte
6.) Vorschläge zur Erhöhung der Effektivität der Seminare
1. Effektiv genug so, 2. mehr Videofilme, 3. soll interaktiver sein
7.) Wie beurteilen Sie die Arbeit der Seminarleiter/in?
Gut, sehr gut, kompetent, korrekt, befriedigend, informativ, „Ich habe die Seminare sehr gerne besucht"
Vielen Dank für Ihre Mitwirkung !

„Studentenspiegel" 2008/2009

1.) Die Seminare haben mein Interesse geweckt
Nein 1 2 3 4 5 6 **6,3** 7 Ja , sehr
2.) Der Nutzen der Seminare für meine berufliche Praxis ist
Gering 1 2 3 4 5 **6** 7 Sehr groß
3.) Wie beurteilen Sie ihre eigene Arbeit an den Seminaren?
Ich war passiv 1 2 3 4 **4,7** 5 6 7 Ich war sehr aktiv
4.) Wie beurteilen Sie die Arbeit der Gruppe an den Seminaren?
Passivität 1 2 3 4 5 **5,1** 6 7 Aktivität
5.) Welches Thema hat Ihnen am besten gefallen/ war am meisten informativ?
1. IVF, 2. Abortus, 3. Humanexperimente, 4. Euthanasie, 5. alle Themen, 6. keine Antwort, 7. Transplantation
6.) Vorschläge zur Erhöhung der Effektivität der Seminare
1. Keine Vorschläge, 2. mehr Videofilme, 3. Rundfragen, 4. mehr Fallbeispiele, 5. bessere Vorbereitung auf das Rigorosum
7.) Wie beurteilen Sie die Arbeit der Seminarleiter/in?
Sehr gut, kompetent, engagiert, hat gute Fallbeispiele gebracht, „ist für die Fragen und Meinungen der Studenten immer offen"
Vielen Dank für Ihre Mitwirkung !

„Studentenspiegel" 2009/2010

1.) Die Seminare haben mein Interesse geweckt
Nein 1 2 3 4 5 **5,9** 6 7 Ja , sehr
2.) Der Nutzen der Seminare für meine berufliche Praxis ist
Gering 1 2 3 4 5 **5,1** 6 7 Sehr groß
3.) Wie beurteilen Sie ihre eigene Arbeit an den Seminaren?
Ich war passiv 1 2 3 4 **4,2** 5 6 7 Ich war sehr aktiv
4.) Wie beurteilen Sie die Arbeit der Gruppe an den Seminaren?
Passivität 1 2 3 4 5 **5,1** 6 7 Aktivität
5.) Welches Thema hat Ihnen am besten gefallen/ war am meisten informativ?
1. Abortus, 2. Euthanasie, 3. Transplantation, 4. Allokation, 5. IVF, 6. Patientenrechte, 7. alle Themen, 8. Humanexperimente
6.) Vorschläge zur Erhöhung der Effektivität der Seminare
1. keine Vorschläge, 2. mehr Fallbeispiele, 3. mehr Videofilme, 4. Effektiv genug so (Ethikunterricht später, im 4-ten Studienjahr)
7.) Wie beurteilen Sie die Arbeit der Seminarleiter/in?
Ausgezeichnet, kompetent, die Seminare sind interessant / gut / nützlich / „ich bin mit der Arbeit sehr zufrieden"
Vielen Dank für Ihre Mitwirkung !

„Studentenspiegel" 2010/2011

1.) Die Seminare haben mein Interesse geweckt
Nein 1 2 3 4 5 **5,8** 6 7 Ja , sehr
2.) Der Nutzen der Seminare für meine berufliche Praxis ist
Gering 1 2 3 4 5 **5,7** 6 7 Sehr groß
3.) Wie beurteilen Sie ihre eigene Arbeit an den Seminaren?
Ich war passiv 1 2 3 4 **4,9** 5 6 7 Ich war sehr aktiv
4.) Wie beurteilen Sie die Arbeit der Gruppe an den Seminaren?
Passivität 1 2 3 4 5 **5,9** 6 7 Aktivität
5.) Welches Thema hat Ihnen am besten gefallen/ war am meisten informativ?
1. Euthanasie, 2. Abortus, 3. IVF, 4. Transplantation, 5. Allokation, 6. Humanexperimente, 7. Patientenrechte, 8. Patientenaufklärung
6.) Vorschläge zur Erhöhung der Effektivität der Seminare
1. effektiv genug, 2. mehr Fallbeispiele, 3. keine Vorschläge, 4. Situationsaufgaben
7.) Wie beurteilen Sie die Arbeit der Seminarleiter/in?
Kompetent, *gut vorbereitet, sehr gut, sehr bemüht, gut informiert „absolut prima" „hat interessante Seminare gehalten"*
Vielen Dank für Ihre Mitwirkung !

„Studentenspiegel" 2011/2012

1.) Die Seminare haben mein Interesse geweckt
Nein 1 2 3 4 5 6 **6,2** 7 Ja , sehr
2.) Der Nutzen der Seminare für meine berufliche Praxis ist
Gering 1 2 3 4 5 **6** 7 Sehr groß
3.) Wie beurteilen Sie ihre eigene Arbeit an den Seminaren?
Ich war passiv 1 2 3 4 **5** 6 7 Ich war sehr aktiv
4.) Wie beurteilen Sie die Arbeit der Gruppe an den Seminaren?
Passivität 1 2 3 4 5 **5,9** 6 7 Aktivität
5.) Welches Thema hat Ihnen am besten gefallen/ war am meisten informativ?
1. Transplantation, 2. Abortus,3. Euthanasie, 4. IVF, 5. Allokation, 6. alle Themen, 7. Humanexperimente
6.) Vorschläge zur Erhöhung der Effektivität der Seminare
1. Mehr Videofilme, 2. Mehr Fallbeispiele, 3. Klinikärzte einladen, 4. effektiv genug, 5. für passive Studenten Rundfragen stellen
7.) Wie beurteilen Sie die Arbeit der Seminarleiter/in?
Kompetent, sehr gut, sehr interessante Seminare, offen „für mich waren Ethikseminare eine positive Enttäuschung"
Vielen Dank für Ihre Mitwirkung !

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

Ergebnisse: Das Interesse an den Seminarinhalten scheint konstant zu sein. Der Nutzen dieser Veranstaltung für die berufliche Praxis wird etwas niedriger geschätzt als das Interesse der Studenten. Die Leistung der Kommilitonen wird in jedem Jahrgang positiver beurteilt, als die eigene, persönliche Aktivität. Die Freitextantworten zeigen große Variabilität, die Kommentare enthalten größtenteils Positive 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 berücksichtigt werden um die Qualität der Lehrveranstaltungen zu fördern.

Literatur: (1)Schulz et al.: Wie wichtig ist der Unterricht in Medizinethik und Medizingeschichte im Medizinstudium? Eine empirische Studie zu den Einschätzungen Studierender. GMS Z Med Ausbild 2012;29(1):Doc08 (2)Straube, W., Pfeiffer, M., Steger, F.: Moralische Positionen, medizinethische Kenntnisse und Motivation im Laufe des Medizinstudiums – Ergebnisse einer Querschnittsstudie an der Ludwig-Maximilians-Universität München. Ethik Med (2011) 23:201-216 (3)Nietzke, G., Möller, M.: Zur Evaluation von Ethikunterricht. Med Ausbild 2002; 19:190-195

Poster 7

Der Ethikunterricht im Spiegel von Studentenbefragungen an der Medizinischen Fakultät von der Universität Szeged

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Einleitung: Die Auseinandersetzung mit ethischen, rechtlichen und sozialen Aspekten von Themenkomplexen der medizinischen Ethik/Bioethik sowie Fähigkeit zur eigenständigen ethisch-moralischen Reflexion ist für Medizinstudenten von großer Wichtigkeit. Medizinethik/Bioethik wird an der Medizinischen Fakultät der Universität Szeged im sechsten Semester als Pflichtfach unterrichtet in insgesamt 45 Stunden; 15 (7x2) Stunden Vorlesungen, 30 (15X2) Stunden Seminare in Kleingruppen. Ziel der Seminare ist neben intensiver Wissensvermittlung die jeweils thematisierten Problemstellungen kritisch zu analysieren, zu bewerten, für relevante Fallbeispiele Lösungskonzepte zu entwerfen. Das Studium soll dazu beitragen, adäquate ärztlich-ethische Einstellung und Grundhaltung einzunehmen.

Hintergrund: Qualitätsentwicklung in Studium und Lehre ist ein wichtiges Bestreben der Mitarbeiter unseres Instituts. Diesbezüglich kommt den Studentenbefragungen eine besondere Bedeutung zu. So werden jedes Jahr im Sommersemester, nach Abschluss der Seminare, die Studenten darum gebeten, einen kurzen Fragebogen anonym auszufüllen. Zielsetzung: Es wurde untersucht, wie die Studierende den Seminarunterricht in Medizinethik/Bioethik 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 2006/2007 bis 2011/2012 wurden jeweils 30 – 30 (insgesamt 180) „Studentenspiegel“ von cca. 200 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.

Ergebnisse: Das Interesse an den Seminarinhalten scheint konstant zu sein. Der Nutzen dieser Veranstaltung für die berufliche Praxis wird etwas niedriger geschätzt als das Interesse der Studenten. Die Leistung der Kommilitonen wird in jedem Jahrgang positiver beurteilt, als die eigene, persönliche Aktivität. Die Freitextantworten zeigen große Variabilität, die Kommentare enthalten größtenteils Positive

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 berücksichtigt werden um die Qualität der Lehrveranstaltungen zu fördern.

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(3)Nietzke, G., Möller, M.: Zur Evaluation von Ethikunterricht. Med Ausbild 2002; 19:190-195

Poster 8

Students's Individual Work as an Important Part of High Skilled Professional Formation

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Adjusting of the Ukrainian High School system to Bologne Process in 2005 year leads to improving studying process in Kharkiv National Medical University. Somehow there are some important questions still in progress. In 2010 year the repository of Kharkiv National Medical University had been organized. The purpose of it was to give an opportunity for the students and young scientists to obtain the important information from the university in studying process via internet. There are more than 50 departments at the university nowadays and each department has their own section at the repository to upload all the books, methodical instructions, and topics for the independent student's work with tests for self control. An individual student's work is one the important part in the studying process. The aim of it is to activate cognitive functions of the students, to involve to the researching work, and to help to ensure the studying process of the topics for the independent work via searching the needed information. All these points are become easier in the frame of the university's repository.

Students take and active position at the scientific conferences, not only local, that's why all the departments keep at the repository all the scientific articles and thesis that have been already published in aim to help to the young scientists in preparing their own scientific papers. According to the published, uploaded information at the repository, the "department rank" is increasing, so it is a positive incentive thing for the scientists to reach the top.

Another opportunity for the students to improve the level of practical skills and theory is the computer and practical centre at the University, where the numerous training programs and simulators are available in everyday use.

Poster 9

Studying Bioethics as an Opportunity for a Medical Student to Become Perfect Clinicist

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[2]department of Pathology Anatomy
[3]department of Propedeutics to Internal Medicine, Bioethics and Biosafety
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Bioethics is a discipline that has one of the important places in studying process at High Medical School. This subject is included as obligatory for all the students and bioethics is integrated with almost all the subjects through the studying years at the University: such as philosophy, history of medicine, justice, deontology, fundamental disciplines, preclinical and clinical disciplines.

The importance of the bioethics for the future doctor is directly connected with the oath "Do Not Harm" and humanism to all alive. Formation of the personality of the future doctor in the context of bioethics has a purpose to create high professionalism, knowing of law, possessing of ethical standards, humanism, and morality, respect the human being from fertilization to biological death.

Considerable part in clinical practice has also bioethics. First of all, exactly the bioethics gives to the future doctor the meaning of the health and disease that for years was widely discussed. It's very important to take in account psychological changes and use bioethical principles in the model of "doctor-patient relationships". In the treatment process there is strong responsibility of the doctor to make it high effective, safety, accessible. The algorithm of the treatment decision making is based on the professional experience, moral principles, and has some debatable questions about type of the treatment, its evidence level, safety, percentage of complications (effectiveness/safety ratio).

From the scientific point of view some part of the questions are solved with appearance of Evidence Based Medicine that become a part of the Bioethics studying program. All the above is created to help the medical student to become a perfect clinicist.

GENDER EQUIVALENT INTERACTIVE LECTURE FORMAT FOR SURGICAL SUBSPECIALTIES - RAISING INTEREST AND IMPROVING RECRUITMENT RATES INTO RESIDENCY PROGRAMS

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BACKGROUND

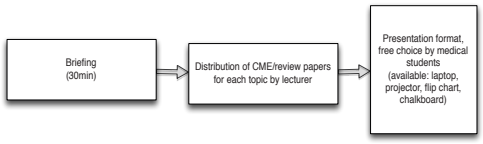
Problem:
Facing a lack of appropriate allocation of surgical subspecialties in the regular medical studies program

Aim:
Prevailing shortage of surgical trainees in respective fields in a gender equivalent format by raising interest at an early stage of medical studies (>= year 3)

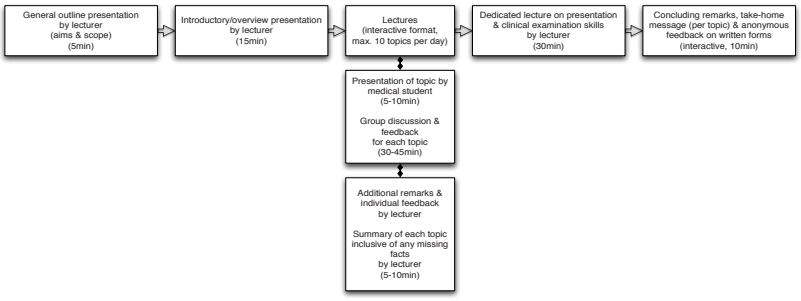
METHODS

Interactive elective lecture format offered within the medical studies program
Open to a limited number of participants (max. 15-20)

Briefing (30 min):
- explanation of format
- distribution of selected scientific/continued-medical education (CME) papers by lecturer
- optional choice for additional resources left to presenting medical students (available media: laptop, projector, flipchart, chalkboard)



Lectures (1-3 appointments, 8 hours each)
- explication of general outline, overview presentation by lecturer
- Presentation per topic per one/two medical student(s)
-interactive group discussion (group feedback)
- Additional remarks and summary of topic inclusive of missing facts, if any, by lecturer
- Individual presentation feedback
- Allowance of sufficient breaks between topics according to participants' preferences
- Dedicated lecture on presentation and clinical examination skills relevant for surgical subspecialty, if not readily covered in each topic
- Concluding remarks, summary, take-home message(s) by lecturer
- Anonymous feedback by participants on standardised written multiple choice forms with optional free text



RESULTS

- Mean duration per topic 45 +/- 10 min
- Overall evaluation scores 9.8 +/- 0.4 by medical students (10 highest attainable score, mean +/- standard deviation)
- Favorable free text feedback in evaluation forms by medical students
- Request for diploma or doctoral thesis topic in 4 out of 10 participants (40%)

CONCLUSION

- Early recruitment raises interest and awareness for surgical subspecialties usually playing a minor role during the regular medical students program
- The presented interactive lecture format encourages active participation and is one option to address the lack of suitable future applicants for residency programs into surgical subspecialties

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Poster 10

Gender Equivalent Interactive Lecture Format for Surgical Subspecialities - Raising Interest and Improvin Recruitment Rates into Residency Programs

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Introduction: The presented lecture format aims at tackling the lack of appropriate allocation of surgical subspecialties in the regular medical studies program and at prevailing shortage of surgical trainees in respective fields in a gender equivalent format by raising interest at an early stage of medical studies (>= year 3)
Material & Methods: Interactive elective lecture format open to a limited number of participants (max. 15-20 medical students >= year 3) and offered within the medical studies program. Appointments: (1) briefing (30 min): explanation of format, distribution of selected scientific/continued-medical education (CME) papers by lecturer, optional choice for additional resources left to presenting medical students (available media: laptop, projector, flipchart, chalkboard) (2) lectures (1-3 appointments, 8 hours each) (2.1) Explication of general outline, overview presentation by lecturer (2.2) 5-10min presentation per topic per one/two medical student(s), followed by interactive group discussion (group feedback), and additional remarks and summary of topic inclusive of missing facts, if any, by lecturer (inclusive of individual presentation feedback) (max. 30-60 min per topic), allowance of sufficient breaks according to participants' preferences (2.3) Dedicated lecture (30min) on presentation and clinical examination skills relevant for surgical subspecialty, if not readily covered in each topic (2.4) Concluding remarks, summary, take-home message (one per topic) by lecturer (2.5) Anonymous feedback by participants on standardised written multiple choice forms with optional free text
Results: Mean duration per topic 45 +/- 10 min Overall evaluation scores 9.8 +/- 0.4 by medical students (10 highest attainable score, mean +/- standard deviation) Favorable free text feedback in evaluation forms by medical students Request for diploma or doctoral thesis topic in 4 out of 10 participants (40%)
Conclusion: Early recruitment raises interest and awareness for surgical subspecialties usually playing a minor role during the regular medical students program. The presented interactive lecture format encourages active participation and is one option to address the lack of suitable future applicants for residency programs into surgical subspecialties.

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Medizinische Universität Graz

From concept to reality: The implementation of simulation-based education into the paediatrics curriculum of the Medical University of Graz

Lukas Peter Mileder[1], Wolfgang Raith[1], Jasmin Pansy[1], Ernst Eber[2], Berndt Urlesberger[1]

[1] Division of Neonatology
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Department of Paediatrics and Adolescent Medicine, Medical University of Graz

Introduction: Simulation has been widely implemented into under- and postgraduate medical education within the past decades [1]. Simulation technology encompasses computer-based virtual reality, part-task-trainers for the training of technical skills, static manikins, and high-fidelity integrated patient simulators [2]. There are numerous advantages associated with simulation-based medical education (SBME), such as structured, controlled, and risk-free learning, reproducibility of learning experiences, training of routine as well as rare clinical situations, on-demand training, and the combination of cognitive, technical, and behavioural skill acquisition [3]. Features and best practices of SBME are summarized in Table 1.

1) Feedback
2) Deliberate practice (dose–response relationship)
3) Curriculum integration (lectures, problem-based learning, clinical training, etc.)
4) Outcome measurement
5) Simulation fidelity (match of education goals with simulation tools)
6) Skill acquisition and maintenance
7) Mastery learning
8) Transfer to practice (highest level of the Kirkpatrick hierarchy)
9) Team training ("patient care is a team sport")
10) High-stakes testing (formative and summative evaluation of competence)
11) Instructor training
12) Educational/professional context (faculty expertise/motivation, institutional support)

Table 1: Features and best practices of SBME [4]

Methods: A simulation-based course will be implemented into the study module "Growth and Development" of the human medicine curriculum at the Medical University of Graz.
An interdisciplinary work group was established in January 2013 and has been charged with designing the course. Definition of teaching contents, course time, and educational objectives, and coordination with current paediatric courses have been identified as integral tasks.

Results: The presented project is an ongoing process. So far, educational objectives of the future course have been defined. Students should learn the structured assessment of infants, common paediatric diseases (e.g. febrile seizure, anaphylaxis, bronchitis), and performance of relevant diagnostic and therapeutic procedures.
In addition, the course design has been determined (Figure 1). After a theoretical introduction (lecture) detailing both the diseases and technical characteristics of the infant simulator, students will actively train practical skills and participate in simulated clinical scenarios with subsequent video-assisted debriefings.

Conclusion: SBME results in significant improvements in cognitive, technical, and behavioural skills [2]. Therefore, simulation-based education will be introduced in the paediatrics curriculum of the Medical University of Graz.
As the quality of SBME depends on the practical relevance of contents, well-defined learning objectives, sufficient training time, and the expertise and motivation of educators, these factors will be of main interest during the ongoing conceptualization process.

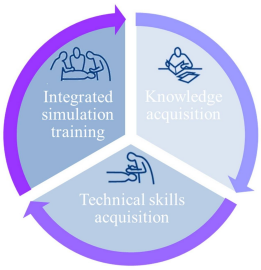

Figure 1: Planned course structure
(Adapted from: Laerdal Medical - The Circle of Learning)

[1] Issenberg SB, McGaghie WC, Petrusa ER, et al. Features and uses of high-fidelity medical simulations that lead to effective learning: a BEME systematic review. Med Teach. 2005;27(1):10–28.
[2] Cook DA, Hatala R, Brydges R, et al. Technology-enhanced simulation for health professions education – a systematic review and meta-analysis. JAMA. 2011;306(9):978–88.
[3] Halamek LP. The simulated delivery-room environment as the future modality for acquiring and maintaining skills in fetal and neonatal resuscitation. Semin Fetal Neonatal Med. 2008;13(6):448–53.
[4] McGaghie WC, Issenberg SB, Petrusa ER, et al. A critical review of simulation-based medical education research: 2003-2009. Med Educ. 2010;44(1):50–63.

Poster 11

From concept to reality: The implementation of simulation-based education into the paediatrics curriculum of the Medical University of Graz

Lukas Peter Mileder[1], Wolfgang Raith[1], Jasmin Pansy[1], Ernst Eber[2], Berndt Urlesberger[1]

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Introduction: Simulation has been widely implemented into under- and postgraduate medical education within the past decades [1]. Simulation technology encompasses computer-based virtual reality, part-task-trainers for the training of technical skills, static manikins, and high-fidelity integrated patient simulators [2]. There are numerous advantages associated with simulation-based medical education (SBME), such as structured, controlled, and risk-free learning, reproducibility of learning experiences, training of routine as well as rare clinical situations, on-demand training, and the combination of cognitive, technical, and behavioural skill acquisition [3]. Therefore, a simulation-based course will be implemented into the study module "Growth and Development" of the human medicine curriculum at the Medical University of Graz.

Methods: An interdisciplinary work group was established in January 2013 and has been charged with designing the course. Definition of teaching contents, course time, and educational objectives, and coordination with current paediatric courses have been identified as integral tasks.

Results: The presented project is an ongoing process. So far, educational objectives of the future course have been defined. Students should learn the structured assessment of infants, common paediatric diseases (e.g. febrile seizure, anaphylaxis, bronchitis), and performance of relevant diagnostic and therapeutic procedures. In addition, the course design has been determined. After a theoretical introduction (lecture) detailing both the diseases and technical characteristics of the infant simulator, students will actively train practical skills and participate in simulated clinical scenarios with subsequent video-assisted debriefings.

Conclusion: SBME results in significant improvements in cognitive, technical, and behavioural skills [2]. Therefore, simulation-based education will be introduced in the paediatrics curriculum of the Medical University of Graz. As the quality of SBME depends on the practical relevance of contents, well-defined learning objec-

tives, sufficient training time, and the expertise and motivation of educators, these factors will be of main interest during the ongoing conceptualization process.

References:

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2. Cook DA, Hatala R, Brydges R, et al. Technology-enhanced simulation for health professions education – a systematic review and meta-analysis. JAMA. 2011;306(9):978–88.

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Presented at the „17th Grazer Konferenz“, Vienna, April 4th-6st, 2013

Development of a catalogue of preclinical learning objectives and competency levels

Medical University of Graz

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INTRODUCTION

Central to the design of contents, the development of curricula, and the construction of examination questions, is the definition of learning objectives. In the case of clinical reasoning, there are several internationally recognized catalogues of learning objectives for undergraduate medical curricula. In contrast, examples for **preclinical catalogues to date do not exist**.
Along the course of an extensive revision of the medical curriculum the need for a homogenously structured and interdepartmental integrated catalogue of learning objectives became increasingly apparent.

HOW TO FIND A STRUCTURE

The clinical departments started with the development of learning objectives based on the structure and items of the Swiss Catalogue of Learning Objectives (SCLO) [1] adapting it according to the needs of the Medical University of Graz (MUG). The structure of the SCLO is based on a subject-oriented list as well as a symptom-oriented list of learning objectives. While subject orientation is fully applicable for preclinical objectives the orientation on symptoms and classification according to diagnosis, therapy, emergency, preventive measures and general practice clearly is not applicable to preclinical needs. We tried to find a structure for the preclinical part suitable to preclinical needs and in parallel related to the structure of the clinical part. Searching for such a continuous structure, we decided to create in addition to the **subject-oriented list** of preclinical learning objectives - and in analogy to the symptoms-based items of the clinical catalogue - a preclinical '**system-oriented' list** of objectives. Such 'systems' being for example: metabolism, reproduction, respiration, scientific methods, etc.
For the classification of profundity of competence we used the taxonomy of Bloom [2, 3] to distinguish between the criteria given in table 1.

Thus, the MUG catalogue will consist of a continuous subject based list throughout the preclinical and clinical items. A definition of competence will be possible throughout the catalogue and will change from the preclinical one based on **Bloom's taxonomy** to the item definitions of the SCLO (Tab. 1 and 2). In the preclinical catalogue crosslinks will be achieved by the parallel construction of the **system-based list** with the intention to assist the adjustment of contents of the different subjects.
In addition to the development of learning objectives described by these categories, a **catalogue of practical skills** which have to be achieved by successfully passing the preclinical part of education will be created.

Level	Classification
1	Basic knowledge
2	Further knowledge and skills
2 V	Compresenshion
2 U	Application
2 A	Analysis

Tab. 1: **Classification** of profundity of learning objectives

	Preclinical items	Clinical items	
Organisation criteria	Subject	Subject	Assignment to department
	System	Symptom	Crosslink
Classification	1 2, 2V, 2U, 2A	1; D, T, E, P, G 2; D, T, E, P, G	Profundity

Tab. 2: **Structure** of preclinical and clinical catalogues of learning objectives. V, comprehension; U, application; A, analysis; D, diagnosis; T, therapy; E, emergency; P, preventive measures; G, general practice.

WORK IN PROGRESS

Ten preclinical departments are included in the current development, eight of which thus far have returned anywhere between 28 and 160 learning objectives.
At this time an editorial committee is revising the objectives concerning wording, number, clustering, overlaps between departments, possible desired redundancies with different levels of competence etc. Next steps will be to find a practicable number of learning objectives for each subject, create the system-based list with all the necessary cross-links, as well as the integration of feedback from MUG clinicians.

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Poster 12

Development of a catalogue of preclinical learning objectives and competency levels

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Central to the design of contents, the development of curricula, and the construction of examination questions, is the definition of learning objectives. In the case of clinical reasoning, there are several internationally recognized catalogues of learning objectives for undergraduate medical curricula. In contrast, examples for preclinical catalogues to date do not exist.

Along the course of an extensive revision of the medical curriculum the need for a homogenously structured and interdepartmental integrated catalogue of learning objectives became increasingly apparent.

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For the classification of profundity of competence we used the taxonomy of Bloom [2, 3] to distinguish between following criteria:

Level Classification

1 Basic knowledge
2 Further knowledge and skills
2 V Comprehension
2 U Application
2 A Analysis

Thus, the MUG catalogue will consist of a continuous subject based list throughout the preclinical and clinical items. A definition of competence will be possible throughout the catalogue and will change from the preclinical one based on Bloom's taxonomy to the item definitions of the SCLO. In the preclinical catalogue crosslinks will be achieved by the parallel construction of the system-based list with the intention to assist the adjustment of contents of the different subjects.

In addition to the development of learning objectives described by these categories, a catalogue of practical skills which have to be achieved by successfully passing the preclinical education will be created.

Ten preclinical departments are included in the current development, eight of which thus far have returned anywhere between 28 and 160 learning objectives.

At this time an editorial committee is revising the objectives concerning wording, number, clustering, overlaps between departments, possible desired redundancies with different levels of competence etc. Next steps will be to find a practicable number of learning objectives for each subject, create the system-based list with all the necessary cross-links, as well as the integration of feedback from MUG clinicians.

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[3] Anderson, L.W., Krathwohl, D.R. & Airasian, P.W. (2000). A Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxanomy of Educational Objectives, Abridged Version. Boston: Allyn and Bacon.

How an integrated module works – the experience gained during a summer school focused on respiratory allergies

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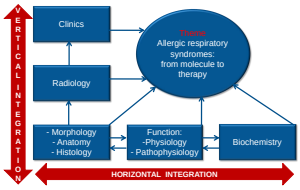
General Description

- The *Allergic Respiratory Syndromes: from Molecule to Therapy* Summer School was organised through the eMediqual project, which focuses on the improvement of the Romanian medical education by, among others, implementing a new curriculum.
- It was the first attempt to evaluate how an integrated medical curriculum works.
- It took place on July, 9-16, 2012.

Summer School poster


Summer School participants

- The modular course was designed to ensure both vertical and horizontal integration so that to offer students an integrated view of respiratory allergies, focusing on:
  - ✓ Morphological & functional aspects of the healthy respiratory system;
  - ✓ Pathophysiology and principles of diagnosis;
  - ✓ A critical approach of the various treatment schemes.
- The knowledge gained by students may be applied in both clinical practice and research.



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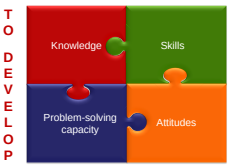
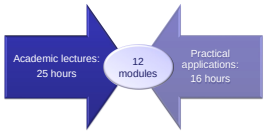


Design and Methods



- Lectures
- Workshops
- Problem-based learning
- Small group discussions

Modules

M1. Morphological unit of the respiratory epithelium
Lectures: • Macro- & microanatomy • Imagistic anatomy of the respiratory system
Workshop: • Imagistic anatomy of the respiratory system • Microscopy
Problem-based Learning: Allergic patient
Small group discussions – 5 students/group

M2. Respiratory reaction to allergens
Lectures: • Allergic immune response • Pathology
Workshop: • Pathology • Immunology: paraclinical evaluation of the allergic response
Problem-based learning
Small group discussions – 5 students/group

M3. Broncho-motricity in normal and pathological conditions
Lectures: • Physiology • Pathophysiology
Workshop: • Spirometry • Bronchial challenge tests
Problem-based learning
Small group discussions – 5 students/group

M4. Signalling in the airways. Normal vs. allergic response
Lecture: • Biochemistry pharmacology
Workshop: • Broncho-motricity – isolated trachea in organ bath
Problem-based learning
Small group discussions – 5 students/group

M5. Fundamental and clinical bases of allergic reactions
Lectures: • Allergic phenotypes • Asthma – video presentations • Allergy – video presentations
Workshop
Problem-based learning
Small group discussions - 5 students/group

M6. Radiological aspects in the respiratory pathology
Lecture: • Imagistics in the diagnosis of respiratory diseases
Workshop: • Imagistic aspects in respiratory diseases
Problem-based learning
Small group discussions - 5 students/group

M7. Allergic bronchial asthma
Lecture: • Extrinsic vs. intrinsic asthma
Workshop: • COPD vs. asthma
Problem-based learning • Case reports
Small group discussions – 5 students/group

M8. Allergic rhinitis
Lecture: • Rhinitis and asthma - an epithelium unit
Workshop: • Assessment of allergic patient • ENT examination • Rhinomanometry
Problem-based learning • Case reports
Small group discussions – 5 students/group

M9. Management of allergic patients
Lectures: • Asthma therapy • Allergic rhinitis therapy • Immune targets in asthma therapy
Workshop
Problem-based learning • Case reports
Small group discussions - 5 students/group

M10. Emergencies in respiratory allergies
Lecture: • Emergencies in allergic respiratory diseases
Workshop: • Emergency management of asthma
Problem-based learning • Case reports
Small group discussions - 5 students/group

M11. Communication abilities
Lecture: • Basic principles in patient – physician discussions
Workshop: • Practical applications
Problem-based learning • Case reports
Small group discussions - 5 students/group

M12. Recuperation and first aid in respiratory allergies
Lectures: • Recuperation in respiratory diseases
Problem-based Learning • First aid in respiratory diseases
Workshop
Small group discussions – 5 students/group

Students

- The summer school was opened to students who have promoted 2nd - 5th year of study:
  - They sent a short CV and a letter of intent
  - After interviews, 23 out of 45 students were selected.


Histology Lab


Physiology Lab - equipped with funds from e-Mediqual project


Juvara Lecture Hall


Brebu Workshop room

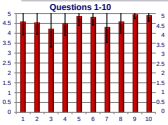
Evaluation

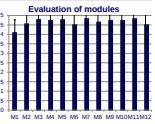
Evaluation of student knowledge (MCQ)

Evaluation of modular course
- by students
- by teachers

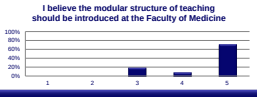
- Answer scale: 1 (strongly disagree) to 5 (strongly agree)
- Questions for students:

1. The lectures answered my needs and expectations.
2. The lectures were effective.
3. The workshops clearly illustrated the theoretical concepts.
4. The lectures and the workshops were well structured.
5. The module objectives were clear.
6. The teaching methods fitted the module objectives.
7. The module has raised my interest for this field.
8. The teaching materials were well structured.
9. I would recommend this module to my colleagues.
10. I would like to attend other modular courses.
11. -13. Open questions about most useful information, the strengths and the weaknesses of the course.
14. Please evaluate each module on a scale from 1 to 5 (very good)





- The questionnaire for teachers comprised both scaled and open questions. The answers showed a good level of satisfaction regarding their involvement in this modular course.
- The most representative assertion and teachers' responses expressed as percents is shown in the figure below.



Results

- At the end of the module, the students were able to:
  1. recognise normal and pathologic results acquired through various methods, in both adults and children;
  2. correlate clinical presentation with the results of traditional and new monitoring methods;
  3. gain a better understanding of the newest developments in the field of non-invasive assessment of airway inflammation and their potential effect on therapy.
- Teachers gained experience in working together to develop an integrated module and guide students.

Conclusions

- Cooperation and communication between teachers from different disciplines (preclinical and clinical) is required to develop a comprehensive module and to avoid overlapping information.
- Small groups teaching enhances the quality of learning process.
- Close interaction with students enables appropriate feedback for improvement of teaching process adjusted to permanent evolving needs.

Acknowledgement: POSDRU /86/ 1.2/ S/ 63815

Poster 13

How an integrated module works – the experience gained during a summer school focused on respiratory allergies

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The Allergic Respiratory Syndromes: from Molecule to Therapy summer school, which took place on July 9-16, 2012, was the first attempt to evaluate how an integrated medical curriculum works.

The modular course was designed to ensure both vertical and horizontal integration so that to offer students an integrated view of respiratory allergies. Our aim was to develop students' knowledge, skills, problem-solving capacity and attitudes.

There were 12 modules comprising 25 hours of academic lectures and 16 hours of practical applications, while the chosen methods were: lectures, workshops, problem-based learning and small group discussion.
The following modules were taught:

- Morphological unit of the respiratory epithelium
- Respiratory reaction to allergens
- Broncho-motricity in normal and pathological conditions
- Signalling in the airways
- Normal vs. allergic response
- Fundamental and clinical bases of allergic reactions
- Radiological aspects in the respiratory pathology
- Allergic bronchial asthma
- Allergic rhinitis
- Management of allergic patients
- Emergencies in respiratory allergies
- Communication abilities
- Recuperation and first aid in respiratory allergies.

Twenty-three out of 45 students (2^{nd} – 5^{th} year of study) were selected based on a letter of intent and an interview. At the end of the summer school, an evaluation of students' knowledge (multiple choice questions) and an evaluation of teachers by students were applied. The modular course was then evaluated by questionnaires for both students and teachers on a scale from 1 to 5, where 1 = strongly disagree and 5 = strongly agree.

The analysis of students' answers to the first ten questions showed they have appreciated this experience (score range: 4.4 – 4.9). There were also three open questions about the most useful information, the strengths and the weaknesses of the course. Students were finally asked to evaluate the modules, the score range being 4.1 – 4.7. The questionnaire for teachers showed also a good level of satisfaction.

At the end of the module, the students were able to: recognise normal and pathologic results, correlate clinical presentation with the results and gain a better understanding of the newest developments in the field, while the teachers gained experience in working together to develop an integrated module and guide students.
After the first modular course in our university, we have reached to the following conclusions: (1) cooperation and communication between teachers from different disciplines (preclinical and clinical) is required for a comprehensive module without overlapping information; (2) small groups teaching enhances the quality of learning process; (3) close interaction with students enables appropriate feedback for improvement of teaching process adjusted to permanent evolving needs.

Acknowledgement: The summer school and this poster were supported by the POSDRU /86/1.2/S/63815 project.

Medizinische Universität Graz

Umfrage über die personenbezogene Evaluierung der Lehre unter Lehrenden und Studierenden der Medizinischen Universität Graz.

Klaus Pfurtscheller, Gerald Wendelin.

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Einleitung:

Die personenbezogene Evaluierung (PbE) von Lehrveranstaltungen ist ein Bestandteil des Diplomstudiums Humanmedizin an der Medizinischen Universität Graz (MUG). Lehrende werden durch die von ihnen betreuten Studierenden im Rahmen ihrer Lehreinheiten (Vo, UE, SE, Praktika) evaluiert. Diese PbE stellt für Lehrende eine Notwendigkeit dar, um die von der MUG vorgegebenen Kriterien zur Erlangung der Habilitation zu erfüllen. Der Umfang der notwendigen PbE ist genauso vorgegeben wie der Fragenkatalog auf den Evaluationsbögen. Für Lehrende wie Studierende bedeutet die PbE meist einen zusätzlichen administrativen Aufwand.
Zweierlei Fragestellungen sollen in diesem Pilotprojekt untersucht werden:

1) Wie bewerten die Lehrenden die Evaluierung in der momentan durchgeführten Form an der MUG? Ziehen die Lehrenden aus den Evaluierungen eine Konsequenz?
2) Wie bewerten die Studierenden die personenbezogene Evaluierung der sie Lehrenden in ihrer derzeitigen Form?

Material und Methode:

- Fragebogengestützte und anonymisierte Meinungsumfrage unter 1) Lehrenden und 2) Studierenden an der Univ. Klinik für Kinder- und Jugendheilkunde Graz.
  - ad 1) in die Lehre des Modul 19 eingebundene Ärztinnen und Ärzte der Klinik (Ass, OA, Priv. Doz., Univ. Prof): n = 51
  - ad 2) Studentinnen und Studenten des Modul 19 im WS 12/13: n = 164.
- 10 Fragen mit je 6 Möglichkeiten zwischen ‚trifft völlig zu' (1) und ‚trifft überhaupt nicht zu' (6)
- Fragebogenverteilung mittels Sammelmail an die Lehrenden und die Studierenden.
- die Auswertung der rückläufigen Fragebögen erfolgte durch die Projektleiter, die Statistik ist deskriptiv.

Ergebnisse:

Der Rücklauf von einmalig ausgeschickten Fragebögen betrug bei den Lehrenden 23 % (n = 12) und bei den Studierenden 7 % (n =12) . Somit war die Bereitschaft zur Teilnahme vor allem unter den Studierenden als recht gering zu werten. Eine Übersicht über die Ergebnisse zeigen Abbildungen1 und 2 (median).

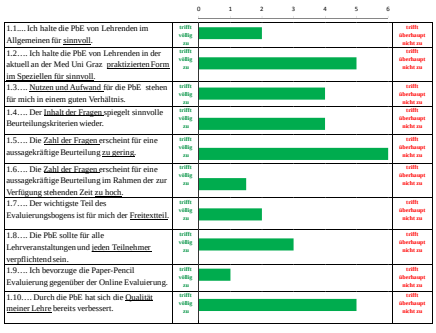

Abb 1.: Fragen und Ergebnisse der Lehrenden

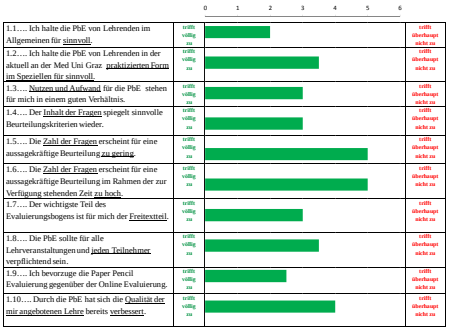

Abb 2.: Fragen und Ergebnisse der Studierenden

Schlussfolgerung:

Zusammenfassend kann festgehalten werden, dass Lehrende und Studierende die personenbezogene Evaluierung im Allgemeinen für sinnvoll erachten. Die Anzahl der Fragen scheint ausreichend, der Freitextteil wichtig und die Möglichkeit der Online Evaluierung wenig genützt. Sowohl Nutzen und Aufwand der PbE als auch Inhalt der Fragen werden sowohl von den Lehrenden als auch den Studierenden eher neutral betrachtet. Die Qualität der Lehre dürfte sich dadurch jedoch für den einzelnen Lehrenden und auch für die Studierenden nicht wesentlich verbessert haben. Bei den Studierenden zeigt sich insgesamt ein ähnlicher Trend wie bei den Lehrenden. Im Gegensatz zu den Lehrenden erachten die Studierenden die Anzahl der Fragen nicht als zu hoch.

Literatur: Stalmeijer R. et.al. 2008. The development of an instrument for evaluating clinical teachers: involving stakeholders to determine content validity. Med Teach. 30:e272-e277

Poster 14

Questionnaire about the individual-related evaluation of teaching among clinical teachers and students of the Medical University of Graz.

Klaus Pfurtscheller, Gerald Wendelin.

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Introduction: The individual-related evaluation of teaching courses is part of the university studies at the Medical University of Graz, Austria (MUG). Clinical teachers are evaluated by their students during or after their courses (lectures, tutorials, practical trainings, seminars). The individual-related evaluation of teachers is imperative to accomplish the necessary criteria for the postdoctoral lecture qualification (Habilitation) at the MUG. The extent of the necessary evaluations and the questionnaires are predetermined. For teachers and students the individual-related evaluation is an additional administrative effort.

This pilot-project analyses two questions:

1) What do the teachers think of the current practice of individual-related evaluation? Do they draw a consequence out of the results?

2) What do the students think of the current practice ofthe evaluation of their teachers?

Materials and Methods:

- Anonymous questionnaire emitted by a single email among 1) teachers and 2) students at the University Children’s Hospital of Graz, Austria.
- ad 1) medical staff involved in teaching within ’Modul 19 – development, growth and maturation’: n = 51
- ad 2) students of ’Modul 19’ during winter-semester 2012/13: n = 164

Results: Twelve teachers (23 %) and twelve students (7 %) returned their questionnaires. Therefore the willingness for participation was poor. An overview and comparison of the results is demonstrated on images 1 and 2.

Conclusion: In summary it can be stated that teachers and students consider the individual-related evaluation as meaningful. The number of questions seems to be sufficient, the part for free text is important and the possibility of an online-evaluation is rarely used. Teachers and students are undetermined for both, benefit

and effort and the content of the questions of the evaluation form. It seems that the quality of teaching has not substantially improved for the individual teacher and for the students. The trend of the answers is similar for both the teachers and the students. Contrary to the teachers the students consider the number of questions as appropriate.

References:

Stalmeijer R. et.al. The development of an instrument for evaluating clinical teachers: involving stakeholders to determine content validity. Med Teach.2008;30:e272-e277

Tailored Skills Training For Undergraduate Dentistry Students In Year 2: Implementation And Challenges

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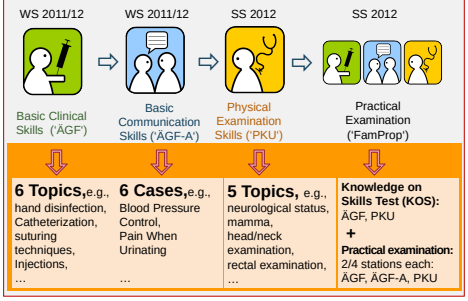
(1) Department of Medical Education, Medical University of Vienna
(2) Bernhard Gottlieb University Clinic of Dentistry

Background

Until 2012, skills training at the Medical University of Vienna in year 2 was the same for students of human medicine and dentistry. However, the need for a more tailored skills training for dentistry students led to extensive adaptations of the skills training in year 2 of the curriculum.



Purpose

This study describes these adaptations and implementation of an intertwined approach and its challenges in form and content.

Methods

In an interdisciplinary team, and with great assistance and support of the organizational specialists, the adaptation regarding content and implementation was continuously discussed and realized.

Physical examination	course week 1	course week 2	course week 3	course week 4	course week 5
	TOPIC A	TOPIC C	TOPIC D	TOPIC B	TOPIC E
	TOPIC A	TOPIC C	TOPIC D	TOPIC B	TOPIC E
	TOPIC A	TOPIC D	TOPIC B	TOPIC C	TOPIC E
	TOPIC A	TOPIC D	TOPIC B	TOPIC C	TOPIC E
	TOPIC A	TOPIC B	TOPIC C	TOPIC D	TOPIC E
	TOPIC A	TOPIC B	TOPIC C	TOPIC D	TOPIC E

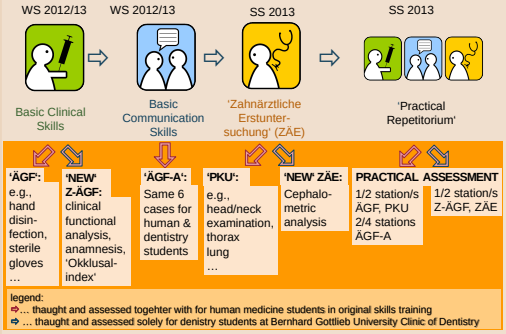
8 dentistry groups with 10 students each

Zahnärztliche Erstuntersuchung'	course week 1	course week 2	course week 3	course week 4	course week 5
	TOPIC A	TOPIC B	TOPIC Z (cephalometric analysis)		
	TOPIC A	TOPIC B			

Table 1: Organisational Intertwined Schedule for 'Physical Examinations' and 'Zahnärztliche Erstuntersuchung'

Results

In semester 3 (WS 2012/2013), the skills course "Basic Clinical Skills" ('ÄGF') was restructured by substituting training unities more relevant for human medicine students (N202) by tailored unities for dentistry students (N203) (e.g. topic "catheterization" by topic "clinical functional analysis ['Muskel- und Kiefergelenksbefund']").



The basic communication skills course ('ÄGF-A') in semester 3 was not altered for N203-students. In semester 4 (SS 2013), a new course was established ['Zahnärztliche Erstuntersuchung'; 'ZÄE'], incorporating contents and structural organization from the skills line course "Physical Examination" ('PKU'). Major adaptations are conceptualized for the practical examination of all four skills lines which takes place in May 2013 ('Practical Repetitorium').

Conclusions

The implementation of the tailored skills lines for dentistry students proved feasible on an organizational level. First adaptations for the basic communication skills course are to be discussed, to master the special needs of a tailored skills line in year 2 for dentistry students.

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Acknowledgements:

The authors would like to thank Nadja Wostry for her valuable support during the whole process of planning and implementing the tailored approach.

Poster 15

Tailored skills training for undergraduate dentistry students in year 2: Implementation and challenges

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Background: Until 2012, skills training at the Medical University of Vienna in year 2 was the same for students of human medicine and dentistry. However, the need for a more tailored skills training for dentistry students led to extensive adaptations of the skills training in year 2 of the curriculum.

Purpose: This study describes these adaptations and implementation of an intertwined approach and its challenges in form and content.

Methods: In an interdisciplinary team, and with great assistance and support of the organizational specialists, the adaptation regarding content and implementation was continuously discussed and realized.

Results: In semester 3 (WS 2012/2013), the skills course "Basic Clinical Skills" was restructured by substituting training unities more relevant for human medicine students (N202) by tailored unities for dentistry students (N203) (e.g. topic "catheterization" by topic "clinical functional analysis ['Muskel- und Kiefergelenksbefund']"). The basic communication skills course in semester 3 was not altered for N203-students.
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Conclusions: The implementation of the tailored skills lines for dentistry students proved feasible on an organizational level. First adaptations for the basic communication skills course are to be discussed, to master the special needs of a tailored skills line in year 2 for dentistry students.

Medizinische Universität Graz

Interdisciplinary teaching and small group lessons within the special study module - "Connective tissue diseases, diagnosis and treatment." of the curriculum of medicine at the Medical University of Graz.

Rabensteiner DF[1]; Wagner J[2]; Borkenstein A[1]; Horwath-Winter J[1]; Weger M[1]; Heidinger A[1], Paschke E[3]; Greilberger J[4]; Obermayer-Pietsch B[5]; Stojakovic T[6]; Aberer E[7]; Schmut, O[1]; Smolle J[8].

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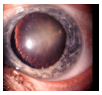


Background:

During the second stage of the curriculum of medicine at the Medical University of Graz the completion of five special study modules (SSM) is mandatory. The students can choose almost freely from a diverse range of thematically different SSM according to their interests. Experiences from the SSM - "Connective tissue diseases, diagnosis and treatment." are presented.

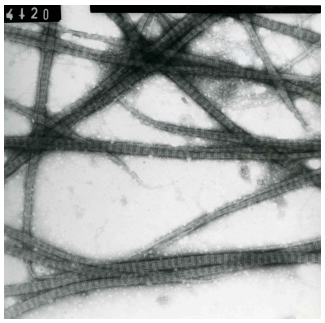
Methods:

The SSM - "Connective tissue diseases, diagnosis and treatment." explains the structure, biosynthesis and degradation of the connective tissue components: cells, fibers (collagen, elastin) and the ground substance (proteoglycans, glycosaminoglycans). Experts in different areas teach lessons that emphasize the importance of the connective tissue for the human body. Main attention is paid to the pathology of the connective tissue. The pathology of the skin, the structure of the blood vessels, atherosclerosis and thrombosis, osteogenesis and osteoporosis, connective tissue of the eye, rheumatology, the effect of oxidative stress on the connective tissue, as well as genetic diseases of the connective tissue are discussed.

Visits to outpatient departments and research units allow the students the direct contact with the patients concerned. Information about diagnostic procedures and current treatment options is given.

Parts of the lessons are performed virtually in the form of an eLecture (including multimedia content), held as Web Based Training (WBT) or completed by the composition of an essay. As a consequence, less physical presence of the students is required and the independent elaboration of learning content is promoted.

The experience and evaluation results of the last 6 years of this SSM were evaluated.



Results:

In all evaluations carried out, the versatility of the areas taught and the interdisciplinary appraisal of the individual topics were positively highlighted. The virtual lessons represent an extremely welcome addition to the lessons requiring physical presence.

Each semester the SSM is limited to a maximum number of 12 students. Lessons are held partly for the entire group, but partly also in small groups of 2-4 students. This small group lessons, especially in the outpatient departments of the individual teachers, are particularly well received. There is a desire for additional training sessions in the outpatient departments, which is often difficult to achieve with regard to the patient care.

The feedback from the teachers confirmed the high motivation and excellent performance of the students.

Discussion:

Special study modules provide a welcome diversification from the routine modules of the curriculum of medicine. They allow students a free choice according to their area of interest and thus a more thorough study of sub-areas and special medical topics, which sometimes can hardly be considered in the main curriculum for various reasons. The interdisciplinary approach, combined with well-organized small group lessons has the agreement of students and enables high-quality teaching, that brings the students and teachers joy alike.

Poster 16

Interdisciplinary teaching and small group lessons within the special study module - “Connective tissue diseases, diagnosis and treatment.” of the curriculum of medicine at the Medical University of Graz.

Dieter Franz Rabensteiner[1], Jasmin Wagner[2], Andreas Borkenstein[1], Jutta Horwath-Winter[1], Martin Weger[1], Andrea Heidinger[1], Eduard Paschke[3], Joachim Greilberger[4] Barbara Obermayer-Pietsch[5], Tatjana Stojakovic[6], Elisabeth Aberer[7], Otto Schmut[1], Josef Smolle[8]

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Medical University of Graz

Video-Feedback in Teaching Doctor-Patient-Communication at the Medical University of Graz

Peter Michael Rohrer [(1)], Michael Trapp [(1)], Eva-Maria Trapp [(1)], Nina Hörlesberger [(1)], Josef Wilhelm Egger [(1)]

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Throughout therapeutic processes the doctor-patient-relationship and the verbal, nonverbal and situational aspects are of utmost importance. Training of communicational skills needed for gathering valid and reliable diagnostic information on physical, psychological and eco-social levels (according to the enhanced Biopsychosocial Model) is embedded in the curriculum for human medicine at the Medical University of Graz [1].

Within the course CSR (Communication / Supervision / Reflection) students simulate doctor-patient-communication in order to practice basic rules for professional medical conversation [2]. The sessions are video-taped for subsequent analysis.

Video-feedback is a tool to modify insufficiencies and to reduce difficulties in doctor-patient-interaction and turns out to be an effective, practicable method. As a part of training communication skills video-feedback is appreciated by tutors as well as students. Concerning the acquired advancement in appropriate collection of valid and reliable diagnostic information and the improvement of conversational skills of medical students the required technical and personal effort is considered to be admissible [3-5].

Figure 1.
Discussing a video-taped simulation of doctor-patient-communication

References

[1] Egger J. Das biopsychosoziale Krankheitsmodell - Grundzüge eines wissenschaftlich begründeten ganzheitlichen Verständnisses von Krankheit. Psychologische Medizin. 2005;16(2):3-12.
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[3] Kopecky-Wenzel M, Reiner F. A video based training in communication skills for physicians. Prax Kinderpsychol Kinderpsychiatr. 2010;59(3):207-23.
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17th Graz Conference on Medical Education
Teaching Medical Skills
Vienna, April 4 -6, 2013

Poster 17

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[2] MUG. Track KSR - Kommunikation/ Supervision/ Reflexion. `https://online.medunigraz.at/mug_online/webnav.navigate_to?corg=16033`

CAM Education and CAM Research - Austria's 1st National Survey*

Hedda Sützl-Klein[1], Slavica Mladen[1], Gerald Pohler[1], Michaela Kaplaner[1], Ulrike Bruckner[1,2], Manuela Ried-Keita[1], Michael Frass[3,4], Wilhelm Mosgöller[3], Erich Stumptner[5]

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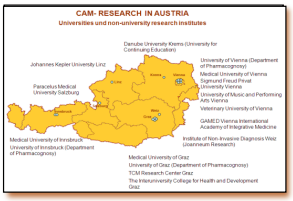
History:
The first national survey on the status of CAM research in Austria, was carried out by ESIHR and ordered by the Federal Ministry of Science. We recorded
▪research topics and
▪research priorities from point of views of CAM researchers
▪financial needs.

Methods used:
•questionnaire
•sent to about 200 researchers, institutions and practitioners known to be interested in CAM research.
•122 researchers answered and returned the questionnaire.

Main results:
•Inventory of CAM research fields in Austria
•the need for support by public funding.
We showed the
•importance of CAM research in Austria's universities, non-university research institutions, and in particular for medical practitioners
•high significance of Austrian research regarding medicinal plants (Pharmacognosy, Phytotherapy) and natural products in the regional and international research areas
•diversity of traditional and modern healing practices and the continuing further development of CAM methods for health promotion, preventive healthcare, for preventive and curative medicine and rehabilitation.

Conclusions:
Because CAM research offers the opportunity to improve health services, CAM researchers should be funded by public sources. Furthermore, we suggest network activities, which can stimulate partnerships and sustainably promote CAM research.

Outlook:
To integrate the currently scattered researchers in a research community, and to provide a long term perspective as well, we suggest installing a national coordination and contact point in order to
• actively promote networking
• constitute a national research platform
• serve as an international contact point
• promote public awareness
• promote public health



The main CAM research institutions are located in Vienna and other university cities.

Health Market in Austria:

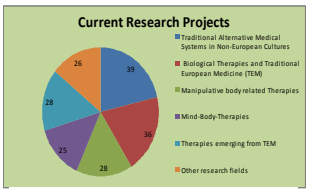
Consumers demand for CAM:
Karmasin Study 2011: „Complementary Medicine" (Representative poll, n=1,000; > 14 years)
www.ganzheitsmed.at
Results:
Consumers are interested in CAM provided by their medical doctors:
-highest preference: herbal treatment: 73%

Consumers use at least sometimes:
•Home remedies (specific food, teas, packing, baths etc.): 70%
•Herbal medicine: 54%
•Homeopathy: 44%

CAM provision in Austria:
16 Medical Societies of the Austrian Umbrella Association of Doctors for Holistic Medicine, (AUADHM) provide CAM: www.ganzheitsmed.at

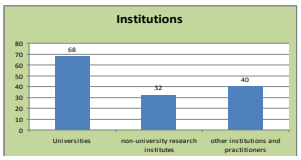
Postgraduate CAM education for medical doctors:
- AUADHM and Chamber of Medical Doctors
- Viennese International Academy of Integrative Medicine
- Donau University of Krems

CAM knowledge integrated in medical education:
e.g.: Medical University of Vienna: LINE-project; Interdisciplinary patients' management in addition, elective courses for principles and practice of CAM methods, as well as for homeopathy.



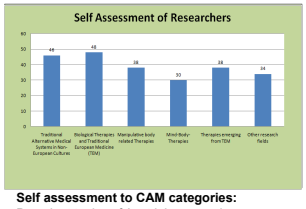
Current Research Projects in 5 categories.

Austrian researchers have a focus on Traditional and innovative European CAM methods.



Research affiliations (multiple choices were possible): 56% of the CAM researchers (68) are employees of **universities**.
32 persons work in specialized **non-university** research institutions, 40 in **hospitals or in private** practices.
75 of the 122 respondents work in Vienna.

Prioritized research topics:
The CAM researchers stated the importance of research topics concerning
- Traditional Alternative Medical Systems from non-European Cultures (like TCM, Ayurveda) and for
- Biological therapies and Traditional European Medicine (like herbal medicine and Hydro-therapies) as well as
- new therapies emerging from TEM (like Homeopathy, Anthroposophy, Heart-Rate-Variability-Diagnosis or Biofeedback).



Self assessment to CAM categories:
Prevalent topics of Austria's researchers are:
•Traditional European Medicine with medicinal plants and herbs, Hydrotherapy and other biological therapies, Pharmacognosy
•Traditional Non-European Medicines: TCM, Acupuncture, Ayurveda, TTM (Tibet), Kampo
•Manipulative Body Related Therapies and Mind-Body-Therapies, mind based therapies
•Music Therapy
•Homeopathy
•Osteopathy
•Chronomedicine and Biofeedback.

* The survey was supported by the Austrian Ministry for Science and Research.

Poster 18

CAM Research in Austria: The 1st National Survey* and CAM Education

Hedda Sützl-Klein[1], Slavica Mladen[1], Gerald Pohler[1], Michaela Kaplaner[1], Ulrike Bruckner[1,2], Manuela Ried-Keita[1], Michael Frass[3,4], Wilhelm Mosgöller[3], Erich Stumptner[5]

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History: The first national survey on the status of CAM research in Austria was carried out by ESIHR and ordered by the Federal Ministry of Science. We recorded research topics and research priorities from point of views of CAM researchers as well as financial needs.

Methods used: A questionnaire war sent to about 200 researchers, institutions and practitioners known to be interested in CAM research.

Main results: 122 searchers answered and returned the questionnaire. We raised an inventory of CAM research fields in Austria and documented the research priorities from researchers point of view. We showed the importance of CAM research in Austria's universities, non-university research institutions, and in particular for medical practitioners high significance of Austrian research regarding medicinal plants (Pharmacognosy, Phytotherapy) and natural products in the regional and international research areas diversity of traditional and modern healing practices and the continuing further development of CAM methods for health promotion, preventive healthcare, for preventive and curative medicine and rehabilitation.

In Austria 16 Medical Societies of the Austrian Umbrella Association of Doctors for Holistic Medicine provide Complementary Medicine. The demand and interest of consumers regarding Complementary Medicine in Austria is documented in the Karmasin Study 2011 regarding „Complementary Medicine" (Karmasinstudie Motivforschung CM, see: http://www.ganzheitsmed.at/). This representative poll (n=1,000 persons > 14 years) revealed that consumers are (very) interested in CAM provided by their medical doctors. The highest preference was stated for herbal treatment (73% of the interviews persons). Postgraduate CAM education for medical doctors in Austria is provided by Medical Doctors Associations, at Universities and at the Viennese International Academy of Integrative Medicine. At the Medical University of Vienna for example lessons on CAM are also included in the medical education (LINE-project; elective courses).

Conclusion: Because of consumers' and patients' demand for CAM medical doctors should know important CAM methods and CAM research should be supported by public funding.

How to Teach Biosignalling from Basics to Clinical Applications in a Modular Way?

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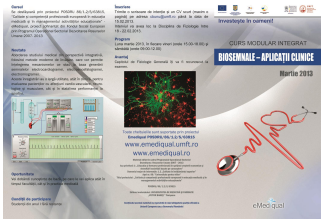
BACKGROUND



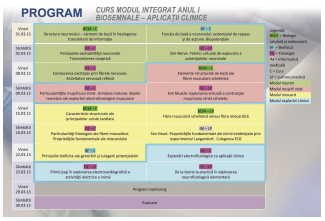
- The module was conceived as a four week programme, organised in two sessions:
  - ✓ March 2013;
  - ✓ April 2013.

BUILDING A NEW CURRICULUM

- Victor Babes University of Medicine and Pharmacy Timisoara develops an integrated teaching approach for the undergraduate medical students.
- In order to evaluate the impact of the new teaching system, a pilot study comprising three modular courses was initiated:
  - ✓ Basic Clinical Abilities (March-April 2013);
  - ✓ Clinical Anatomy (March 2013);
  - ✓ **Biosignals-Clinical Applications** (2 sessions: March 2013 and April 2013, respectively).

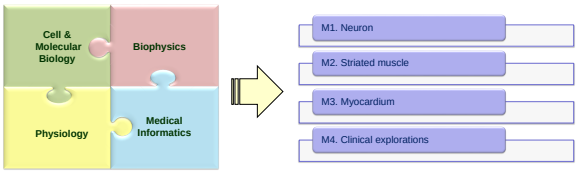
AIM

- *Biosignals – Clinical Applications* integrated modular course is addressed to the first year medical students, with the aim to assess whether a modular medical curriculum would fit students' needs.
- Besides the novelty of learning in a modular way, the students benefit also of different methods of teaching, which are not applied in the regular lectures.



- There are four modules comprising:
  - ✓ 20 hours of academic lectures;
  - ✓ 12 hours of practical applications;
  - ✓ 4 hours of mentoring
  - ✓ 4 hours of evaluation (MCQ and modular course evaluation).

MODULAR COURSE DESIGN



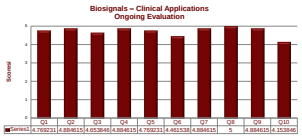
- The theme was chosen so that to cover subjects taught in the first year of studies:
  - ✓ Physiology
  - ✓ Cellular and Molecular Biology
  - ✓ Biophysics
  - ✓ Medical Informatics.
- Information regarding pathological changes is also given, strictly linked to the theory taught in the first year.
- M1, M2 & M3:
  - ✓ Neuron/striated muscle/myocardium structure
  - ✓ Neuron/striated muscle/myocardium function
  - ✓ Neuron/striated muscle/myocardium pathological aspects
- M4:
  - ✓ Function simulations - neuron/striated muscle/myocardium
  - ✓ Clinical explorations - neuron/striated muscle/myocardium

STUDENTS

- Thirty students enrolled in the 1st year of studies were selected (out of 60 candidates) for the first session of the course based on a letter of intent and an interview.
- In order to ensure both objectivity and transparency of the selection process, all the students had to answer at the interview five questions, as follows:
  1. Why do you want to participate in this course?
  2. Do you know what a biosignal is?
  3. Do you know what a modular curriculum is?
  4. Have you ever used the Internet to learn? How?
  5. What are your expectations from this course?
- Each answer was appreciated on a scale ranging from 1 to 5, where 5 was the highest grade, and 1 the lowest.
- The average of the five grades was then calculated for each student, thus obtaining the final ranking.

ONGOING EVALUATION OF THE MODULAR COURSE

- At the end of the first two modules, an ongoing evaluation of the modular course was carried out, in order to find out the students' perspective at the time.
- A questionnaire with ten questions was applied.
- The answer scale was 1 – 5, where 5 = strongly agree.
- The analysis of students' answers showed a good level of satisfaction (score range: 4.15 – 5.00) at the middle of the modular course.



QUESTIONS

1. The lectures answer my needs and expectations.
2. The lectures are effective.
3. The workshops clearly illustrate the theoretical concepts.
4. The lectures and the workshops are well structured.
5. The modular course objectives are clear.
6. The teaching methods fit the module objectives.
7. The MCQ are helpful for the better understanding of theory.
8. The use of clickers is useful for self-evaluation.
9. I would recommend this module to my colleagues.
10. I prefer the modular curriculum to the traditional one.

CONCLUSION

- As a new method of teaching and instant evaluation of the students understanding regarding lectures content, we have used the SMART Notebook programme with the Smart Response PE interactive response system.
- This has proved to be a very useful tool, as shown by students' responses to the question 8 in the Ongoing Evaluation Questionnaire regarding the usefulness of clickers for self-evaluation :
  - ✓ All the students have chosen answer 5 (strongly agree).

- It is too early to reach to a final conclusion regarding this particular modular course, but we can surely say the signals so far are very positive, as shown by students' answers to question 10 in the Ongoing Evaluation Questionnaire:
  - ✓ 73% of the students have chosen answer 5 (strongly agree) to the question asking whether they prefer the modular curriculum.
- The preliminary conclusion about this modular course is that this way of teaching has the potential to improve the quality of both teaching and learning processes.

The great gain of this particular experience for the **students is that they are now able to compare the modular against the traditional education,** as they study the same subjects in both ways.

Acknowledgement: POSDRU /86/ 1.2/ S/ 63815

Poster 19

How to Teach Biosignalling from Basics to Clinical Applications in a Modular Way?

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Victor Babes University of Medicine and Pharmacy Timisoara develops an integrated teaching approach for the undergraduate medical students. In order to evaluate the impact of the new teaching system, a pilot study comprising three modules was initiated. One of them is Biosignals-Clinical Applications integrated modular course, addressed to the first year medical students, with the aim to assess whether a modular medical curriculum would fit students' needs.

The module was conceived as a four week programme, organised in two sessions: one in March and the second in April 2013. The theme was chosen so that to cover subjects thought in the first year of studies: Physiology, Cellular and Molecular Biology, Biophysics and Medical Informatics. Information regarding pathological changes is also given, strictly linked to the theory taught in the first year. There are four modules comprising 20 hours of academic lectures and 12 hours of practical applications, with the last two days of the modular course being dedicated to mentoring and evaluation, respectively. The modules are:

1. Neuron
2. Striated muscle
3. Myocardium
4. Clinical exploration

Besides the novelty of learning in a modular way, the students benefit also of different methods of teaching, which are not applied in the regular lectures, such as the use of SMART Notebook programme and of the Smart Response PE interactive response system.

Thirty students enrolled in the 1st year of studies were selected (out of 60 candidates) for the first session of the course based on a letter of intent and an interview. In order to ensure both objectivity and transparency of the selection process, all the students had to answer at the interview five questions, as follows:

1. Why do you want to participate in this course?
2. Do you know what a biosignal is?
3. Do you know what a modular curriculum is?
4. Have you ever used the Internet to learn? How?
5. What are your expectations from this course?

Each answer was appreciated on a scale ranging from 1 to 5, where 5 was the highest grade, and 1 the lowest. The average of the five grades was then calculated for each student, thus obtaining the final ranking.

At the end of the first two modules, an ongoing evaluation of the modular course was carried out, in order to find out the students' perspective at the time. A questionnaire with ten questions was applied. The analysis of students' answers showed a good level of satisfaction (score range: 4.15 – 5.00) at the middle of the modular course.

The preliminary conclusion about this modular course is that this way of teaching has the potential to improve the quality of both teaching and learning processes. But the great gain of this particular experience for the students is that they are now able to compare the modular against the traditional education, as they study the same subjects in both ways.

Acknowledgement: The modular course and this poster were supported by the POSDRU /86/1.2/S/63815 project.

Medical University of Graz

AN INDIVIDUAL APPROACH OF TEACHING: MENTORING AND TRAINING FOR TUTORS AT THE MEDICAL UNIVERSITY OF GRAZ

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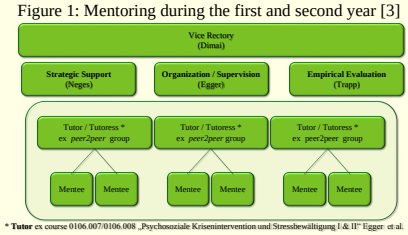
The Medical University of Graz supports its students with multidimensional projects in order to focus on personality development: the mentoring program [1, 2], a widely used tool in medical education represents an important part that aims to enable ongoing physicians to learn about the professional environment they are becoming a part of. During the first two years of studies "junior mentors" provide a peer to peer support for their colleagues. These tutors (junior mentors) are trained in special courses that aim to focus on social demands (stressful life events, interprofessional conflicts, etc.) that are requested in their future work routine [3].

Figure 1: Mentoring during the first and second year [3]



After their participation in the course "psychosocial crisis intervention and stress-coping" - provided by the Teaching Unit "Communication / Supervision / Reflection (CSR)" the tutors are supported in their work by 5 professional medical psychologists and psychotherapists. These supporting systems are combined with the MUG-helpline *"students help students"* that aims to enhance the students' individual stress coping strategies in case of problems [4]. Thus the MUG focuses on multidimensional skills training in order to foster "self-reflection" and individual personality development.

Figure 2: Multidimensional soft skills training and mentoring system at the Medical University of Graz

References:
[1] Medizinische Universität Graz: http://www.meduni-graz.at/16737
[2] Egger, J.W. & Reibnegger, G. (2011). Das Mentoring-Programm der Medizinischen Universität Graz. Psychologische Medizin. 22, 1, 49-54.
[3] Michael Trapp & Josef W. Egger (2011). The mentoring-program for supporting students of the medical university of Graz. 15th Graz Conference - Quality of Teaching 2011 - Teaching and Learning - Expanding our Resources
[4] Josef W. Egger, Michael Trapp & Eva Egger-Zeidner (2011). Students help students – peer to peer helpline & mentoring at the medical university of Graz. EAIE - FEDORA Summer University, Ioannina, Greece.

Poster 20

An individual approach of teaching: mentoring and training for tutors at the medical university of Graz

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[4] Josef W. Egger, Michael Trapp & Eva Egger-Zeidner (2011). Students help students – peer to peer helpline & mentoring at the medical university of Graz. EAIE - FEDORA Summer University, Ioannina, Greece.

How do medical undergraduates infer a self-judgment when practicing information gathering with simulated patients?

Michaela Wagner-Menghin[1], Jan van Dalen[2], Jeroen van Merrienboer[2], Anique der Bruin[2]

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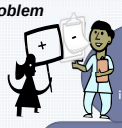
Overview of the project:

Can we improve medical students' ability to identify strengths and weaknesses in communicating with patients through self-reflection?

Problem



Students' weakness in self-judging performance impacts learning negatively.

This is a problem when learning to communicate with patients, as the majority of practice is done in a self-directed fashion in suitable practice settings.

Although research provides ideas on improving self-judgment accuracy, getting a clear picture on what might work and how and why for self-judging communication performance is currently not possible.

→ Studies in the context of practicing communicating with patients are rare or missing.

Research questions for upcoming studies

- → How do medical undergraduates infer a self-judgment when practicing information gathering with simulated patients?
- → To what extent are self-judgments accurate as compared by an external judgment?
- → How and to what extent can self-judgment's accuracy be influenced?

Relevance

- → Knowing more about the cognitive processes of self-judgment will help to inform changes in teaching how to practice to communicate with patients.

The current study:

Purpose

Refine a cognitive model of inferring metacognitive-judgments[1] and translate it into the field of learning to communicate with patients (Fig 1)

Methodology

Data Collection: students elaborate in writing how they infer metacognitive judgments (satisfaction-with-performance-judgments) when practicing information gathering for a high stakes practical clinical clerkship entry exam

Sampling: 20 students (stratified purposeful sampling, informationally representative) provided judgments on 67 self-selected communication sequences

Data Analysis - coding and constant comparison

- *Identifying incidents:* The 67 statements accompanying the self-judgments were searched for expressions with a special syntax or juxtaposition (Fig 2).
- *Identifying and assigning codes:* informed by cognitive model on inferring self-judgments[1] and the expanded framework for communicating with patients; (Fig 2).

Results

Domain specific knowledge and beliefs as well as *objective behaviour* were easy to identify with the definition given by the cognitive model (Fig 3). The definition for identifying *subjective feelings* had to be adapted and expanded during coding to allow more precise coding of statements reporting how behaviour was perceived, but without explicit references to this behaviour → summarized behaviour (see Fig. 2).

Conclusion

Students self-judging their performance in practicing information gathering use similar processes as defined by the cognitive model on inferring metacognitive judgments.

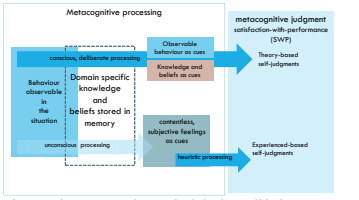


Fig 1: Koriat, 1997; pathways for inferring self-judgments

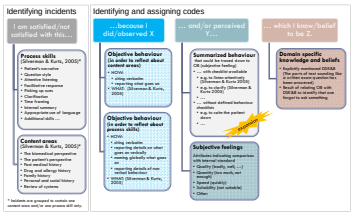
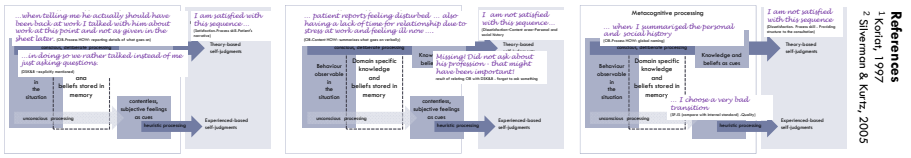


Fig 2: identifying incidents "I am satisfied/not satisfied with this because I did/observed and/or perceived Y which I know/belief to be Z"; identifying and assigning codes



Example for theory-based judgment on process skill; G2006(A2), P58(I1)

Example for theory-based judgment on content area; G1001(A2), P17(I1)

Example for (mainly) experienced-based judgment; G104 (A3), P9(I1)

Fig 3: examples for incidents and codes

References

1 Koriat, 1997
2 Silverman & Kurtz, 2005

Poster 21

How do medical undergraduates infer a self-judgment when practicing information gathering with simulated patients?

Michaela Wagner-Menghin[1], Jan van Dalen[2], Jeroen van Merrienboer[2], Anique der Bruin[2]

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Students' weakness in self-judging performance impacts learning negatively. This is a problem when learning to communicate with patients, as the majority of practice is done in a self-directed fashion in suitable practice settings. Lacking structured feedback there increases the importance of accurate self-judgment. Although research provides ideas on improving self-judgment accuracy, getting a clear picture on what might work and how and why for self-judging communication performance is currently not possible. Thus the purpose of this study is to refine a cognitive model of inferring metacognitive-judgments and translate it into the field of learning to communicate with patients.

Therefore we had students elaborate in writing, how they infer metacognitive judgments (satisfaction-with-performance-judgments) when practicing information gathering for a high stakes practical clinical clerkship entry exam. On this data we use coding and constant comparison to refine and translate the cognitive model of inferring metacognitive judgments into the field of learning to communicate with patients. Adjunct to these qualitative techniques we quantify the narrative material to provide frequencies and descriptive statistics on the model's categories to review our generalizations and to justify our impressions on the data.

The value of the study lies in broadening our view on how communication training is put in practice when practicing communicating with simulated patients and in advancing our understanding of the self-judgment process thus potentially informing teaching in the communication domain.

Maintaining Quality in Light of Increased Quantity

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Introduction

In academic year 2010/2011, we started an elective subject (ES) on clinical skills training (CST) for year-3 medical students. In 2012/2013, we incorporated some components of the ES into the obligatory Internal medicine subject. Selected CST (history taking and clinical examinations) followed by an objective structured clinical examination (OSCE) became obligatory for all year-3 medical students before attending their clinical practice at wards. CSTs were run almost exclusively by peer tutors (PTs).

We wondered if obligatory nature of CST and greater number of students involved affected students' satisfaction with the execution. Research question: **Is there a significant difference between year-3 medical students'perception of CST in 2011/2012 versus 2012/2013?**

Method

We gave identical questionnaires to medical students in year 2011/2012 (N=40) and in 2012/2013 (N=64). Response rates were 82.5 % and 90.6 %, respectively. Students evaluated different aspects of CST on the scale from -2 to +2. They also answered some closed-type questions. Results were analysed using independent samples T-test.

Results

All the variables point to at least substantial satisfaction with the CST in both years. There is no significant difference in any of the feedback variables (Table 1). This year, we had greater number of students who believe that initial lack of their theoretical knowledge influenced their CST (p=0.001). There is no difference in number of students who believe that OSCE is an objective evaluation method and who would like to become PTs next year.

Table 1: Evaluation of different aspects of CST on a scale from -2 to +2.

Variable	2011/2012	2012/2013	p-value
Organization	1.88	1.72	0.11
Quality of Execution	1.85	1.88	0.68
Interestingness	1.73	1.86	0.12
Usefulness	1.91	1.91	0.95
Work of PTs	1.82	1.93	0.14
Competency of PTs	1.79	1.88	0.25
Acquiring competences for work with patients	1.06	1.03	0.88

Conclusions

The obligatory nature of CST and increased number of students does not seem to affect general satisfaction with the training. However, students' lack of theoretical knowledge has to be taken into account. Correlation of topics covered in lectures and in CST is difficult to achieve in practice, but short theoretical introductions before CST could be feasible and make students' work a bit easier.

Take home message

Quality of execution of obligatory CST did not diminish due to increased number of students involved in the teaching process as measured by students' perception.

Poster 22

Maintaining Quality in Light of Increased Quantity

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