EDUCATING VACCINATION COMPETENCE

Simulation Practice

Student's guide

Student's Guide – Content

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1. INTRODUCTION TO THE COURSE

Partnering Higher Education Institutions (HEIs) value that teachers and students are able to participate in international collaboration and knowledge exchange. HEIs benefit from networking, cultural exchange, teacher/ student mobility.

In relation to Vaccination Competencies, students need to become competent in counselling and vaccinating people, and they need to obtain the skills to deliver health care services to meet the needs of people with various cultural backgrounds in national and international contexts. In addition, they need to have evidence-based knowledge. Future health care professionals need to develop multicultural sensitivity and understanding, as they will also benefit from the inter-cultural experience and improve their English language skill.

The simulation cases have been developed in EDUVAC – Project (Erasmus + project), aiming to develop vaccination education for health care students. The participant institutions developing this guide are: University of West Attica (UNIWA) from Greece, Metropolia University of Applied Sciences from Finland, University of Tranava from Slovakia, University of Vic-Central University of Catalonia (UVic-UCC), and University of Modena and Reggio Emilia (UNIMORE) from Italy.

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2. EDUCATING VACCINATION COMPETENCE - EDUVAC PROJECT

Vaccinating is globally one of the most cost-effective preventive health care innovations (WHO Europe, 2013). High rates of vaccination not only protect individuals' health, but it is also translates into widespread protection in the community. However, there are still 19.4 million unvaccinated and under-vaccinated children in the world (WHO Europe, 2017). In addition, there is an increasing number of people moving from place to place, like refugees and migrants, that impacts the community's health. Moreover, there is evidence of a growing anti-vaccine movement in many countries (Larson et al., 2011; Shetty, 2010). Therefore, the WHO (WHO Europe, 2015) stresses that the immunization gap should be closed.

Vaccination requires special education, and the health professionals in charge of administering vaccines should be competent and qualified to provide with high-quality care. Furthermore, vaccination should be safe and cost-effective (Nikula et al., 2009; Rowlands, 2014). **EDUVAC** project fosters an internationalization strategy of higher education institutions that mobilises staff and students and, enhances the quality and relevance of the vaccination learning program. This project strengthens the knowledge, skills and attitudes of students from five European partner universities about how to vaccinate the people.

The overall objective of the EDUVAC–Project is to promote the population's health from the partners countries by increasing the vaccination rate and by also promoting vaccination worldwide. **The specific objectives** are, first, to develop a course on vaccination care that will enhance the quality and relevance to learn about vaccinations

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and, second, to strengthen the knowledge, skills and attitudes of students in the five EU strategic partner universities about to vaccinating and counselling the people. Moreover, this project will enhance the internationalisation strategy of the partners' institutions by promoting their staff and students' mobility.

3.EDUVAC: SIMULATION APPROACH

The Simulation Practice will include health sciences students of different health disciplines. This programme is part of an international project developed in the context of the global concern for vaccination. This approach will consider the international and multicultural perspective.

3.1 Simulation as a pedagogical approach

Simulations for educational purposes have been described as a learning method, in which the purpose is to simulate real life situations (Barjis, 2011). The benefit of simulation-based education in health care education is to provide with a safe and realistic environment that allows repeated practice with the aim to acquire the suitable skills by practicing and teaching different scenarios and, by integrating theory into practice. Simulation-based education promotes active and experiential learning, which leads to enhance patient safety (Keskitalo, 2015).

The basic principles in simulation-based education are: having previous learning, autonomous action, decision-making and debriefing as an integral part of simulation (Keskitalo, 2015). During the debriefing, students reflect on their actions, they learn and they found out their areas they need to work on.

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Simulation-based education has been the focus of many research studies. The main advantages are promoting critical thinking, developing problem-solving skills, improving their communication, team working and clinical skills as they learn how to be health care professionals (Salakari, 2010). Students have experienced simulation as a realistic and effective educational method that stimulates real feelings connected to working life situations. Simulation practice provides students with preparation for real professional work (Akselbo et al., 2019). Furthermore, a simulation may significantly increase students' knowledge and confidence in using the motivational interviewing method (Chang et al., 2019).

Students in health care professions need skills to provide with efficient vaccination counselling. In this project, simulation-based education may be used in an innovative way for teaching and learning. Students may perform different roles such as: a patient, a health care professional or a family member. In these different roles, students would learn different aspects regarding the same teaching topic, from different perspectives. Therefore, students must develop their professional abilities systematically in different roles.

3.2. Learning from simulation

Students carry out and independent study using theoretical content material provided by the teacher. At the beginning of a simulation situation, the teacher presents the description of the scenario. After this, students will agree on their roles with the teachers' guidance. Then, students with active roles together with students with observational roles (observers), get more precise instructions. Once the simulation case finishes, teachers and students start the debriefing discussion. Debriefing is the

final phase of simulation-based education, and it is often indicated that it is the most important phase of simulation-based education (Wang et al., 2011). This phase is where students can review and reflect on their learning process. This phase allows trainees to explain, analyse, and summarise information and emotional states that will allow them to improve their performance in similar situations in the future. The process to achieve these goals usually follows a series of steps, such as processing reactions, analysing the situation, generalising to everyday experiences, and shaping future actions by lessons learnt (Rudolph et al., 2007).

3.3 Expected learning outcomes of the Simulations

After performing the simulations cases, students will be expected:

1. To achieve knowledge on vaccines and immunisation.

2. To acquire basic knowledge of evidence-based practice on vaccination.

3. To be aware of the different vaccination schedules and to provide counselling according to these schedules.

4. To communicate and provide counselling to different populations by applying all the theoretical background knowledge gained such as motivational interviewing and counselling different age groups.

5. To be able to participate in counselling discussions including ethical and cultural issues.

3.4 General pedagogical aspects and simulation scenarios

Students will have different roles within the simulation cases: actors (health professional, service user or relative) or observers (the others who will evaluate and

discuss the action). These roles will be agreed between teachers and students before each simulation.

At the beginning of each case, it is important to explain to students that anything that takes place in simulation is confidential. This confidentiality is a key element to have a comfortable environment during all simulations. It will allow students who are performing not to feel anxious. Furthermore, it is very important to convey the message that if anybody makes a mistake, it is fine as it is a simulation case and all participating students may learn from the errors.

A small number of students will perform as actors (the concrete number of students required depends on each simulation case). The rest of the students, eight to ten (small group), will take the role of observer. The observers will have to fill the observational plan table as well as the teachers. These documents will be provided by the teachers. The debriefing takes place with all the students together. Gardner (2013) explanation of the debriefing phases may be seen in Table 1.

Table 1. The theoretical framework of the debriefing phases (Gardner, 2013).

DEBRIEFING PHASES

1. Reactions

- Express emotions

- Review the facts

- Establish the scenario to address the learning objectives

2. Understanding

- Explore what happened

- Discover the mental models that have led them to act in a certain way

- Apply good judgment to understand what has happened and acquire new knowledge and skills

- Transfer what has been learned to real situations

3. Summary

- Revise what has been learned

- Discuss what they take with them and what they have learned to apply to future situations

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Simulation cases:

1. Motivational interview as a method of counseling.

2. Children who are afraid of having vaccines.

3. Counselling people with immigrant background, a challenge with the language.

4. Parents who are hesitant to vaccinate their children.

5. Health care professional, who does not take vaccinations, even though he / she works with immunocompromised persons.

3.5 Assessment and evaluation

To reach an appropriate assessment of each student, teachers will support students during the whole process. Students should actively take part in the simulation practice taking an active role in the scenarios and during the debriefing discussion. Through all

this process students will be able to show that the learning outcomes are achieved.

Each university decides on the grading and ECTS according to their criteria.

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