

Simulation based training to promote ability in dealing with aggression and violence in the healthcare setting

SimPRENA

WP3– A1

Exchange on experience with simulation based training

Best practice report - Summary

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Version 1.0

Date of last Update: 16.10.2024



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Date and place of the interviews/Focus group meetings:

Country: Poland, on spot in Kielce, 25.09.2024

Number and profile of participants: 5 persons: 1 teachers, 2 medical staff, 2 students

Country: Cyprus, Online Survey, 01. - 07.10.2024

Number and profile of participants: 6 individuals from teaching and research staff, including Adjunct Professors, Lecturers, and specialised educational personnel from the School of Life and Health Sciences across various universities.

Country: Germany, written answers, 01.- 14.10.2024

Number and profile of participants: two teachers from nursing, two teachers from paramedic department

Country: Ireland

Number and profile of participants:

Country, Czech Republic

Number and profile of participants:

Results

Poland:

COMMUNICATION TRAINING (focus on dealing with aggression/violence): The medical staff had no experience with these topics during their studies, the subject was marginalised or outright ignored. They believe 10h of such training should suffice. The teacher and one of the students had taken part in a specialised course on the topic. The students believe there should be 100h of such training and the teacher put the number at 40.

SIMULATION AS A TEACHING METHOD: All had experience with simulation training as teachers or students (scenario-based patient care, CPR, medical simulation centres at universities, self-defence training based on scenarios in medical facilities). The students and staff rated their confidence in utilising simulation as a training method at 9-10 points, while the teacher rated it at 7.

Medical simulations centres at universities are often mentioned as the perfect place for simulation training. CPR training using CPR dolls, training in pairs under the supervision of an experienced teacher, clear and simple transfer of knowledge, focus on practical training with feedback.

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SIMULATION TRAINING:

One student has 8 points of confidence. The other student and the staff are 10 points confident, while the teacher is 7 points confident.

NEEDS IDENTIFIED: The content should be as simple and clear as possible. The simulation training should take into account the participants' gender, age, skills etc.

Most would like to have more experience with simulation training, the teacher would like to see more clear regulation – based on the penal code – of what is self-defence and what constitutes an attack. One of the persons said that they would feel more confident teaching smaller groups.

MICROLEARNING: The methodology was not clear to the teacher and one of the students. One staff member said it should be edited.

4 persons responded that it would help and the teacher said it might help depending on many factors.

SUGGESTIONS FOR COURSE STRUCTURE AND CONTENT: Short learning modules covering only the most important topics. Well edited texts.

ADDITIONAL TOPICS: Mobbing, work under stress, dealing with the patient and the patient's family in the event of a sudden negative diagnosis, dealing with family members of a recently deceased patient.

SUMMARY: The subject is important for all participants, but mostly for students, who would like to have 100h of specialised communication and de-escalation training. Lots of emphasis on the compactness and clarity of the learning modules.

Cyprus:

COMMUNICATION TRAINING (focus on dealing with aggression/violence): 4 participants indicated that training on managing aggression and violence is part of their curriculum. 2 participants stated that it is not included in their curriculum.

The majority (67%) incorporate this training, but the variation in responses highlights inconsistency across institutions. The fact that some do not include it could be due to limited curriculum space or perceived lack of need. This presents an opportunity to standardise communication and violence management training across related health education programs.

Answers indicated insufficient hours allocated, with some specifying 2-3 hours or up to 10 hours annually. Training is mostly embedded in broader courses like Occupational Health and communication skills. The consensus is that while the topic is included, the time dedicated to it is

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inadequate. This suggests that a more structured and comprehensive approach could be implemented, integrating these skills into core subject areas to ensure sufficient coverage.

Teaching methods include discussions, simulation scenarios, role-playing, videos, and PowerPoint presentations. A variety of instructional methods are employed, with interactive and experiential learning (such as role-playing and simulation) standing out. These methods are beneficial but could be further enhanced by standardising techniques across institutions and increasing practical components like scenario-based learning.

SIMULATION AS A TEACHING METHOD: All six participants have experience with simulation training.

Simulation topics included pediatric care, ALS/APLS training, and clinical scenarios in nursing and resuscitation. Methods mentioned include role-playing and using simulation models in laboratories.

The use of simulation is widespread, and it is applied in diverse settings such as emergency care, pediatric care, and resuscitation. However, while experience is common, a more focused approach on aggression and violence management via simulation would be valuable. This highlights the importance of developing scenarios tailored to these skills.

Confidence levels varied, with one participant feeling "very confident," while the rest expressed lower confidence or insecurity. 2 participants were "less confident," and 2 felt "insecure."

While all participants have experience in simulation, confidence in utilising it effectively is inconsistent, especially for managing aggression and violence. Additional training to boost confidence in this area would be beneficial. The need for structured professional development programs to increase competency is evident.

Participants highlighted the importance of standardised scenarios, graded difficulty, collaboration, and feedback. Other notable practices include role-playing self-defense techniques, pre-briefing, debriefing, and recording sessions for review.

The responses reflect a comprehensive understanding of simulation best practices, particularly the value of feedback and scenario realism. However, the inclusion of self-defense techniques and the emphasis on feedback suggest a need for structured guidance on balancing theory with practice in aggression management.

SIMULATION TRAINING:

5 participants indicated that they had not received specific training.

1 participant stated that they had received training.

Most participants (83%) had not received formal training on using simulation as a teaching method, despite their experience in simulation-based teaching. This suggests a significant gap in formal

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professional development for educators using simulation, highlighting the need for targeted training programs to enhance their capabilities in this area.

One participant elaborated that they had attended instructor training for ALS (Advanced Life Support), with the content focused on advanced resuscitation techniques.

Another participant mentioned receiving partial, self-taught training of about 5 hours on the use of simulators provided by the supplier.

The responses reveal that even those who have received training experienced it in a limited capacity, with only one structured program mentioned (ALS instructor training). This further underscore the need for comprehensive, formalised training specific to the use of simulation in managing aggression and violence, ensuring educators are well-prepared to use these methods effectively in their teaching.

Confidence levels varied, with 3 participants expressing insecurity and one participant feeling relatively confident.

NEEDS IDENTIFIED:

Lack of time and resistance to new skills may be obstacles.

Address students' learning needs and prior knowledge.

Debriefing is crucial in simulation.

Use real-life scenarios and incorporate implicit bias training.

Participants stress the importance of addressing logistical challenges like time constraints and student readiness. Tailoring training materials to accommodate varying skill levels and integrating real-world scenarios are essential for effectiveness.

More training on specialised scenarios, practical exercises, and tools.

Cultural shifts in education to embrace simulation.

There is a clear demand for additional training, focusing on practical, scenario-based learning to enhance confidence in teaching violence management. Developing specialised training modules would address this need.

MICROLEARNING: 5 participants have not used microlearning, while 1 participant has.

Microlearning is relatively unexplored among these educators, indicating a potential area for innovation and integration into future training materials, particularly for time-constrained environments.

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4 participants confirmed the methodology was clear, while 1 participant expressed confusion regarding micro-credentials.

Most participants found the document clear, though there is some ambiguity regarding certain terms like micro-credentials. Ensuring clarity on terminology will be important in future material development.

Responses were mixed: 1 participant strongly agreed, 4 disagreed, and 1 participant expressed enthusiastic support.

This feedback suggests varying perceptions of the effectiveness of microlearning and gamification. While some see its potential, others are more skeptical. Future implementations should include evidence-based design and pilot testing to gauge effectiveness.

SUGGESTIONS FOR COURSE STRUCTURE AND CONTENT:

ADDITIONAL TOPICS: Communication with colleagues.

Home care and primary care in the community, including health education and promotion.

Topics on domestic violence, abuse of vulnerable groups (minors, women, elderly), and management of individuals carrying weapons/knives.

Managing external interferences in scenarios, such as relatives or bystanders.

The participants provided valuable suggestions, particularly expanding the topics to include home and community care, and more sensitive issues such as domestic violence, vulnerable populations, and armed individuals. These are crucial areas that could be encountered in real-world scenarios, and their inclusion would increase the relevance and comprehensiveness of the training. Additionally, managing external influences like bystanders or relatives is an important aspect of real-world de-escalation, adding complexity and realism to simulation scenarios.

SUMMARY:

The survey results reveal important insights regarding the current state of training in managing aggression and violence in educational programs. Although most participants include this topic in their curricula, the time and depth dedicated to it are insufficient, indicating a need for a more structured approach. All respondents have experience using simulation as a teaching tool, but their confidence levels vary significantly, particularly when it comes to applying simulation to aggression management. This suggests a clear demand for more specialised training to help educators feel more prepared and competent. While participants shared some best practices, such as the use of realistic scenarios, role-playing, and feedback, they emphasised the importance of creating simulation scenarios that are specifically tailored to managing aggression and violence. They also

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highlighted challenges like time constraints, resistance to learning new skills, and the importance of aligning training with students' prior knowledge and backgrounds.

Regarding formal training in simulation methods, the majority of participants had not received any specific instruction, and even those who had were limited to short or informal courses. This highlights a significant gap in professional development that needs to be addressed. Participants also provided valuable suggestions for expanding the content of de-escalation training to include topics such as domestic violence, abuse of vulnerable populations, and managing external interferences, which would increase the relevance and applicability of the training. Additionally, participants expressed strong interest in engaging with the project further, showing enthusiasm for contributing to the pilot phase and receiving updates on its progress. Overall, the findings point to a need for comprehensive, flexible, and contextually relevant training materials that incorporate more specialised content and better prepare educators to teach effective management of aggression and violence in healthcare settings.

Czech Republic

COMMUNICATION TRAINING: Since 2014, communication skills training has been compulsory for paramedics at our university. We are still the only university in the country that combines two compulsory subjects: communication and crisis communication (20 hours per semester) and self-protection (12 hours per semester). There has been a demand for the same type of training for nurses, but nurses do not have it in their teaching accreditation. 3 years ago, an elective course was opened for nurses: Communication and Prevention of Violence (8 hours per semester). Our students have another subject: Psychology and Medical Psychology where is communication training via role plays. Paramedics and nurses have these subjects in two first semester of their background in first year of their study programme.

We have three instructors with simulators for the paramedic train-the-trainer course. The nurses have instructors without this experience. Teachers on the paramedic study programme feel confident on the scale on point 8 and teachers for nurses feel confident on the scale for point 2 for simulation study.

Our teachers use simulation methods for practical exercises in the following subjects Communication, self-protection, nursing, psychology and pre-hospital and acute care.

SIMULATION AS A TEACHING METHOD: In our experience, we prefer our staff to have clinical days - each academic has a mandatory one clinical day per week on site for nurses or paramedics. We choose common situations, not rarities. We practice situations where no one dies so as not to traumatise the students.

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We work a lot with mistakes so that students know that mistakes are normal and that they need to know how to deal with them. We choose situations that are complicated communicatively, not professionally.

We invite actors and patients so that the students get effective feedback.

What we as trainers still need a lot of training in is feedback in simulation training.

SIMULATION TRAINING: 3 paramedic teachers have attended the 3 day train the trainer course, the nursing teachers have not attended such a course.

We have only one teacher who is interested in this topic, he is going well and feel very good in his teaching (he feels very confident, point 8). Rest of our teachers is not feeling as good as him (point 1-2) because the problematic is very huge and sometimes, we only discuss some cases from media area or own students experience. As good method or tools for teaching are videos or reels from internet, also campaigns with their preventive shots are very useful. Many of us only present this problematic as a frontal teaching method.

NEEDS IDENTIFIED:

Feedback training. Sometimes lecturers tend to handle feedback situations for students and give them advice. The feedback after the simulation training needs to be about the students coming up with the change themselves.

For teachers who do not have training and experience in simulation, some guidance on how to do the first simulation, what it should contain, how to start it, how to work with students and how to give feedback would be helpful.

MICROLEARNING: No, we have not had that experience. We all agreed that this text is comprehensive and useful.

SUGGESTIONS FOR COURSE STRUCTURE AND CONTENT:

Paramedics and nurses agree that playing cards are very useful. One project played the game "tell me", a variation of the British card game Go wish.

It was played in one project and the students found the game very motivating for open discussion, perhaps such a variation would be good for debriefing aggressive and violent incidents.

Overall, we recognise gamification as a beneficial educational method for paramedics, but also for nurses as students with a competitive nature.

ADDITIONAL TOPICS:

Nowadays, de-escalation and a team approach to dealing with violence and aggression in healthcare is a big issue - not only an individual approach, but also changing the environment (Six Core Strategy), positive patient handover (Safewards methodology), prioritising a humane approach over professionalism (De-escalation, no force first approach).

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Certainly, situations where communication with patients cannot be negotiated would be beneficial, and staff/students should think more about self-protection, escape and, most importantly, analysis of the situation after the incident.

Perhaps what we are seeing in students are all types of responses to aggression - attack, flight and freeze. The latter reaction is very common in students, and we would certainly appreciate some tips on what our students can do in a situation where they are frozen and unable to call for help. And also consider the situation of cooperation and communication with the police who arrive at the scene to deal with the incident.

SUMMARY: We feel a current need to strengthen skills in simulation teaching especially for teachers. We lack clear guidance or methodology for colleagues who do not have a training course for conducting and analyzing simulations, providing feedback.

We would welcome a manual for new trainers and a methodology on how to work with scenarios.

We need activities and scenarios for students to practice de-escalation skills and dealing with situations in a team.

Ireland:

COMMUNICATION TRAINING: In MAPA training- blended learning online component and then 4.5 hours face to face.

So general communication skills for therapeutic interaction is taught in year 2 to both general and mental health nurses and then MAPA training in year 3. Also in year 3 mental health students are thought how to deliver trauma informed care preventing escalation of behaviour to aggression and violence and de-escalating when it does present.

SIMULATION AS A TEACHING METHOD: Some training in use of equipment and managing a simulation but just an introduction to same - 6 hours. Also, we use actors to simulate patients for assessment purposes to assess student communication skills and this has always worked well.

Confident when using it where actors simulate patient experience ie 7 but less ie 5 with use of mannequins who need programming to simulate certain symptoms. Generic agreement with staff on this.

Training being led by someone who has the necessary training and experience in simulation. Staff simulation training being provided in small groups with plenty time provided for questions and feedback.

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Scenarios that are realistic and representative of what students may encounter thus partnership with clinical colleagues to inform this. Time dedicated to setting up scenarios linking the scenarios to student experience/ year of programme.

De escalation techniques in clinical practice: If a patient is coming agitated, I remember the nurse talked in normal speaking voice and calming to try to understand the patient why being agitated and not raising their voice to prevent further aggression.

TRAINING IN SIMULATION:

Yes in use of the equipment involved and in programming the mannequins and in becoming familiar with the infrastructure involved. 6,5 hours

N/A students

NEEDS IDENTIFIED: Adequate time and staff available to ensure that quality preparation.

Availability of experts in the area.

Expanding the scenarios to include more diverse presentations of aggression and violence.

MICROLEARNING: Yes we believe this is a very good idea. It's a very interesting and innovative way to get students to engage as the majority like different ways of learning. The gamification is viewed as modern and fun way to learn.

SUGGESTIONS FOR COURSE STRUCTURE AND CONTENT:

ADDITIONAL TOPICS: Working with diverse populations; working with individuals who are experiencing addiction. Some element of the importance of risk assessment and environmental requirements.

SUMMARY: Students wanted to gain more confidence by increasing training in dealing with aggression and violence if we received more training or even lecture on how to talk with a patient and what is the best way to approach this situation and idea what to say in this situation to try to ease the patient and not make them more aggressive. Smaller sessions for this.

De escalation techniques using real life scenarios from a variety of settings ie not just mental health. Scenarios that are realistic and representative of what students may encounter thus partnership with clinical colleagues to inform this. Time dedicated to setting up scenarios linking the scenarios to student experience/ year of programme.

Germany:

COMMUNICATION TRAINING:

Nursing: Special communication techniques are not been taught separately. However, communication in challenging situations is a recurring topic in the spiral curriculum in nursing

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training, especially when it comes to endangering oneself and others or specifically violence in nursing. 54 teaching units are available for this topic within the three year training period.

Paramedic: According to the Saxon curriculum it is part of learning field 5. Learning area 5: Communication and interaction with and counseling of people seeking help and people in need of help, taking into account the respective age as well as sociological and psychological aspects. Time reference value: 120 hrs. No further specification of individual focal points. The topic "Dealing with fear and aggression" currently comprises 8 units in our 3rd year of training.

Nursing: So far, I have used shock experiences to make the topic emotional. I have shown YouTube videos in which nursing staff have mistreated patients. I then spent a lot of time reflecting on what I had seen with the trainees and asking them to describe their own experiences/observations. We then discussed what options trainees have to deal with this (reporting to their supervisor, being open with colleagues, etc.).

Paramedic: mainly classroom discussion

SIMULATION AS A TEACHING METHOD: Nursing: None, 1

Paramedic: Practical training as part of NTS and nursing training. Different case studies from all specialist areas adapted to the training objective and level.

Confidence level 8/9

Paramedic: In principle, simulation training can always be divided into three phases (briefing, action, debriefing), whereby the focus is clearly on debriefing and deep learning from the simulation. For debriefing, I use the 3-B technique (observation, assessment, questioning) as well as the principles of human factors and CRM (simulation-based learning, double-loop learning)

An essential aspect of simulation training is the focus on debriefing. Here, the focus is not only on reflecting on one's own situational actions, but also on analyzing the deep structure of action competence. In this way, participants can achieve deeper and more sustainable learning (compared to exclusively simulated action or vague and superficial reflection).

TRAINING IN SIMULATION: Nursing: No

Paramedic: Yes

Simulation training was a method that was taught at university

Simulation training as a method was discussed in detail both as part of the ACLS instructor training course and in the additional debriefing module (approx. 32 units including self-study plus observation of a 20-unit course).

NEEDS IDENTIFIED: Nursing: The international background of many trainees and the language barriers should be taken into account. This means that simple language should be used here.

Concrete scenarios and didactic comments on implementation are needed, as well as training for lecturers.

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Paramedic: Materials for teachers: Checklists, explanations, clear learning objectives and timelines for orientation

Materials for learners: as close as possible to the world of work and life, geared towards the necessary skills of the trainees

Mimes who play the scenario as realistically and professionally as possible so that the communication techniques can be actively applied. There is a risk that such simulation training will miss the mark (be ridiculed) or be based solely on the “self-defense” approach rather than on communicative strategies.

MICROLEARNING: Nursing: no

Paramedic: not specifically and didactically prepared, rather spontaneously and therefore unconsciously/unknowingly

Paramedic: yes, even if the content is still quite superficial, but the approach is clear to me.

Nursing: I'm not sure whether I think gamification approaches are appropriate for this topic.

Paramedic: Yes, although the trainees show great interest in this topic themselves (regardless of the methodology). At least as important for a positive benefit for the learners is a correspondingly detailed training of the teachers.

SUGGESTIONS FOR COURSE STRUCTURE AND CONTENT:

ADDITIONAL TOPICS:

Paramedic: intoxicated patient, Situation with violent character (brawl, domestic violence, etc.)

Cooperation with police in de-escalation

SUMMARY:

- In the paramedic education simulation training is more widely known and used than in nursing.
- Paramedic training has twice as much learning hours for communication than nursing.
- The learning area of communication in both fields is not determined and leaves room for own focus.
- Focus should be put on proper debriefing to intensify the learning outcomes for the students.
- Students are generally very interested in the topic, independent of the teaching method.

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Conclusion:

The situation concerning the prior knowledge about and capability of teachers to conduct simulation training as well as the available time for simulation training in dealing with aggression and violence is similar in the partner countries. Simulation as a teaching method is used with medical topics but not with a structured focus on communication in difficult situations that include aggression and potential violence. However, there is a common interest in such training expressed by students and teachers alike. The time restrictions given by the limited curriculum space are a common limitation.

Therefore, the following suggestions should be taken into consideration when preparing the teaching materials for teachers (train-the-trainer) and students (e-learning and videos).

Regarding teaching materials for students and teachers:

- well edited concise texts to enable microlearning
- modules should be covering the most important topics
- strengthen skills of teachers in simulation teaching by providing clear guidance and methodology (Manual), checklists, explanations, clear learning objectives and timelines for orientation
- concrete scenarios and didactic comments on implementation as well as learning result orientation
- an emphasis should be put on debriefing¹ in the scenarios and the teacher – training

Regarding simulation scenarios:

- scenarios should simulate real-life, realistic, representative situations, incl. logistical challenges, time constraints, team work etc.
- incorporate implicit bias training, take into account students preconditions (learning needs, varying skills levels, language proficiency, age, etc.)
- choose situations that are complicated communicatively, not professionally
- actors make the simulation more realistic, (student actors could ruin the simulation by ridiculing it) so that the communication techniques can be actively applied
- evidence based design set-up of simulations

¹ Here, the focus is not only on reflecting on one's own situational actions, but also on analyzing the deep structure of action competence. In this way, participants can achieve deeper and more sustainable learning (compared to exclusively simulated action or vague and superficial reflection).

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Additional suggested topics:

- Communication with colleagues (mobbing, work under stress)
- Domestic violence
- Abuse of vulnerable groups (minors, women, elderly),
- Armed individuals
- External interferences, such as relatives or bystanders
- Dealing with the patient and the patient's family when conveying difficult messages (a sudden negative diagnosis, death of a patient)
- Situations where communication with patients cannot be negotiated
- Cooperation and communication with police
- How to deal with three typical response types (attach, flight, freeze), how to un-freeze
- Addicted and intoxicated individuals
- Risk assessment, environmental requirements
- Diverse populations (avoid culturalisation)