

## Abstracts Poster Session «Learners»

### 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.

## 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.

## Bodywork skills assessment with professional actresses as SP (working title)

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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:

Steering the Roleplay actively in a standardized way

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)

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 feedback 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.

## 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.

## A Student's perspective on simulated patient feedback (Poster)

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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.

## 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 curriculum, where students are alternately, six months at the nursing school and six months 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.