



Program & Abstracts

Bridging the Gap -
Venturing into the Unknown

11.-13. September 2019

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Prof. Dr. Urs Brügger
Head of Department
Health Professions,
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Sciences

Welcome

Simulation-based training for healthcare professionals relies on a broad spectrum of methods: Both traditional, established approaches such as standardised patient simulation, and newer ones such as virtual reality are used.

In any case, simulation is a powerful training and learning method which shapes the technique of health professionals like hardly any other: In the 1980s, the French sociologist called Jean Baudrillard said: “Simulation is not only a representation or even a falsification of reality. Simulation rather anticipates reality”. A physiotherapy student puts what she has learned with simulation-based training into practice. The simulation is imprinted in her head.

In order to continue to improve patient treatment and increase the quality of care, we must come to grips with simulation in all its forms, and its potential and limitations in the training and further education of health professionals. This is precisely what we will be doing at this year's SPSIM conference. Keynote lectures will be delivered in the “K-OSCE” format, allowing direct exchange with the speakers.

We hope that you will take away new inputs for simulation-based learning and teaching.

Prof. Dr. Urs Brügger

Location & How to Find Us

BFH Health Professions is perfectly situated and well connected at **Murtenstrasse 10, 3008 Bern**.

Arriving by public transport

You can get here from Bern central station in five minutes with bus no. 11 towards Holligen, alighting at 'Inselplatz', or with the PostAuto (route 101) alighting at 'Inselplatz'.

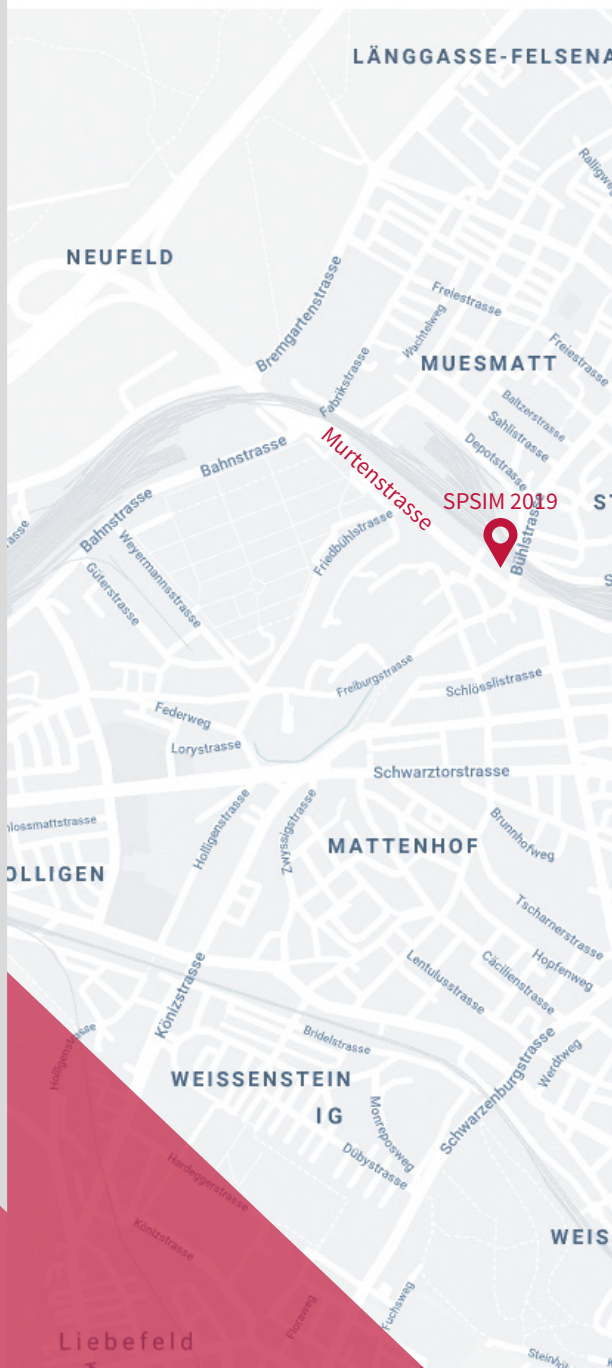
By foot, it will take you about 10 minutes via the railway station walkway (Schanzenstrasse) along Stadtbachstrasse.

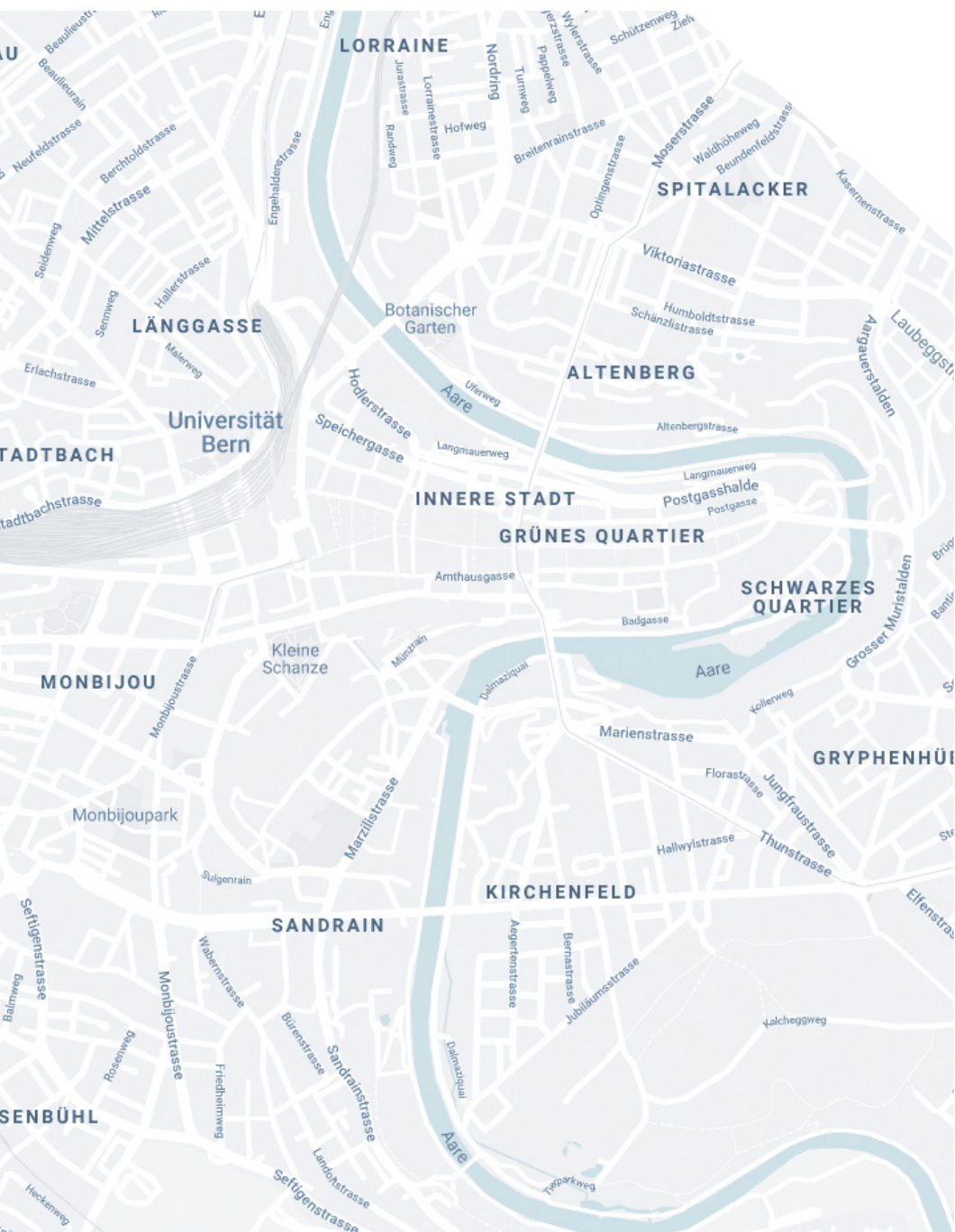
Arriving by car

See Google Maps for itinerary to Murtenstrasse 10, 3008 Bern.

At Murtenstrasse 10, 3008 Bern there is a parking garage available. A day ticket costs up to CHF 35.

The parking garage at Murtenstrasse 10, 3008 Bern is located after 800 meters from the slip road "Bern-Forsthaus/Inselspital".







Bern – UNESCO World Heritage

What to do in Bern



House of Parliament, Parliament Square & Water Fountains

The Parliament Building houses the Swiss Parliament. The Swiss federal government has its headquarters in this impressive structure where the National Council and Council of States convene for regular sessions four times a year. Parliament Square is the site of official receptions, political rallies, cultural events and numerous sporting events.



Zytglogge (Clock Tower)

Bern's typical streets, lanes and buildings have exciting stories to tell, and in the midst of them all in the Old Town one of the city's best-known landmarks stands high above the rest: the Zytglogge (Clock Tower). Once a city gate, the Clock Tower now attracts spectators from all over the world.



The Rose Garden

The Rose Garden is one of Bern's most beautiful parks, offering an unrivaled view of the Old Town and Aare Loop. When the weather is clear, the view extends far beyond the city. Not only is the Rose Garden a welcoming recreational area, it's also a popular spot for taking memorable photos.



Bern Animal Park, BearPark

The Bern Animal Park, BearPark is home to Finn, Björk, and their daughter Ursina. The animals have been living in the new park along the bank of Aare since 2009. The new Bern Animal Park, BearPark provides a landscape where the brown bears can climb, fish and play, but also just retreat and relax.



Gurten - Bern's Local Mountain

The Gurten is Bern's local mountain. It stands at 860 meters over sea level and can be accessed by train or by foot. The mountaintop offers a fantastic view across the entire city of Bern. The view extends even further from the Gurten's observation tower.

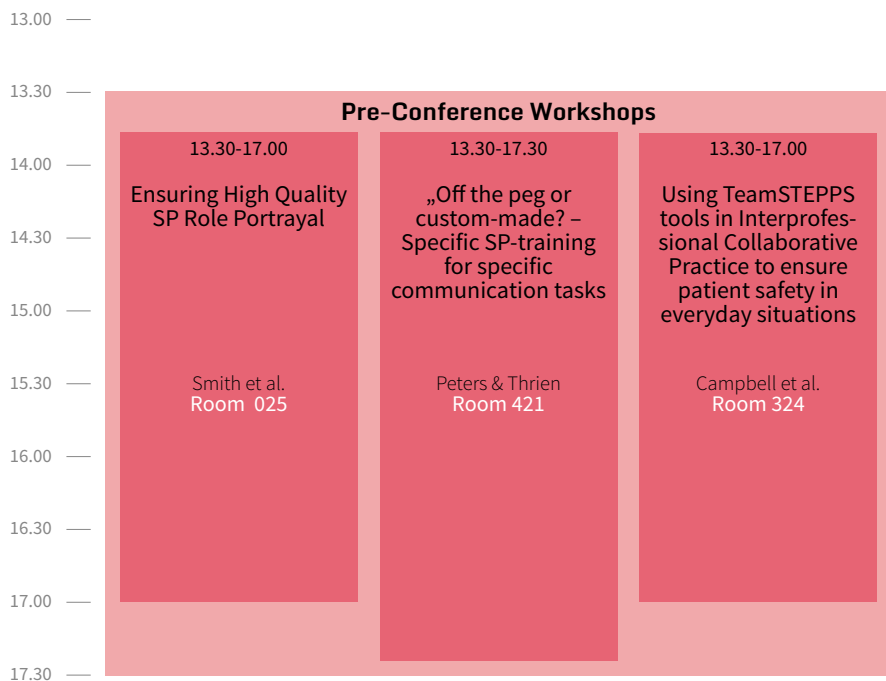


Program

Pre-Conference Workshops
& Conference Days

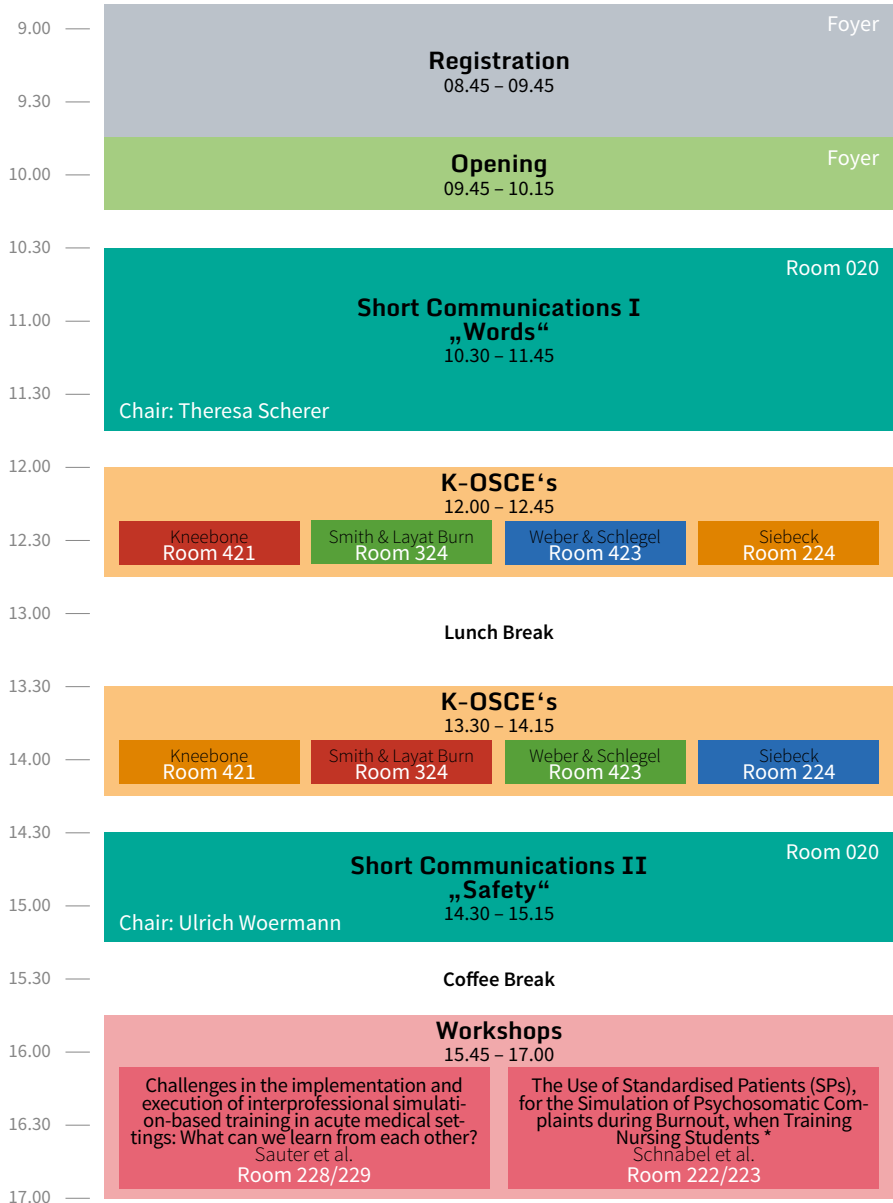
Pre-Conference Workshops

Wednesday, 11. September 2019



1st Conference Day

Thursday, 12. September 2019

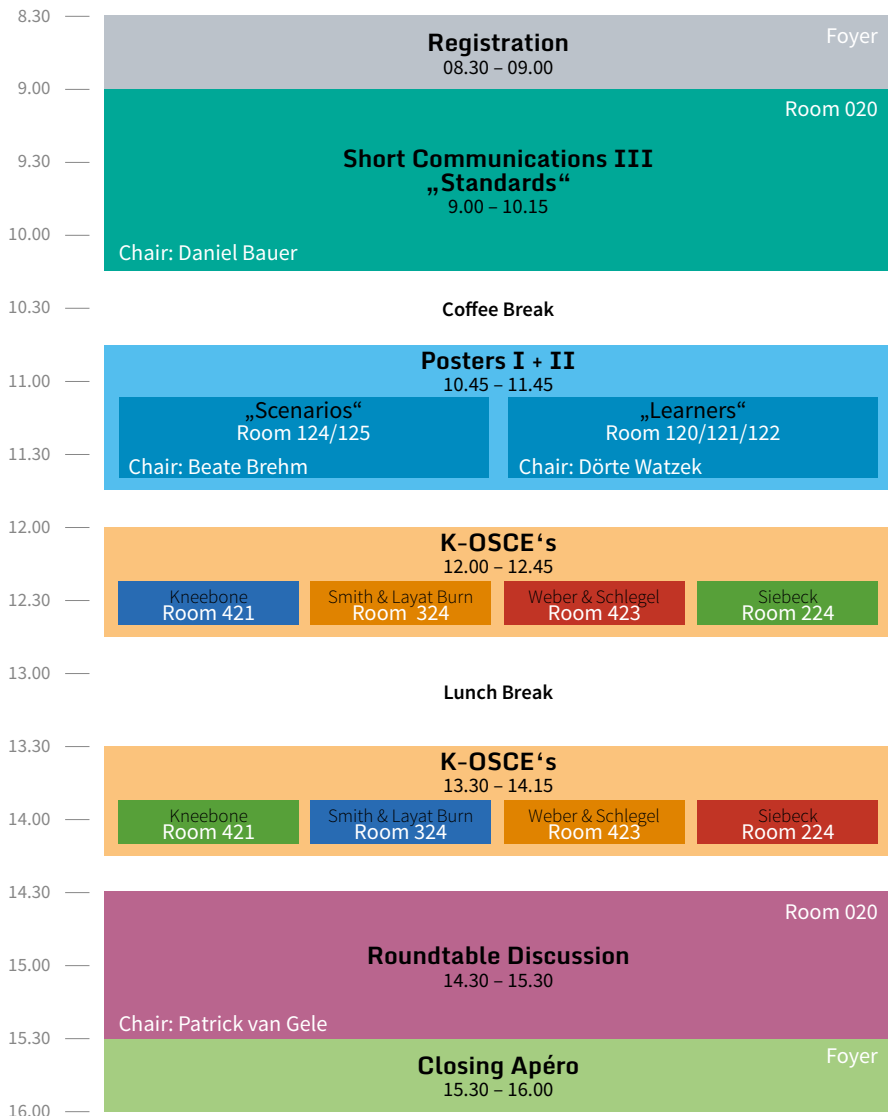


* This workshop will be held in German.

Start of Social Program: 17.30h Site Visit BiSS | 18.15h Conference Dinner (see p. 12 + 13)

2nd Conference Day

Friday, 13. September 2019



Conference Dinner

The Conference Dinner will be held at “Restaurant zum Schloss”, which is located at **Muhlernstrasse 9, 3098 Köniz**.

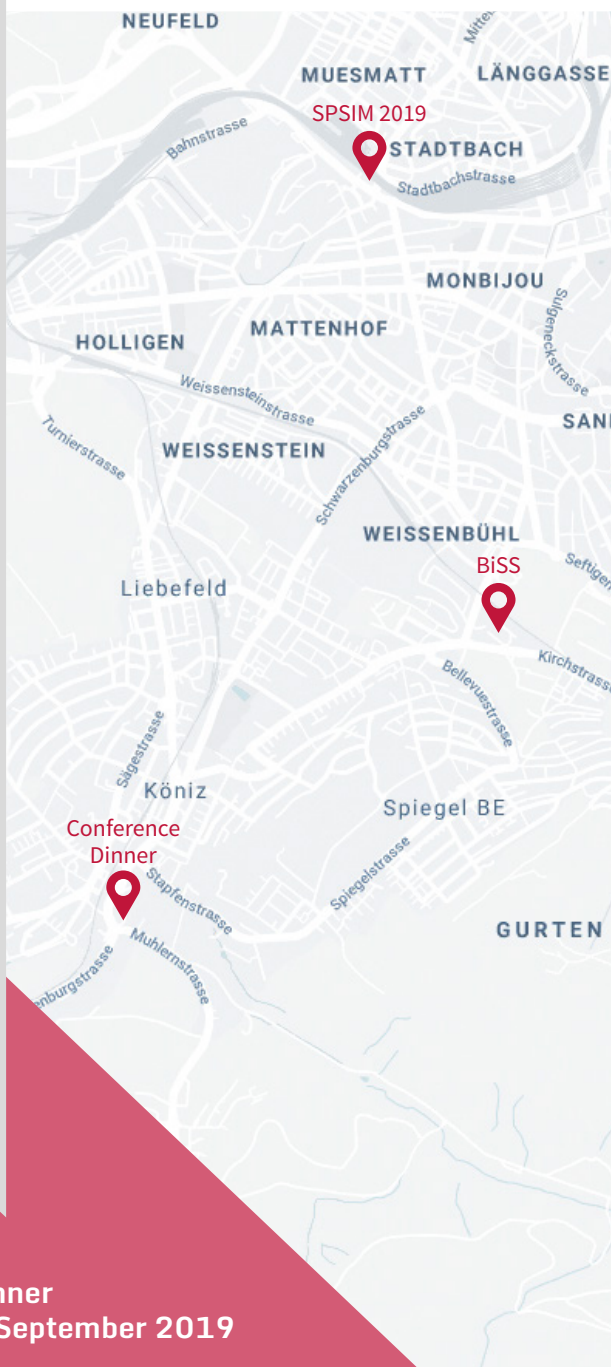
Situated near the Restaurant Schloss Köniz is the pretty Bern School Museum. During the Apéro we will get a short introduction in the ancient world of Bernese schools.

How to get there by public transport

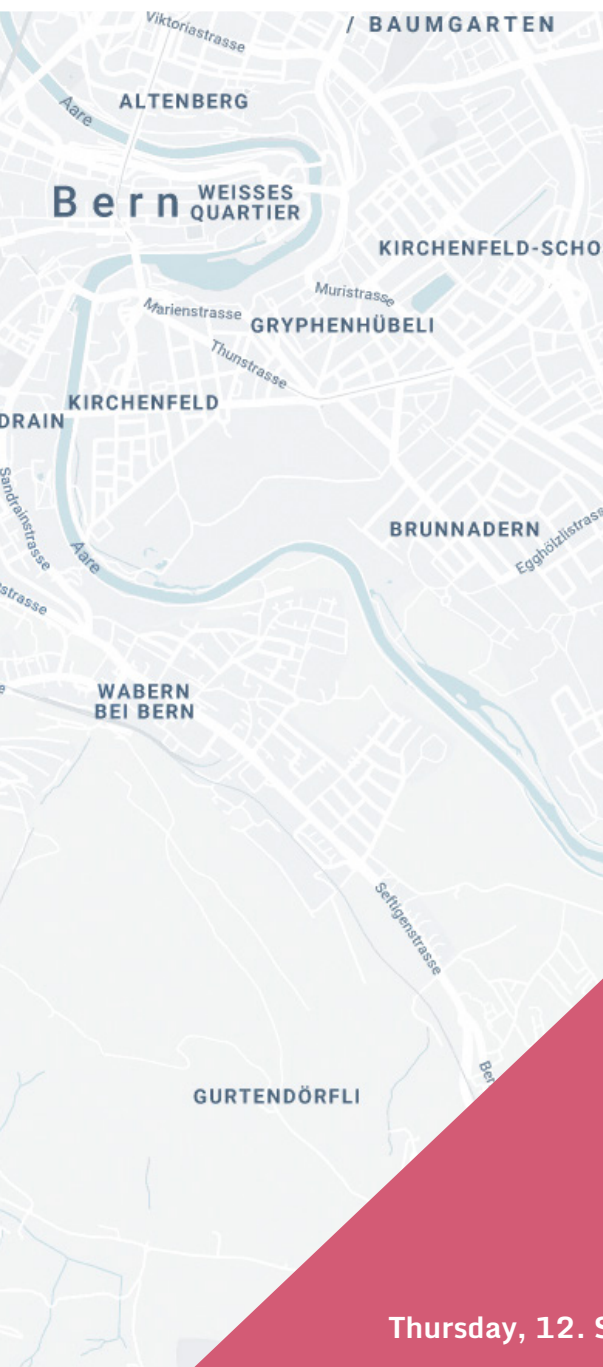
Starting at Murtenstrasse 10, 3008 Bern:

1st possibility: walk to Eigerplatz (approximately 12 minutes, 900 meters) and then catch Bus Nr. 10 in direction to “Schliern, Bus-Endstation” and get off at the station “Köniz, Schloss”.

2nd possibility: catch Bus Nr. 11 from Inselplatz (on the other side of Murtenstrasse 10) in direction of “Bern, Neufeld P+R” and get off at “Bern, Bahnhof”. At “Bern, Bahnhof” get on bus Nr. 10 to “Schliern, Bus-Endstation” and get off at the station “Köniz, Schloss”.



Conference Dinner
Thursday, 12. September 2019
18.15h



BiSS

The Bernese interdisciplinary Skills and Simulated Patient Centre (BiSS: <http://biss.iml.unibe.ch>) is a facility which provides over 3 floors on more than 2500m² Space for learning and high stake skills exams with realistic simulators, a sophisticated video observation system in more than 40 fully equipped rooms. The main goals are:

- To facilitate the acquisition of practical skills
- Promote the acquisition of communicative competences, in particular also for the preparation for the federal licensing examination
- Providing the students with an independent exam preparation under realistic frame conditions
- To create an organizationally efficient structure in which various teaching and self-study events can take place.

Address:

UniZiegler, Morillonstrasse 79, 3007 Bern

Site Visit BiSS
Thursday, 12. September 2019
17.30h





General Information

Wi-Fi

Guests can use Wi-Fi «bfh-open»:

1. Connect your mobile device with Wi-Fi «bfh-open»
2. Open <https://wifi.bfh.ch> and follow the instructions

Members of other universities:

The 'eduroam' (education roaming) Wi-Fi is a secure, worldwide internet access for the international academic community. With eduroam, students and employees of the participating educational institutions (universities, colleges and other educational institutions) have free internet access. You can use the Wi-Fi infrastructure of participating institutions with the access data of the home network.

- Access with the e-mail address and password of your home educational institution.

Help needed?

BFH Servicedesk, Phone +41 31 848 48 48, servicedesk@bfh.ch

Tap Water

Swiss drinking water – a quality product from natural resources – of which 80 percent stems from natural springs and groundwater, and the rest from lakes. Strict regulations concerning water and the quality of it have led to such positive development that, in some places, you can drink straight out the lake without second thoughts! Swiss tap water also demonstrates a more balanced ecology as opposed to water purchased in bottles and mineral waters travelling from near and far.

More Information: <https://www.myswitzerland.com/en-ch/water-land-switzerland.html>

Exhibitors & Sponsors

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www.reavita.ch



SKILLQUBE GmbH
www.skillqube.com



Bronze Sponsors

Dräger Schweiz AG
www.draeger.com





K-OSCE's

What are K-OSCE's?

The SPSIM **K**ey **O**rganized **S**imulated **C**linical **E**xperience (K-OSCE) is an adaptation of small group conference formats for SPSIM. Its didactic means are direct interaction between facilitator and audience and their practical involvement. Unlike with conventional keynote talks, the K-OSCE presenters will facilitate a 45-minute hands-on simulation workshop, four times, for a fourth of the conference attendees at a time, distributed over the two days of the conference. By and by, participants will thus pass through all four stations and learn about innovative approaches to simulation, facilitated by international experts.

This way of delivering key inputs should not only enable more involvement and activation from the attendees' side but also be more rewarding for the facilitator, presenting four variations on their theme and meeting four different smaller groups, each with their own interests and questions. The scientific committee acknowledges this format also poses its own didactic challenges. We are glad to have chosen a didactic approach to the keynotes that is true to the conference motto: bridging the gap, venturing into the unknown.

Note: Please find the curriculum vitae of the keynote speakers on our homepage: www.spsim.ch

Keynote



Prof. Roger Kneebone

Professor of Surgical Education and Engagement Science

Faculty of Medicine, Department of Surgery & Cancer, Imperial College London

Minimally Expensive Simulation

This workshop will introduce the concept of low-cost simulation using everyday materials. The session invites participants to consider the educational essence of the activity - what is to be simulated and for whom – rather than focusing on surface realism. Drawing on Kneebone's work with Hybrid, Distributed and Sequential Simulation, the session will frame simulation as 'selection, abstraction and representation' from one setting (such as a clinical event) to another setting (such as a teaching encounter). A range of objects costing less than 1 CHF will be available for participants to use.

Keynote



Prof. Dr. Matthias Siebeck, MME

Consultant

Department of General, Visceral and Transplantation Surgery, University Hospital, LMU Munich

Founder

Center for International Health at LMU

Facing Taboos Physical Examination Skills Teaching

Despite the widely acknowledged diagnostic relevance of the clinical examination, some areas of the physical examination remain shrouded in taboo. Subpar skills in rectal, breast or genital examination, or a reluctance to apply these skills, can unfortunately prolong the time to diagnose or submit patients to unnecessary procedures.

This keynote workshop addresses how a blended-learning program utilizing patient educator that addresses skills as much as attitudes could be successfully established in a large medical program. The program director and an SP from the course in rectal examination share first-hand impressions.

Keynote



Cathy Smith, PhD

Baycrest Healthcare Sciences, Toronto, Canada



Carine Layat Burn, PhD

Medical Centre, La Providence Hospital, Neuchâtel

Incorporating the Association for Standardized Patient Educators Standards of Best Practice (ASPE SOBP) into your simulation context

SP educators are in the midst of professionalizing, as evidenced by many initiatives, including the publication of the Association of Standardized Patient Educators (ASPE) Standards of Best Practice (SOBP) for human role players in simulation. The ASPE SOBP includes the input of experts from around the world, providing foundational guidelines that are precise and yet flexible enough to address the diverse contexts of SP practice. Using the ASPE SOBP ensures the safe and effective application of SP-based educational endeavors. These standards are designed to be used in conjunction with other standards such as INACSL's Standards of Best Practice: Simulation SM, which address broader simulation practices. This session will orient participants to the ASPE SOBP and will be structured to include the presentation of key information, large and small group discussion, and opportunities for reflection. By the end of this session, participants will be able to describe key features of the ASPE SOBP and identify areas of strength and areas for growth related to implementation of the SOBP into their current practice.

Keynote



Uwe Weber, MME

Head of Media and Education

Bern College of Higher Education of Nursing



Claudia Schlegel, PhD, MME

Head of Skillslab

Bern College of Higher Education of Nursing

Virtual Reality, a learning tool for health profession education

Virtual reality is a contemporary simulation method that is currently upgrading medical education. VR provides a 3D and dynamic view of structures and the ability of the user to interact with them. The recent technology allows the user to have a realistic and interactive experience; which enables hands-on-procedures.

In this workshop, you learn how to use the VR glasses in an educational context for health profession education. In a second step you have the possibility to experience the virtual world yourself and learn what educational settings are suitable for students in undergraduate education.



Roundtable Discussion

Simulation: Back to the Future

Healthcare innovation can be defined as the concrete application of new concepts, ideas or technologies into clinical practice to improve quality of care in a measurable way. Since more than two decades, simulation has played an increasing role in that process as a tool for education and professionalization as well as a testbed for diminishing risk and harm.

This roundtable offers a look back and forward pertaining to simulation and innovation. Major stakeholders in simulation will present, through short presentations, a contrasting view of the past and the future.

Participants will answer two major questions:

- ▶ In your simulation practice, what have you done the last years that was worthwhile and made an impact in practice?
- ▶ Looking at the future, what simulation strategy will you adopt that seems promising to you for improving practice?

The debate will offer different perspectives of innovation in simulation.

Moderator: Patrick van Gele, RN, MScNI, dean of nursing Faculty HESAV, Lausanne Switzerland



Abstracts of

- Short Communications
- Posters
- Workshops

Development of communication skills

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 Petra Metzenthin, University Psychiatric Clinics Basel, Switzerland
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Background

Communication is a core competence for nurses¹. Therefore, the curriculum in the Bachelor of Science in Nursing at Bern University of Applied Sciences (CH) is focused on the development of competences around communicative skills. Students practice intensively during the communication modules, particularly in communication training utilising standardised patients². However, it is unknown how effective this training is for students and how well their competences are developed.

Research question

How do former Bachelor of Science in Nursing students from the Bern University of Applied Sciences experience the development of their communicative skills in relation to the other knowledge acquired during their studies, and how do the skills developed in the course relate to communication skills acquired in their current practice?

Method

Six qualitative episodic interviews were conducted with former students. Analysis was based upon interpretative phenomenological analysis^{3,4,5}.

Results

During their studies, the participants reflected on their first training in communication utilising standardised patients. They reported that they became sensitised with this training, that it increased their knowledge and experience, and that they felt more confident about their communication skills. After graduation, role security and self-assertion were dominant within the interprofessional context. In their current nursing practice, they experienced a further development of their analytical ability in relation to self-reflection and the perception of their environment. Another change experienced was the implicit use of communicative skills. The basis for their professional development was their personality, the bachelor programme, and the communication training within the programme.

Discussion

Former students experienced and reflected upon several learning phases. These phases activated different aspects of their long-term memory^{6,7}. The communication modules were experienced as being effective over the long-term, due to the emotional components within the communication training⁸. The

important role of communication trainers was also mentioned. Participants reported that the feedback they received was enormously beneficial and it contributed to long-term retention of the training. This is because the situation becomes more tangible and concrete when the approaches are reflected upon. It can be assumed that the participants are, due to the communication-skills training, more capable of acting in future communicatively difficult situations. Additionally, the combination of theoretical aspects of communication, and communication training including reflection, shaped the development of communicative competences and their long-term retention.

Conclusion

The graduates entered into practice with a wealth of knowledge and initial experience. However, the transition between university and practice could be improved upon, especially for new graduate nurses. This study provides evidence that nurses use and reflect upon professional communication in everyday care. How the competences are applied in practice cannot be clearly evaluated. In order to close this research gap, observations in the workplace are necessary.

References

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Teaching clinical skills with Simulated Patients Instructors (SPI)

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Background

In 2018, the Medical School of Lausanne took the decision to abandon the organization of an OSCE for 2nd-year students of Bachelor. This was due to the important resources needed to set up such an exam for 240 students who had no clinical experience. At that point of their medical curriculum, they only had 2 formative encounters with SPs on history taking and 6 sessions in which they could practice physical examination in between students. This led to deceiving performances at the OSCE, as students mainly seemed to ask questions and perform physical examination learned by heart, with no clinical integration. In order to assess the physical exam competencies taught in 2nd year Bachelor, we decided to substitute formative encounters with Simulated Patients Instructors (SPI) for 2nd-year of Bachelor OSCE. We focused our intervention on 3 major domains of physical examination: neurological, cardiopulmonary and abdominal exam.

Project description

Patients were selected and instructed in each of the 3 domains: 12 men for the neurological examination, 12 women for the cardio-pulmonary examination and 12 women for abdominal examination. Based on the students' physical examination checklist, they were taught to understand the purpose of each action or gesture and feel when it was done properly. They were also instructed on how to correct the student (gesture, posture, attitude, formulation of demands). At the same time, they learned how to address critical subjects such as how to ask a woman to take off her bra in order to perform the cardiac examination, for example. For their part, students had a theoretic ex-cathedra lecture on the topic, followed by a training session where they could practice on each other with the help of a tutor ("tutor for skills", student of 2nd year of Master). The formative encounter with the SPI took part after the in-between-student training session. Students were divided in small groups (3-4 student) and spent one hour with the SPI. An expert teacher was present during the session and went from room to room, in order to answer any question and check the accuracy of the SPI training.

Outcome or expected outcome

This formative encounter is expected to give students the opportunity to learn and practice clinical examination in a safe environment. It's an opportunity to enhance their clinical skills and their confidence. They can perform a clinical examination for the first time on a patient who is able to give feedback on each gesture and help them address critical issues.

SPI can feel if the examination is done properly (if palpating is deep or not, if the strength testing is adapted. ...) and check that all the students have the opportunity to make the same test and repeat it until everyone can perform it in a correct way.

Challenges

In this new type of encounter, we are facing different challenges:

- Teaching SPs to become qualified SPIs, acknowledged by teachers and students
- Teaching students to acquire new skills, taught by several instructors (professors, faculty, more advanced students, SPIs), and accepting the fact that they are different ways to perform an examination, which is something they find very disturbing.
- Addressing critical issues and enhancing communication skills, in order to prevent any interference in the examination due to embarrassment or discomfort.

Discussion

In our setting, during 2nd year Bachelor, opportunities to practice physical examination on real persons were limited to students themselves or SPs. Up to now, we stuck to the option of students practicing on themselves under the supervision of more advanced students. This option was suboptimal as groups of 15 students for one tutor did not allow for easy individual interaction and feedback by the tutor. The tutor being a student himself can lead to an overly relaxed atmosphere that is not suitable to achieve learning objectives. Lack of resources didn't allow us to have a faculty in every room during the whole activity. SPIs allow students to practice physical examination on a patient in a more formal setting, with an individual feedback on his/her performance. The formative encounter with the SPI is a preliminary clinical experience useful for future interaction with real patients. Students are thankful of the opportunity to practice physical examination on a SPI and address topics such as of how to ask a female patient to take her bra off in order to make the cardiac auscultation in a simulated setting. SPIs enjoy their new role, which empowers them and allows them to feel part of the learning process. The faculties are collaborative as far as instructing the SPIs and participating to the project. Some reluctance comes from the student's tutors, who feel a kind of competition with SPIs and think they are more knowledgeable about physical examination than SPIs. We have to explain that the SPI encounter is a complementary activity that brings the perspective of the patient in the interaction.

Is an additional assessment of candidates by standardized patients useful in the OSCE?

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Background

Good physician communication skills seem to increase patient satisfaction and improve healing processes. Although there are indications that physicians and patients value communicative competencies differently, candidates in OSCE are often evaluated by physicians only.

Research Question

In this study, we examine whether additional assessment of candidates by standardized patients (SPs) is useful.

Methods

In the OSCE of the 5th year of study 2017 in Bern, the students were additionally assessed by the SPs on the basis of two items. The SPs were informed in advance that their assessment will be obtained for academic research only and will have no impact on the official assessment of the students. One item addressed the communicative competencies of the students: „Global communication rating“ on the scale „Extremely competent; Very competent; Competent; borderline; Not competent“. The other item addressed the SPs' loyalty to the candidates: „I would like to come back and discuss my concerns with this student.“ on the scale „Fully agree; Agree; I rather agree; Neutral; I don't agree“. In addition, the SPs had the opportunity to comment on their rating in a free-text field.

Results

In fact, the SPs rate the communicative competencies of the candidates differently than the medical examiners. Had 30% of the candidates' assessment of the candidates by the SPs been included, three times more candidates failed in the section „Anamnesis Status Management“ (10 versus 3, respectively 4.2% versus 1.3%). In addition, the consideration of the SP judgment reduced the construct irrelevant variance by one fifth (in the „Anamnesis Status Management“, section from 21.4 % to 17.3 % and in the area „Communicative Competencies“ from 39.0 % to 31.0 %). This means that the measurement error is reduced and the ratings better match the actual performance of the candidates.

The two assessments by the SPs (communication and loyalty) are closely linked ($r = 0.739$). The SPs mentioned among other things the interpersonal relation-

ship with the candidates, the flow of information and the professionalism of the candidates as important aspects for their evaluation.

Discussion and Conclusion

The results of our study argue for an additional assessment of the candidates by the SPs. However, before such an assessment is actually included in the official assessment of the candidates, we believe that it should be further explored in what the assessments by the SPs and by the medical examiners differ and who can better assess which aspects.

A history of success: facing the challenges of a bilingual standardized patient program in medical education

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In Switzerland, the official languages are four and medical school is either German or French speaking. Geographically Fribourg is situated on the border between the two languages. The medical school of the University of Fribourg has chosen to provide its curriculum in both languages: French and German. The aim of this article is to describe the process of developing its bilingual standardized patient (SP) program. The University of Fribourg offers now a Bachelor's degree in human medicine for 120 students. Because of the admissions' process policies throughout Switzerland, the majority of students studying medicine in Fribourg are native German-speaking, with only one-third of French-speaking students. The teaching of clinical skills has been using the standardized patient (SP) program as a didactic tool since 2010. Over the years and as the number of students has increased, we have perceived a linguistic issue concerning SPs and real patients in the hospital. In fact, the Fribourg population reflects its clinical reality, with almost 70% of the French-speaking population. Students face two difficulties: first, they are faced to a patient and they have to integrate the anamnesis and the communication skills within their learning process, second, they also have to struggle with a foreign language (French) to effectively communicate with the patient. This can result in a cognitive overload for the learners and a source of frustration for both learners and patients, hindering their relationship during the conversation.

For the evaluation of clinical skills in the form of Objective Structured Clinical Examination (OSCE), the students have the possibility of choosing their own language (French or German) for the exams. This means finding enough German-speaking SPs to cover the different OSCE stations. In order to answer these issues concerning the teaching of clinical skills and the examination, we adopted multiple approaches. First, decided to develop our SP program with the primary objective of recruiting and training mainly German-speaking SPs. We were able to build up a pool of German-speaking and bilingual SPs over the years, thanks to the help of bilingual SPs already involved in our program and to the contacts with other German-speaking health training centers. Second, we translated all clinical situations and most, of course, materials in both languages. Third, we have encouraged the presence of bilingual tutors during the courses of clinical competencies.

To show the benefits of our approach we have been collecting data on the students who have completed their Bachelor of Human Medicine training in Fribourg since 2009 and their linguistic choice: French, German, bilingual. We have also gathered the information regarding the number of SPs used for the third year of the Bachelor of Medicine (BMed3) clinical skills seminars and the number of SPs who have participated in OSCEs, including the language spoken, since 2010. 840 students have been participating since 2009 in the different clinical skills learning activities of the BMed3 program: 67% spoke German, 29% French and 4% were bilingual. 1739 SPs have been recruited for the clinical skills to date. As showed in Fig.1 we had no German-speaking SPs in 2009. In 2019 we were able to count on the participation of 122 German-speaking SPs (41%) and 77 bilingual (26%) to cover all the learning activities. As described in our project, it is remarkable that from 2014, the recruitment of German-speaking SPs has become very efficient and we have seen significant progress. In the academic year 2016-2017, we had the highest number of students (115 students) and this corresponds to the highest number of German-speaking SPs interventions. Regarding the OSCE, as the number of stations requiring SPs varies from year to year, we have also seen an increase in German-speaking SPs since 2015. We can say that starting from 2012; we were able to guarantee German-speaking students SPs services in their own language. As shown by the description of the process and the data presented we could face the challenge of creating a standardized patient program in French and German and to meet the changing needs of our learners. This process has taken almost ten years and it needs a constant and reiterative work of maintenance and development to adapt to the continuous changing of our students' population. Networking and collaboration with other universities and training institutions in the field of care have been central elements to facilitate the success of this project as well as the enthusiasm and the efforts of our dedicated faculty members. Now we have sufficient resources to offer clinical skills training in both French and German at the Bachelor level and we will use these precious experiences to combine our students' needs with the language competences of our SPs for the upcoming Master of Medicine Program that will begin September 2019.

The use of Medical Onomatopoeia during SP Encounters

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Introduction

Onomatopoeia is a term that comprehensively refers to „mimetic word.“ Onomatopoeia is the process of creating a word that phonetically imitates, resembles, or suggests the sound that it describes. Examples of Onomatopoeia in English include “cuckoo,” “sizzle,” “hiccup,” or “buzz”. Although a particular sound is heard similarly, by people of different cultures, it is often expressed through the use of different consonant strings in different languages.

In Asian countries, Onomatopoeia are often used to express an impression in a personal, emotional manner, and therefore considered indispensable not only conversation.

In this project, a sub-group of ASPE International Committee investigates, if Onomatopoeia, which allows to express an impression in a personal, emotional manner, exists also in other countries and cultures. As there are many different Onomatopoeia expressions in Asian countries, we focused in our investigation on the Onomatopoeia of pain.

Method

As the members of ASPE`s international committee come from different continents as Asia, Africa and Europe, the Onomatopoeia of describing pain in different countries were investigated.

Each member of the sub-group explored in his/her own cultural environment, by doing literature search and conducting interviews, if Onomatopoeia exists to express pain in their context.

Results

Onomatopoeia to express pain from different countries as Japan, Singapore, Togo and German and English speaking countries were found. In some countries as e.g. Japan, pain is expressed using many kinds of Onomatopoeia, in other countries one could find only one. The Onomatopoeia from the different countries were listed in form of a little dictionary.

Discussion/Conclusion

Medical Onomatopoeia can describe not only the quality of pain but also the degree of pain. Unders-

tanding and interpreting Onomatopoeia by patients who use Onomatopoeia is important for healthcare providers so they can understand patients and give the right treatment.

In a time where people migrate from one continent to another it is important for healthcare professionals to interpret and understand people`s concerns. Encounters between SP and student are a good opportunities to practice those skills.

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A new simulation tool for the radiology technician, a simulated based learning project description

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The aim of this study is to evaluate the best simulation based learning strategy (SBL), for first-year students in Medical Electroradiology Manipulator Training Institutes. To date, radiology technicians (i.e. radiographers, or Medical Electroradiology Manipulator) can hardly access to simulation learning during their schoolhood, which is nevertheless plebiscited in others healthcare professions. Indeed, the French High Health Authority recommends since 2012 that no care could be performed for the first time on a real patient. Nevertheless, in diagnostic radiology, it remains very difficult to purpose another kind of training and more often, students have to test their practical training for the first time during clinical internship. Even if manikins who can replace the patient do exist, they are very expensive and the access to radiological equipment remains very difficult. Therefore, most often the Medical Electroradiology Manipulator Training Institutes use radiological equipment „without X“ which have few common characteristic with the real environment.

Students' adherence to teaching then remains difficult and the link between the knowledge of the different teaching units as applied physics, photon-matter interactions, laws of radiological optics, anatomy and radiological semiopathology, very unsure. In fact, the X-ray chain cannot be mimic during the simulated based learning in standardized condition and the student cannot see by himself the result of the positioning he proposed to the simulated-patient during the role-play with another student.

Therefore, this project proposes the creation of a high-fidelity learning environment that would allow detecting with depth cameras (but no X-Ray) the positioning of a role-play patient during a simulation learning. Then, the positioning information captured will be transformed into a 2-dimensional image, equivalent to a standard radiological image, and corresponding to the positioning made by the student. It is therefore postulated that the device thus created would be more efficient than the other available methods because it would allow students to train as much as necessary to the realization of radiological protocols in an environment closer to reality, but without radiation protection issues.

SG4ER: Serious Games for Emergency Rescue

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A Serious Game for the development of professional skills in emergency management

Background

New ways of living, of organizing society, of healing but also of training are being shaped by the daily presence of digital technology. The Serious Game for Emergency Rescue or „SG4ER“ project consists in developing a Serious Game software prototype to support the case scenario of emergencies in the field of early childhood: observation, decision, relevance of information transmitted to the 144. The aim is to raise awareness, motivate and even broaden the teaching options of acute care education with a target audience, bachelor students in health care and early childhood professionals. It fits in a wide way in the field of eHealth but corresponds above all to a reflection on the contribution of the Serious Games in access to information, the improvement of the services of care and the services touching the sphere acute care. This project is therefore fully in line with the international ongoing projects in the field of engineering and health, in line with the policy of the Federal Council which has just published official report about the video games sector in Switzerland, notably by artistic, scientific and economic: „Video games. A field of cultural creation in development „(CF report of 21 March 2018).

Project Description

Patient care and monitoring can be considerably improved over time with the use of technological health devices. This project has been developed with user-centered methodologies (AGILE, Scrum). The two levels place themselves in a childcare institution. The user is driven through four different phases. The first one consists of a contextualization of the level and important data about the center location and access which include: a map of the scene, the street name, the city, the floor and entry code of the building. The user must remember this information and can look it up during his play-through. Once the user is ready, he is put at the beginning of the scene and must explore it to find what the trouble is. He can look through medical files, pick up items and realize various actions to analyze and solve the situation. At one point, the user will have to call the emergency center that will ask him timed questions. The time limit is there to give the emergency feeling usually given by call answers. In this part, his possible answers depend on his actions in the scene. Finally, the session ends as the player receives, by email for privacy and

back-up, his score and advice for further improvement as a feedback. She or he will also be able to retry the level or go back to the level selection. A user's play-through will amount to numerous actions evaluated between correctness and timeliness. Each action will impact the total level time as well as the speed at which the user takes care of the patient. Therefore, all the user's actions during the session, as well as his choices during the call to the emergency services, are analysed by a dedicated scoring module. The output consists of an action score, a time score, a call score and his two best and worst actions.

Outcomes

Applying his experience in different scenarios, the user gains control of his own skills. Indeed, the goal, under these circumstances, is the completion of a mission associated with the role assigned to it in the scenario. In addition, this resolution process will allow him to develop new skills such as leadership and/or social, communication and interpersonal skills. It is also possible to introduce the pleasure dimension in the situations developed. In this sense, serious play is an experiential learning approach. In the first conclusions, the SG is validated as an original learning tool because it is different from the usual ones. It needs to be improved in terms of navigation ease and graphic quality.

Challenges

Many potential developments remain. The users considered the game as a real time of learning and reflection allowing a confrontation with the reality of care situations. This experience lets us imagine the development potential of games around any serious health topic, combining pleasure and learning.

Discussion

This project has demonstrated that it is possible to enrich and increase first-aid education through the introduction of information and communication technologies by developing a low cost device. Skill acquisition can be challenging, and this educational tool can be identified as a new pedagogical approach and a learning tool. Nevertheless, the scenario must really reflect situations that are rarely encountered to properly train the emergency response and mobilize the user. The prototype will have to be remodelled to improve the readability of possible actions, which will have to gain in precision and variety. It is an exercise that should conclude with indications to develop knowledge and a debriefing with a health professional.

Graduate level medical students' ability to detect and address incidental melanoma in a simulation study

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Background

Considering the high incidence of skin cancer in Switzerland (Vienneau 2017), detecting moles suspicious of skin cancer is an important competence for Swiss medical graduates. While screening for skin cancer is part of any dermatologists' routine, physicians of all other specialties should still be able to detect secondary, incidental lesions suspicious of cancer and refer patients to a specialist. Little is known about how well graduates are able to detect incidental findings and draw correct conclusions.

This study measures the detection rate of incidental melanoma of Bernese medical students at graduate level during a formative clinical skills simulation exercise utilizing standardized patients.

Methods

In this observational evaluation study, a full semester of Swiss sixth year medical students (N=240) will undergo formative clinical skills assessment from March to May 2019. One of the cases will present a standardized patient with non-dermatological chief complaints typical for bowel obstruction. Furthermore, this patient will be showing a suspicious skin lesion indicating signs of a melanoma. This suspicious mole will be realized using a silicone-based 3D moulage, i.e. a professional temporary tattoo, true in colouring, shape, visual and tactile information, fixed onto the standardized patient's thorax so it can be discovered during the physical examination. Students are randomly assigned into groups of four, with one of the four taking the physician's role (N=60) and the three peers observing the performance for later feedback. The students performing the case will be evaluated with a checklist containing different levels of response on the suspicious lesion regarding history, examination and their conclusions (adapted from Zorn 2018).

Results

Results will be available at the conference and indicate either the effectiveness of the dermatology education delivered and prove its effectiveness or disclose possible improvement in dermatology education in the medical master program in Bern.

Conclusions

Not yet available.

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Plausability As A Source For Standardization - New Pathes In Training Simulated Patients

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Background

For working in osce, the simulated persons (SP) should be standardized as good as possible. For the federal licensed examination (FLE) a well working and largely standardized procedure has been developed in Switzerland during the last ten years. The main part of this procedure is to imitate a roleplay which has been videotaped. It should be performed during the osce of the FLE for the candidates in a consistent way. The transfer of the pure facts works very well. Difficulties appear, for instance, in an unlikelike roleplay due to lacking ability of imitation, overimitation or hard to believe emotions.

Thesis

To convey the patient role believable, we accept the physiognomic differences and the individual capability of showing expression of the SP. Nevertheless, the candidates will have the same sensibility of the patient.

The aspired goal is a plausible standardization, which is not only an imitation.

Project description

During the trainings, so far we had focused on the SP, we changed the main attention to the experience of the candidate. Thereby the „role“ itself moved to the center. With the introduction of the term „disturbance“ we were able to standardize both, the delivery of information and the emotional part of the case. „Disturbance“ means the whole package of verbal, paraverbal and non-verbal expression which should be delivered to the candidate. The main principle is: „You have to deliver the same, but it has not to look the same.“

Outcome

We developed the model of the „case room“: candidate and SP are moving in a defined zone which is watched from outside by the rater. This case room is one part of four eccentric arranged zones of presence. The candidate (1) is getting in contact with the SP (2) and the case room (3) via a communication room (4). The challenge of the SP is to transfer the facts and the correct impression of the osce case, due to the right behaviour of communication under the conditions of examination. „Fact“ means the standardized physical and communicative features of the case. „Impression“

means to convey the level of disturbance in an individual way of expression. As control serves the perception of the disturbance on the part of the candidate. When the level of disturbance is recognized as similar, the performance of all SP applies successful. So, the SP are portraying the roleplay in a standardized way, but at the same time in an individual way. Thereby they always appear plausible and not cloned.

By questioning our SP after the osce we found out that the portrayal of the role character was easier than before. Also they found it less tiring to perform the role a whole day long.

The quality assurance during the FLE did not show a difference or a lack of standardization.

Take-home message

Working with the conceptional terms „case room“ and „disturbance“ is good for the SP. We didn't find any hint that it would be worse than before for the candidates. Until now, we don't know how the candidates are feeling in reality. For this purpose it needs further research.

Development of a position paper on minimum standards and development perspectives for the use of simulation patients in German-speaking countries

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Background

Although the Simulated Patient (SP) Method has spread widely in German-speaking countries, it is currently lacking uniform minimum standards across faculties and institutions. Existing recommendations and standards on SPs^{1,2} often refer to the North American situation. This is sometimes noticeably different from European or German-speaking countries. In German-speaking countries, for example, the focus is much more on teaching than on assessments. Therefore, in 2014 the Committee for Simulated Patients of the German Association for Medical Education (GMA) decided to develop a position paper. The aim was both scientific quality assurance of the method and its documentation, as well as provision of argumentation aids for future discussions on the use of SPs within the faculties and for establishing them in other health care professions.

Project description

In a multi-stage consensual process, the Committee for Simulated Patients of the GMA has developed a position paper in open forums with the participation of further SP experts from the German-speaking countries to advance the establishment of the SP Method as a scientific standard. In working groups of the committee, 1.) the current state of research was reviewed and summarized, 2.) the current status of the SP programs at medical faculties was investigated and evaluated by means of an anonymous survey, and 3.) minimum standards and development perspectives for SP programs were formulated in several workshops, taking into account the internationally published recommendations and the results of the survey.

Outcome

After 4 years and 8 workshops, the position paper was unanimously adopted by the GMA Committee on Simulated Patients and published in the GMS JME 2019³. In addition to the literature review, it contains an overview of the results of the survey⁴ and a description of the development process. 47 minimum standards and 30 development perspectives were formulated on the main topics „safe working environment“, „case development“, „SP-training“, „SP-program management“ and „professionalism“.

Challenges

Even though the position paper is based on a thorough literature search and on a successfully conducted survey, the standards themselves were discussed and defined in workshops. They therefore merely represent a consensus of the participants. As a result of this consensus process, the regional and national differences, some of which were documented in the survey, could not always be reflected to the necessary extent. In addition, the position paper is a product of the current discussion. The future application will show the relevance and validity of the position paper and where adjustments still have to be made.

Discussion

The process of drafting the position paper was lengthy and challenging, but at the same time, it enabled an enlightening and stimulating exchange on the various SP programs in German-speaking countries. It became evident that the SP method is practiced in very diverse ways, which is both strength and weakness. On the one hand, diversity offers the faculties a high degree of flexibility. At the same time, there is cause for concern that the method could be practiced too arbitrarily, for example to be sophisticated enough to be applied in high-stakes assessments. The position paper tries to consider both sides appropriately. It remains to be seen whether this has been successful, what effects the position paper will have and how the formulated standards can be broadly implemented in the future.

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Running simulation education sessions with untrained standardized patients

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Background

Using standardized patients has been part of training/assessment of healthcare professionals for many years. Their involvement is different based on the training they receive, the resources of the institution and the type of training/assessment done during the session.

The use of trained standardized patients is well discussed in the literature, but not so much, the use of untrained standardized patients.

Project description

A simulation centre in Spain started doing simulation educational sessions using untrained lay people with their simulation programs for undergraduate nursing students, undergraduate dietician students, residents from different programs, unqualified health care professionals and post graduate educational programs. At that point of time, staff in the simulation centre did not know how to train them and started using them as actors. Their involvement was simplified to study a script and try to reproduce it, most of the time without even knowing or understanding the learning objectives of the participants or even what they were studying.

We started looking at the efficiency of the training sessions with their unique involvement of reproducing a script. They would not be involved in any part of the simulation session except the acting during the scenario. They would only be shared the information of their script and have one meeting a week before the session to clarify aspects of the script with the subject matter expert running the session.

From the satisfaction questionnaires filled in by both the visiting subject matter experts and the participants, the use of untrained standardized patients gave a lot of realism to the sessions assisting all of them in engaging in the simulation experience as well as suspending disbelief.

Outcome or expected outcome

We expect that the achievement of learning objectives for undergraduate nursing students, resident programs and postgraduate programs does not vary when involving untrained standardized patients rather than using trained standardized patients in our institution.

Challenges

Human resources needed, technical support needed (headsets, walkie talkies...)

When standardized patients are untrained and are not involved in the achievement of learning objectives of the learners, there is a lot of support that needs to be provided to them during the scenario in order to adapt to the participants performance. The fact that the majority are lay people makes it as well challenging in understanding some aspects of the script and how to respond to certain participants during the scenario. The level of improvisation needed a lot of the times during a scenario, was not possible to be done due to the lack of knowledge of the learning objectives and level of knowledge of the participants from the standardized patient point of view.

The lack of improvisation from the standardized patients made us realize that they needed a minimum level of involvement during the simulation sessions in regards to understanding who the participants were, what level of knowledge they had and what was expected from them, so we implemented the review of the mentioned as part of the documentation shared with them and as part of the review process of the script a week before the scenario.

Discussion

Depending on what the sessions are in simulation (formative assessment, summative assessment, high stake assessment) the use of untrained standardized patients is as efficient as the use of trained standardized patients.

The minimum level of training as well as the level of involvement of the standardized patients still needs to be agreed upon in the literature. Whether they are involved in the preparation of the scenarios, the running of the scenarios, whether they improvise during the scenario, and whether they participate actively in the debriefing as either lead debriefer or second debriefer. The above depends on the type of use that is made of the simulation, as there is for example, much literature proving the efficiency of the use of trained standardized patients that run scenarios and then provide debriefing/feedback sessions to the participants efficiently and objectively.

Perspectives on learning in a simulated patient scenario

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Background

In a scenario with simulated patients (SP) the participants have different roles. These roles can be present in a single simulated patient scenario¹:

- the student can take the role as active health care provider or as observer
- the person who is portraying the SP can take the role of the patient and feedback provider
- the clinical teacher can take the role of administrator, observer, feedback provider, examiner etc.

The participating persons may have dissimilar perspectives on the learning experiences. We wanted to investigate how the perception of learning, in the same simulated scenario, differed between three persons, the student, the clinical teacher and the SP, with their different roles. Which aspects influences the perception of learning in a simulated scenario with an SP?

Method

In the ninth semester of the medical program, psychiatry placement, at Lund University, Sweden there are learning activities including simulated patients with a behavior of acute crisis. The objective of the activity is patient communication in emotional strained context. In a scenario there are 4-5 students, one clinical teacher and one SP. One or two learners act as interviewing medical doctors, the other students are observers. We asked students to volunteer in a research project on simulated patient scenarios, 8 accepted. Three of the clinical teachers and one SP were also recruited as informants.

We recorded the simulated scenarios with a video camera. In total 8 scenarios were recorded. We used stimulated recall², and conducted semi structured interviews. Each informant was individually interviewed on a scenario in which they had been active. In all we got 24 interviews from the students, the SP and the clinical teacher, on the 8 recorded scenarios. The aim of the interviews was to discuss how the informants perceived the influence of their different roles on the learning in each simulated scenario. They were asked to describe how they experienced the scenarios, and when and why learning occurred. The interviews were audio recorded and transcribed verbatim. They were analyzed using qualitative content analyzes³.

Results

The students perceived the emotional pressure from the SP as a learning experience. They felt an opportunity for development in the conflict between the pro-

fessional doctor and the private person. The students stated that the clinical teacher had a major role in preparing the students by emphasizing the value and uniqueness of the simulated scenario, it supported the motivation and the sense of realism. The students valued the feedback from peers and SP.

The clinical teachers perceived the emotional pressure as a learning experience. They took an assessing point of view, commented on the students' performances as "good or bad". The clinical teacher wanted the students to use planned professional communication.

The SP regulated the emotional pressure to individualize communicative challenges. The SP created the flow of the scenario in collaboration with the active student, and if the student was physically closer it was easier for the SP to regulate the emotional pressure. The SP recognized the conflict in the students, between being professional and a private.

Discussion

Our results imply that the SP had a key role in the learning of the simulated scenarios. In collaboration with the students the SP made the activities individualized and active. The emotional pressure and the conflicting points of view created learning in how to be a professional doctor⁴. The most valuable contribution from the clinical teacher was in the preparation of the students before the activity. The clinical teacher took a more assessing perspective on the activity in favor of a more formative view.

Conclusion

The students and the SP had rather coherent perspectives on the learning. The students valued feedback from observing peers and SP. The clinical teachers took a more assessing distant position during the scenarios but they were valued in the preparation of the activity.

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Emotional Standardisation of Simulated Patients

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Background

Simulated patients (SPs) are deployed not only for educational intentions but also for examinations. On these grounds, a standardised SP-performance is a precondition, as it guarantees replicability of the examinations and the similar prerequisites for every examinee^{1,2}. Due to this, standards must be set for the use and presentation of SPs, which go beyond a standardised role and cast and lead to a standardised style of acting.

Research question

This raises the question of what this style of acting could look like and how it could be integrated into a training concept.

Methods

The Learning Center for Individualized Medical Activity Training and Development (Lernzentrum für individualisiertes medizinisches Tätigkeitstraining und Entwicklung also known as Limette) of the Medical Faculty of the Westfälische Wilhelms-Universität Münster regularly uses SPs in formative and summative examinations. Far more than 1000 standardised examination scenes are being held during the semester, which leads to a pool of experiences in terms of standardisation.

Results

These experiences were summarized in the model of Emotional Standardisation. In addition to a standardised role and cast, it also includes a standardised style of acting with focus on the aspects of atmosphere, emotions and status. This is achieved by standardised directions for drama performance. In addition, a training concept for this model was developed, which is based on the constructivist didactics^{3,4}.

Discussion and Conclusion

The concept of Emotional Standardisation allows SPs to gain a better sympathy for the character they play. This implies an improved comprehension of the character, their emotions and status, and of the scene's atmosphere and how it unfolds. This all allows an increase in standardisation. The more a role gets standardised, the harder it is to preserve the authenticity of the drama performance⁵. Within Emotional Standardisation, however, the SPs can respond to the examinee in an improvising manner within fixed specifications and perform authentically at the same time.

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Multiple-Patient-Simulation in Nursing Education

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Background

Newly graduated nurses face many challenges as they transition into clinical practice. They have to care for multiple patients simultaneously and be flexible for rapid changes in their condition. As qualified nurses, they must also show leadership skills, e.g. delegating nursing students and health care assistants (Beroz et al. 2018; Keith 2009). These factors can be overwhelming for many young nurses and some suffer from “transition shock” (Blodgett et al. 2016).

Simulation provides a safe environment to practice clinical situations, but usually simulation focus on only one patient. Multiple-Patient-Simulations (MPS) could be an ideal way to prepare nursing students for caring for many patients (Horsely et al. 2014; Watts et al. 2014; Chunta/Edwards 2013; Ironside et al. 2009).

Project description

In the first session, eight students went through a three-hour simulation caring for four patients simultaneously with different tasks (washing the patient, administering medication, care for a dying patient, attending multidisciplinary rounds etc.). The patients were portrayed by High-Fidelity Simulators (HFS) as well as Standardized Patients (SP).

The main objectives were to determine how students perceive a MPS and how a MPS can help nursing students to transition into clinical practice.

Outcome/ expected outcome

Students perceived the simulation as positive and very realistic. Students felt more self-assured to prioritize in caring for multiple patients after the simulation.

Challenges

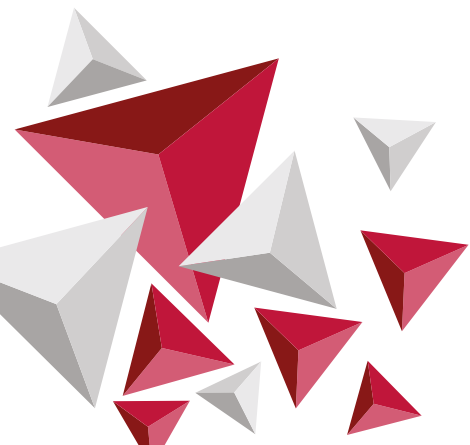
Implementing a three-hour simulation into the curriculum is challenging for a large number of students. It requires several instructors to observe and control the HFS. There are also many SPs, material and props necessary to make the simulation realistic.

Discussion

Further simulations are necessary to determine the positive effects of doing a MPS especially the impact on student's abilities while transitioning into clinical practice.

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Implementation of Family Systems Nursing and Palliative Care in High Fidelity Simulation: Development of Patient Family Crew Resource Management Criteria

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Background

The high fidelity simulation is a realistic demonstration of a practice situation. It consists of the practical performance on the simulation doll and debriefing of the performance. Traditionally the high fidelity simulation was developed for the training of emergencies in acute care. The debriefing is often based on the Crisis Resource Management (CRM) Key Points (Rall & Gaba, 2005), where the teamwork of the involved health professionals is emphasized.

At present there is rarely a focus on Family Systems Nursing and Palliative Care in high fidelity scenarios in nursing education. Therefore an adaptation of simulation settings and debriefings are needed.

Project description

The modules “Family Systems Nursing” and “Palliative Care” are integrated in the Bachelor of Nursing program at the Zurich University of Applied Sciences. The aim of these modules is to provide the students with competencies in Family Systems Nursing and to care for palliative patients in primary health care. For effective care, it is crucial to embed palliative care nursing activities in family systems nursing.

This in mind, we have designed a high fidelity simulation scenario, in which students develop skills to combine pathophysiological and psychosocial care in the context of an exacerbating palliative care situation. The practical performance on the simulation doll (patient) is enhanced by the presence of a family member (actress).

The debriefing sessions include a thorough student self-reflexion guided by the teachers, lecturer feedback as well as peer-feedback and are the cornerstones of the simulations sessions.

Specific instruments for the training and reflection process have been developed. Based on the well-established CRM Key Points “Patient Family Crew Resource Management (PF-CRM) Criteria” have been designed. These criteria emphasize not only the teamwork of the involved nursing students, but also their communication with the patient and the family member.

Outcome

The experience of the authors shows that this learning approach is well accepted and appreciated by students and teachers.

Discussion

These scenarios are ideal to further the transformative

knowledge development and application through the advancement of skills and comprehensive clinical decision-making (Mezirow, 1997; Mezirow, 2000). The new instruments (e.g., PF-CRM Criteria) equip teachers to empower students to independently take control of their competence development process to best practice in Palliative Care. The PF-CRM Criteria can also be implemented in traditional high fidelity scenarios, where communication with patients and family members are as crucial as in Palliative Care.

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Simulation Trainings in Nursing –an effective training method in the geriatric setting?

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Background

Studies have shown that simulation-based training in a clinical setting contributes to the reduction of treatment errors and patient safety. Simulation-training show positive effects especially with regard to knowledge growth and the behavior of the participants.

However, this form of education training is commonly not used in the geriatric setting so far and the benefits are only proven insufficiently. Therefore, the Geriatric Health Centers of the City of Graz (GGZ) carried out simulation-trainings on two topics in 2018 for their nursing staff:

- Simulation-training (1) Hygienic aspects in placing urinary catheters
- Simulation-training (2) Consultation of fall prevention for residents in nursing home

As part of the training sessions, practical simulation-training sessions with mannequins or standardized patients were held in addition to theoretical basics.

Methods

Three simulation-trainings took place between 01 / 2018 and 05 / 2018. In total 25 people were trained. The knowledge level, the feeling of security in action and the compliance of standardized work steps were evaluated and compared with each other before and two months after the simulations. As a method, questionnaire and standardized audits with checklists were used. Furthermore predefined key figures of the years 2017 and 2018 were compared.

Results

The results in the simulation-training (1) show that 75% of the participants rated the training as a contribution to an increase in safety. They now feel safer when handling a bladder-indwelling catheter. The evaluation of the knowledge tests show a small to medium improvement (5.7% -25%) compared to the first measuring time. In simulation-training (2) an increase in knowledge was particularly noticeable with regard to practical topics such as fall factors and prevention or practical aids. Little to no knowledge gain could be achieved concerning aspects of theoretical basics such as definitions or laws.

Discussion and Conclusion

The participants enjoyed this form of education training. Due to the positive experience with simulation training, the method will still be used in the GGZ. The recommendation rate ranges from 8,75 to 9,4 on a scale 1-10 [1 means “not at all likely”; 10 means “extremely likely”]. The simulation-training can lead to an increase in knowledge, an increase in the sense of security and an improvement in the quality of care. In order to demonstrate the benefits of simulation-training in geriatrics, an evaluation with a larger number of participants over a longer period is recommended.



Towards respite services for informal caregivers using simulation

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Background

Currently, care for the frail elderly people is provided mainly on an informal basis by relatives. In Austria about 80% of older people, who are in need of care, still live at home and be tended by their own families or mobile services.

Care dependency burdens not only patients but also their informal caregivers. Caregiver burden is a multi-dimensional reaction to a number of factors associated with providing daily assistance to elderly and dependent people, including physical, psychological, emotional, and social stressors. Therefore, arrangements must be made to provide respite for family carers. Simulation training is a validated and powerful experiential learning tool traditionally incorporated in health professional educational curricula but has not been commonly used in the hands-on training of informal caregivers.

Project description

In January 2017 the Geriatric Health Care Centers of the City of Graz decided to develop a respite service for informal carers. From January 2017 until March 2018 a project team of about 12 people build up extensive structures for a simulation training center in Styria. In April 2018, the Albert Schweitzer Training Center, which includes a seminar room, a flat intended for simulations for informal caregivers and a patient room built for the staff of the Geriatric Health Care Centers was opened. From April until December 2018 twenty simulation-based trainings for informal caregivers took place. The main goal was to improve caregiving competence, reduce stress coping, and promote mental well-being in a safe learning environment. The trainings were either Manikin-based simulation trainings or Standardized Patient simulation trainings. The simulation-based-trainings referred to caregiving competence, stress coping, and mental well-being. The impact on these factors will be evaluated in a prospective randomized controlled trial with 100 participants.

Expected outcome

Expected results of the simulation trainings at the Albert Schweitzer Training Center will be a reduction of caregiver burden, especially depression and role overload as well as an increase of caregiving competence and knowledge.

Challenges

During establishing the training courses at Albert Schweitzer Training Center the project team faced many challenges:

- Defining the contents of the different trainings
- Lack of knowledge in simulation
- Deciding which kind of simulation trainings are going to be held
- No budget for actors of SPs
- Promoting the simulation trainings
- Troubles with equipment, e.g. simulator during the trainings
- Providing time and personnel resources for the project despite daily

Routines and tasks

- Secure funding of the Albert Schweitzer Training Center

Discussion

Initial results show that the participants benefit from the simulations, since they can apply at home what they have learned in the trainings. The recommendation rate shows approximately 90%. Further research on health economic evaluation is essential to show positive effects of this kind of respite service for informal caregivers and the inpatient sector.



Posters I: Topic „Scenarios“

Evaluation of an interprofessional procedure improvement in obstetrics: get the baby out fast

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At our local hospital with approx. 1100 deliveries/year, we recognized the importance to prevent asphyxiation of newborns by improving our decision-delivery time (D-D time) in the scenario of emergency C-sections.

Learning from relevant literature, an interprofessional simulation protocol was instituted including midwives, anaesthesiologists, obstetricians, operating room and neonatology/pediatric personel, doctors as well as nurses from each specialty working together during routine cesarean sections.

A new telephone procedure/alarm system was installed to call simultaneously all necessary personel at T-dn = decision time (T-dy = delivery time).

Simulations of the fast-track C-section protocol were conducted using a „simulated pregnant woman“ (usually one of our doctors or midwives in-training) especially to test, and train for, fast transport from the delivery room (3rd floor) to the operating room (floor -1). The simulations were announced to the team involved no longer than a few hours beforehand on the day of the simulation, in order not to obstruct the usual busy operating suites which could be halted during an emergency C-section.

An evaluation form comprising a Likert-skale questionnaire was designed to monitor impressions of every team member after each simulation event, which has taken place 9 x (once per month) thus far, to pin down

and abort obstacles, and demonstrate improvement after each simulation event.

At the time of the conference, evaluation data on 10-12 simulation events can be shown, step-by step commentaries from team members will be quoted which helped in optimization. An improvement of decision-delivery time can be demonstrated; and a few data on our reality emergency C sections can be used to validate the necessity and success of the implementation of the new protocol, using interprofessional pre-implementation simulations.



Interteam Perinat – Interprofessional scenario training in obstetrics for undergraduates

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Background

In the delivery room, many professions such as obstetricians, neonatologists, anesthesiologists, pediatric intensive care nurses and midwives need to form a well-functioning team. To prepare medical students in their last year of education together with midwifery students for this complex task, two scenarios were designed to sensitize students for their roles in the delivery room.

Project Description

Two obstetrical emergency scenarios were conceived, one involving shoulder dystocia (scenario 1), the other postpartum bleeding (scenario 2). 6 students (3 medical students, 3 students from midwifery school) volunteered for 2 consecutive training sessions of 3h each. Hybrid simulation was integrated in both scenarios (simulated patient with a strap-on Mamma Nathalie® Simulator, Laerdal, Norway). Prior to the scenario, the participants were instructed in Crisis Resource Management and feedback rules, and divided into active and feedback-giving participants. Roles were switched in the consecutive scenario. Four cohorts were involved in both sessions in 2018. Evaluation forms were distributed after each session and analyzed.

Outcome

Evaluations showed that all participants perceived the interprofessional courses as valuable for their education. All wished for more possibilities to perform interprofessional scenario training in their health professions education. The learning objectives receiving and giving structured feedback as well as practicing team communication under stress were regarded as especially valuable.

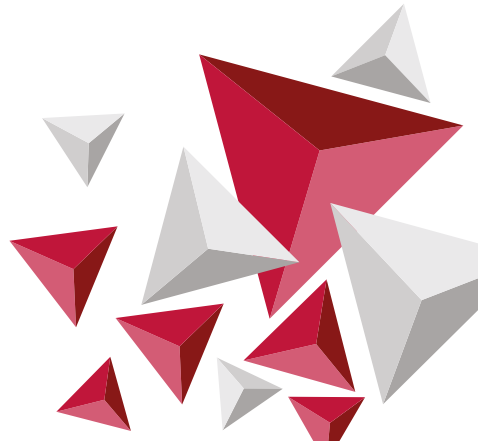
Challenges

High preparation time and personell intensity make it difficult for trainers to find feasible strategies to make scenario trainings accessible for large target audiences. The limited time slots available for students involved in different health professions curricula make the conception of interprofessional trainings challenging.

Discussion

Scenario team training sessions in the delivery room in undergraduate health professions education are highly valued by all participants. Understanding the own role in team training scenarios as well as slipping into roles

of other health professions may ameliorate mutual understanding when working together in teams. Scenario training should not be restricted to postgraduate education, it may have a major impact on individual professional development in undergraduates.



Self-reliant peer learning for nursing students

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Background

Most Nursing students require more training time for necessary nursing skills than defined by nursing schools curriculum to acquire basic nursing skills. Given skills training lessons are too brief to enable effective student learning, meaning in depth skills practice and repetition various learning steps. This increases stress levels and the pressure to succeed for nursing student with slower learning capabilities. Another possible consequence is that nursing students are less prepared in required skills for future clinical practice.

Intervention

The Bern College of Higher Education of Nursing, Switzerland, started the independent peer practice learning program in 2012. A concept was developed which defines specific aims and content as well as student's rights and obligations. Students enlist beforehand and order the required materials. They organize themselves and train in small groups in allocated training location in the area of « Learning Training and Transfer » (LTT). During the peer practice skills and knowledge can be repeatedly be trained and reflected in the peer groups without presence of a tutor. All invasive skills are practiced only on teaching dummies. This allows students to use all their potential. The students may access learning materials as literature and their own student notes. This allows nursing students to practice their skills and to deepen their knowledge on corresponding with their own learning rate.

Results

Peer group discussions during the independent peer practice learning support the students in gaining certainty and confidence in their knowledge and skills. This may improve patient safety in future daily care practice. Descriptive Statics show that the number of students who take advantage of the independent peer practice learning increased continuously (2012-2018). It has to be mentioned that in 2012 solely students of the first semester attended the independent peer practice learning program, while in 2018 over one third of the participating students were in their fifth semester and final study year. It is clearly visible that the demand for independent peer practice learning is increasing. This has to be considered in the development of future teaching curricula.

Keywords

learning program, nursing students, peer learning, skill training



Assessment drives learning a myth?

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Introduction

Many programs in medical education include comprehensive assessments at the end of a semester. When all exams have been passed the students have been considered qualified to continue with the next semester. This classical approach is old and has served us well. Also at the Bern College of Higher Education of Nursing this approach is common. During a three year dual nursing curricula, where students are alternately, six month at the nursing school and six month in clinical practice, students are assessed by two summative OSCE's. The first OSCE takes place at the end of the first semester and the second at the end of the 5th semester. In all school (odd) semesters, students have, after class, the possibility to practice voluntary, in peer groups, already learned nursing skills. The question arose, if students from the 1st and 5th semester were more motivated to visit the skillslab after class, to train already appropriated nursing skills, than the students from the 3rd semester.

Method

From 2012- 2018, data was collected of students who visited voluntary the skillslab after class and practiced independently, in peer groups, already learned nursing skills. The data collection included all students from semester one, three, and five.

Results

The results show a general increase of students who visited voluntary the skillslab. However, the increase of students from the 1st and 5th Semester was considerably higher, than students from the 3rd semester. In addition most of those students used this supplementary training as a training opportunity shortly before the OSCE.

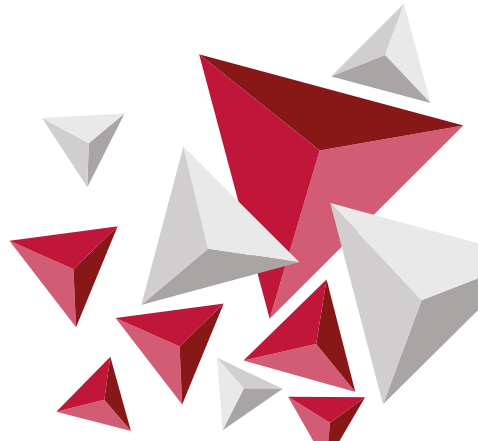
Discussion/Conclusion

The general increase of students who visited the skillslab after class, can be explained that faculty emphasized promoting this specific training opportunity to the students. The summative OSCE at the end of the semesters however, seems to have triggered students from the 1st and 5th semester, to practice after class in the skillslab. Although the learning is triggered by the assessment occasion, the actual assessment is but one data point with limited utility. As long our assessments have a classical approach the

expression assessment drives learning has it's legitimization and is therefore not a myth. However, assessment drives learning should not be used by faculty to look at student's deficits but should help students believe that they are capable thinkers.

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A Student's perspective on simulated patient feedback

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Introduction

Feedback is an integral part of a student's learning process. At the Bern College of Higher Education of Nursing, the nursing students are involved in several educational settings with simulated patients (SP). After each encounter, the nursing students receive direct feedback from the SP. However, even if SP feedback is carefully trained and monitored by the SP trainer, the student's perspective of what they believe to be as good and instructive SP feedback is often not considered. Therefore, peer-students were asked to give their opinion about what aspects of SP feedback have an important impact on their learning.

Method

A cohort of students n=44 from the Bern College of Higher Education of Nursing was asked what kind of SP feedback is valuable to them, and which parts of the feedback are helpful for their learning.

Results

An analysis of the students' answers has highlighted the following themes are especially relevant:

- Change of perspectives: Students believe that feedback from the SP after an encounter helps to change their perspectives, while they exchange their views, thoughts and feelings with the SP.
- Self-reflection: Comprehensive SP feedback triggers the student's self-reflection.
- In addition, SP feedback should generally be constructive, authentic, empathic and specific, so that students are stimulated to enhance their performance.

Conclusion

For nursing students, comprehensive and effective SP feedback is an important factor for their learning process. Moreover, constructive SP feedback is motivating and helps nursing students to reflect and improve on their professional knowledge and behaviour. It helps them best if the feedback triggers their self-reflection, as mentioned and they can come up with ideas by themselves. Therefore, it is essential to involve students in the development of SP feedback instruments to ensure that they can benefit from the feedback given by the SP.

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Qualitative analysis of simulations - longer answers to open questions in physiotherapy

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Background

History taking is considered a crucial part in all medical and paramedical professions. The way of questioning can have influence on therapeutic relationship and on the success of the intervention. There was no study found which particularly analyses the anamnesis by physiotherapists. Only few studies investigate the different effects of open-ended and closed questions during the medical history taking.

Research question

The purpose of this study was to investigate whether closed or open-ended questions trigger longer answers in a physiotherapeutic anamnesis and to observe the difference between first and second year students.

Methods

In this observational study film sequences with standardized patients (SP) were analysed. Out of the same communication training setting for physiotherapy students at the University of Applied Sciences Bern, two cases were selected because of a similar approach with patients. Both cases included history taking. All observed students participated in both cases, within cases the same professional actor performed the role of the patient. All dialogs were transcribed verbally. Open-ended and closed-ended questions were localised in the transcripts. The length of the answers was measured by counting the answers' words as a basis for subsequent statistical evaluations with nonparametric Wilcoxon-test.

Results

A total of 14 videos of communication training were analysed. Seven students took history with a male and a female standardised patient. The average length of the answers was 3.6 times longer (sequence in first year) and 4.6 times longer (sequence in second year) for open-ended questions than for closed-ended questions. The difference of the average length of the answers was significant with a p-value of $p = 0.015$. First-year students asked closed questions with a quote of 1.6 and in second year the quote reduced to 1.4.

Discussion

Open-ended questions trigger longer answers, this effect seems to be more intensive in the second academic year than in the first year. After a stage of 10 weeks in hospital

students used more open questions and they had more trust to wait for longer answers than first-year students without physiotherapeutic experience. It was beyond the scope of this study to further explore if longer answers also contain more information. However, taking into account that history taking follows international classification of functioning (ICF), it can be assumed that longer answers also contain more information. Further studies on this topic are required to examine the information content in the corresponding answers. Only in the first case SP got instruction to answer in dependence of open/closed-ended questions. We assume, that the results are generalisable to "real" patients.

Implications

The use of open-ended questions can be recommended for physiotherapy students, especially in the first half of the anamnesis. There is no reason, that this is different in other professions. Although no "real" patients were interviewed in the communication trainings, the findings of this study can also be used in practise, because the differences are clinically significant. Further studies should focus on real patients or compare students with experienced physiotherapists.

Funding acknowledgements

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Make a wish! Or not? – Does the way simulated patients give feedback influence students' commitments to change?

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Background

Feedback has a powerful influence on learning and can be immensely helpful. A lot of principles on how to give feedback exist – designed to ensure the positive effect of feedback – and a lot of time is spent to train simulated patients (SP) to become proficient feedback providers. Many of these principles are well studied (e.g. feedback should focus on observable behavior) others seem intuitively important, but are less well investigated – especially looking at the feedback of SP and its specific goal on helping the students to improve their communication and interpersonal skills. Having this question in mind, we wanted to take a closer look at two of the elements of an SP feedback: the suggestion for improvement, also called “constructive criticism” or simply “the wish”, and the stimulation of a dialogue. The aim of expressing a wish is to give the learner a workable alternative and to increase the possibility of a behavior change. Giving feedback as part of a dialogue is supposed to allow the recipient to receive a feedback which discusses not only the SP's but also the learner's perspective and is therefore better adapted to his or her individual needs and more helpful.

Project description

In our project, we examine the effect of different types of SP feedback in a peer teaching course with cases from general practice, where every student has the opportunity to talk to and examine a patient. Students receive feedback from the SP (on communication skills) and the tutor/ their peers (on medical knowledge/technical skills). In order to study the effect of the SP feedback, we used the concept of commitment to change (C2C) and asked students to name up to three aspects they want to change after attending the course. Furthermore, we ask students for an evaluation of the whole course and the quality of the feedback. We include three different types of SP feedback: a) feedback sandwich (3 aspects; positive, negative, positive), no wish, b) feedback sandwich, including a specific wish, c) feedback sandwich, wish, stimulation of dialogue (e.g. inquiring by SP). We categorize the C2Cs into two groups: C2Cs related to communication skills and C2Cs related to knowledge/technical skills. We compare the number of commitments between the groups, as well as students' satisfaction with feedback. Furthermore, we compare the SPs wishes with the students' C2Cs to look for matching statements.

Outcome/expected outcome

The study started in 2018; until now 43 students participated and received feedback of type a) and b). They committed to a total of 99 changes ($M=2$), out of which 64 cover changes in communication behavior. Students who received feedback of type a) ($M=1.6$, $SD=1$) did not commit to a significantly different amount of CSCs about communication than students who received feedback of type b) ($M=1.4$, $SD=0.8$; $t(41)=0.9$, $p=.4$). The quality of the feedback was rated as comprehensible and helpful in both groups, too. In about half of the cases, the SP's wish was directly reflected by the student's commitments. We plan to start collecting data on feedback type c) in summer 2019. We expect students to be more satisfied with the dialogical feedback than with feedback of type a) and b) and to commit to more C2Cs about communication behavior.

Challenges

One of the challenge of this study is its setting, since it does not take place in a laboratory environment and influences on students' learning experience other than SP feedback are likely. These include the feedback of the tutor and the other participants. Categorizing the C2Cs presented a second challenge, which was resolved by using the CanMEDS framework. Furthermore, the type b) feedback group currently consists of more advanced students than the type a) group. We plan to reduce this imbalance in the course of the project.

Discussion

Whether SPs expressed a specific wish as part of their feedback or not, did not result in significant differences considering the students' communicative C2Cs or their satisfaction with the SP feedback. Considering the setting, the SPs wish seems to be a too small part to change the whole perception of the feedback. However, expressing a specific wish did result in a matching commitment in many cases, showing the potential of a feedback being transformed into (planned) action.

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Posters I: Topic „Learners“

Inside out – Translating Body Experience into verbal feedback

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Background

At the Bern University of Applied Sciences, a new module was developed at the BSc Midwifery program which is called bodywork. A skills-assessment concludes this module employing Standardized Patients (SP) not only to incorporate the client in the role-play but also including them in a formative feedback-session. The skills-assessment consists of two parts: During the examination the students are interacting with a SP playing a client in a ten-minute roleplay. From the perspective of the SP the focus lies mainly in the nonverbal skills of the student. Directly after the interaction the student receives in the second part a formative feedback from the SP who is a professional actress as well as from the midwifery expert. In this setting the behavioral feedback skills and sophisticated body awareness of the SP are crucial.

Project Description

The SP trainers at BFH Health Professions have a theatrical background, they are themselves professional actresses and actors. In this setting the training of the SPs focuses specifically on the quick and complete change of role, the resource-oriented feedback and the credible representation of the character. The immediate oral formative feedback of the SP combined with the feedback of the assessing expert can have a powerful impact on the student. Therefore, elaborate skills of the SPs not only in giving feedback with the special focus on the nonverbal cues are essential but also their ability to detect and verbalize the thoughts and feelings of the character.

Outcome

Preparing the SPs for their demanding tasks the SP trainers emphasize on two main challenges. First the focus lies on three layers the SPs are fulfilling during the roleplay:

1. Steering the Roleplay actively in a standardized way
2. Perceive the effects of the interventions of the student with emphasis on the nonverbal skills (e.g. distance, quality of touch, eye-contact, pitch of voice, pace, body language)
3. Memorize the feelings of the figure based on examples

Secondly the SPs exercise the verbalization of the experiences in relation to the behavior of the student. The trainer focuses in this part on a resource-oriented feed-

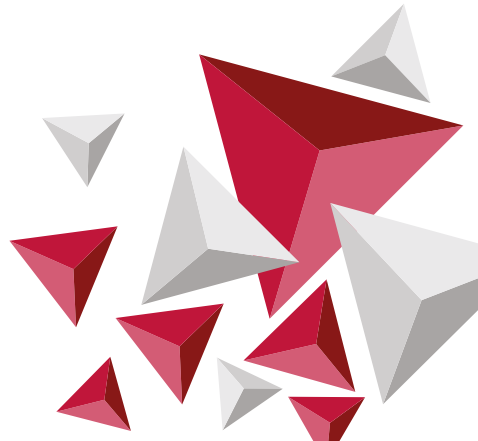
back and techniques how to change quickly between the roles. To express the experienced feelings clearly the trainer uses skills out of the concept Nonviolent Communication by Rosenberg.

Challenges

It remains a challenge to recruit the adequate professional actresses who can be empowered to fill out the demanding tasks in this setting. Although the trainer aim to work with the same SPs over the years which improves their adequate role portrayal and perception of nonverbal skills as well as their feedback competencies, SPs new to the tasks have to be educated quickly. At BFH we are particularly discussing video-based E-Learning sequences.

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Workshop

Challenges in the implementation and execution of interprofessional simulation-based training in acute medical settings: What can we learn from each other?

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Background

Paramedics, emergency nurses and doctors work together at emergency departments in interprofessional teams in stressful situations.

The great challenge for the responsible teams, which are put together ad hoc for the care of a certain patient, lies in the necessity of having to make stable decisions under stressful conditions when the facts are uncertain. Interprofessional education from medical studies to postgraduate education and training is described in a position paper of the GMA Committee as the basis for any successful interprofessional cooperation in health care¹.

There are indications that interprofessional teaching formats such as simulation team training not only increase mutual understanding for the other occupational group, but also improve team performance² and communication up to changes in the workplace³.

Despite this scientific evidence for interprofessional simulation-based training, the implementation at different institutions and training settings or even in different countries has a wide range.

On the other hand, problems and challenges arise in the practical implementation in all settings. Not only the theoretical development of the learning content, suitable for all occupational groups involved, but also the successful implementation and execution of interprofessional simulations pose extensive practical challenges for coordinators and instructors.

Learning goals

The aim of this workshop is the interprofessional exchange in the areas:

- Contents and methods for interprofessional simulations
- Challenges in the development of an interprofessional scenario design
- Presentation of competence-oriented case scenarios, adapted for all occupational groups involved
- Curricular implementation of interprofessional simulations in different institutional settings
- Pitfalls in organisation and implementation: What can we learn from other intuitions and settings or even other training settings in neighbouring countries?

Course of the workshop

The workshop participants will gain exemplary insights into the planning phase and implementation of various interprofessional simulation trainings in emergency medicine from an international perspective (Germany and Switzerland). In the first part, the scientific project contents and pitfalls in planning will be presented by the experts.

Subsequently, various individual challenges of interprofessional simulations will be discussed in small groups and situational solutions will be developed.

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The Use (participants/training/curricular integration) of Standardised Patients (SPs), for the Simulation of Psychosomatic Complaints during Burnout, when Training Nursing Students

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Background

Since 2006, Bern University of Applied Sciences, in addition to other Swiss Universities of Applied Sciences, has prioritised „Clinical Assessment“ as an important aspect of the training for future Bachelor Nursing professionals [Lindpaintner et al. 2009].

Clinical assessment comprises of a systematic assessment of the patient's state of health. This includes taking a patient's medical history, the mastery of examination techniques, the ability to recognise patterns and take appropriate measures. Learning these skills requires a considerable amount of practice.

Training with SPs offers the possibility to learn such competences in a safe and protected environment without harming patient's [Teherani et al. 2008]. Through simulation exercises, students are able to gain more experience and security for their future clinical practice [Walton et al. 2011].

While physical examination techniques can largely be practiced in class, usually medical case histories concerning borderline situations, related to the psychosomatic field and other emotionally challenging situations, are difficult to simulate by lecturers in a realistic way. Such challenging situations can elicit phenomena of transference such as aggression, affection, helplessness or others. Trained SPs can prepare for individual role plays and also give professional feedback [Peters, T., Thrien, Ch. 2018].

Learning Objectives

Participant will:

Cognitive:

- be able to identify important criteria and methods for the selection, training and quality assurance of SPs to secure optimal simulation of emotionally challenging situations and feedback by SPs
- be able to describe how, in assessments, the recognition and identification of overriding phenomena (e.g. somatic complaints in connection with a mental illness) can be facilitated didactically in students

Affective:

- experience how realistic transference phenomena can be triggered through the simulation of patient behaviour by trained SPs
- reflect on what transference phenomena can trigger in an examining and observing person during role play
- experience the effect of feedback, provided by trained SPs

Workshop Description

After an introduction about the casting, the training and the use of quality assurance measures when using SPs in emotionally challenging teaching situations, a case history training will be simulated with participants playing the roles of nursing students. The transference phenomena experienced during the process will then be discussed and incorporated into a fictitious teaching scenario based on the needs and requirements of the participants.

- **Target Audience:** Teachers of Bachelor Level Student Nurses
- **Language:** German, as transference phenomena are best presented, experienced and reflected upon when addressed in the primary language.

Literature

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