

Intellectual output No 1: Curriculum of the patient safety module

This curriculum was developed by the Estonian and Norwegian core group and agreed with the extended working group members. The curriculum include the description of the content, objectives, learning outcomes and recommendations for teaching and learning methods and materials.

Improvement of patient safety in advanced nursing: teamwork, safety culture, and patient involvement

HYBRID CURRICULUM IN PATIENT SAFETY: integration of academic master's education and continuous professional education in Estonia and in Norway

Introduction

This course will introduce the participants to the concepts of teamwork, safety culture, and patient involvement in the context of the improvement of patient safety in nursing. This course is designed to fulfil the gaps in the existing curricula of the under- and postgraduate training programs in nursing/health sciences in Estonia and in Norway as well in continuous professional training for practicing nurses in both countries. We identified these gaps by analyzing the existing curricula according to the topics recommended in the WHO patient safety curriculum guide¹. Additionally, we conducted the surveys among the master students in advanced nursing/health sciences and registered nurses (nurse practitioners) in Estonia and Norway to find out the level of competencies and learning needs in patient safety. We used the Health Professional Education in Patient Safety Survey (H-PEPSS) instrument² which was translated into Estonian and Norwegian languages.

This course is using the **principles of intraprofessional shared learning**, the target groups are nursing master students and registered nurses (practitioners).

The **first part** of the course is focused on the importance of teamwork in patient safety. The students will learn how to build up the competent team of health professionals as well how to prevent errors through the leadership to detect the risk factors and dangerous situations in daily practice.

The **second part** of the course aims to explain the role of safety culture: how to create the safe and blame-free environment and how the positive safety culture supports the patient safety.

The **third part** of the course will discuss how the patients can contribute to the improvement of their own safety. The students will deepen their knowledge and skills in the involvement of patients in the healthcare team and benefits of the cooperation.

The amount of this course is 3 ECTS (78 academic hours), from this at least 1/3 will be spent in (virtual) classroom.

Objectives

1. To deepen the knowledge of the role of human factors and teamwork in the context of patient safety.
2. To understand the importance of safety culture in the health care organization.
3. To understand the patient's role in their own safety and to promote the patient involvement in patient safety.

¹ WHO patient safety curriculum guide: multi-professional edition. WHO 2011. Available at:

https://www.who.int/patientsafety/education/mp_curriculum_guide/en/

² Ginsburg, L., Castel, E., Tregunno, D., & Norton, P. G. (2012). The H-PEPSS: an instrument to measure health professionals' perceptions of patient safety competence at entry into practice. *BMJ Qual Saf*, 21(8), 676-684. doi:10.1136/bmjqs-2011-000601

Learning outcomes

After the completion of the course the participant:

- is familiar with the concept of human factors in the context of patient safety and is able to analyze and critically evaluate the influence of human factors on patient safety;
- understands the roles and responsibilities of each member of healthcare team in the context of patient safety;
- has knowledge and skills to avoid a culture of putting the blame on someone/each other;
- has knowledge about the patient's role in their own safety and understands the patient role in healthcare team;
- has knowledge and skills about the design and implementation of the safety improvement projects and strategies of patient involvement into their own care and safety.

Additionally, general learning outcomes expressed by skills, attitudes and values as well by general competencies are defined as follows:

Skills:

- Uses of relevant tools and strategies to improve teamwork in patient safety (TeamSTEPPS).
- Uses of systematic instruments in the clinic, e.g. checklists, early warning scores etc.
- Takes facilitator-role in simulation (pedagogics, theories).

Attitudes and values:

- Access their understanding, believes and actions toward patient safety.
- Plan self-development and training for being a cooperative and skillful professional and leader in patient safety.
- Respect other professions.
- Acknowledge patient safety as a joint responsibility.
- Valuing leadership, situation monitoring, joint support, and communication.
- Demonstrate skills in leadership, situation monitoring, joint support, and communication.
- Promote ethical clinical practice in nurses.
- Values and promote good leadership skills.
- Value and promote communication skills.

General competencies: ethics and value aspects in patient safety; attitudes; increased patient safety competency with simulation training, understanding how to prepare simulation, how to assess.

Teaching and learning methods

Using the shared learning principles, the following teaching and learning methods will be used:

- **Group discussion** to share experiences and find literature to promote dialogue.
- **Situation analysis.** Get the perspectives of nurses involved in adverse events, leaders' perspectives, patient perspectives etc.
- Nurses **sharing experiences.**
- **Sharing their practical and theoretical knowledge** with each other.
- **Situation analysis.** Nurse leaders/managers should be involved with students in learning activities. Nursing managers can present a case and ask students for advice on how to manage the staff for promoting appropriate handling of the case (staff feel safe and willing to share feelings and experiences). Reflections around the case.
- **Presentations,** students present literature.
- Groups for **peer support.**

But also

- independent reading of case studies and reflecting them in a group;
- Independent guided work with study materials and as a result compiling and presenting infographic in a group.

Teaching and learning resources

- recorded video-lectures,
- handouts,
- case studies,
- scenario for the role play,
- learning videos (e.g. *Learning from errors by WHO*³).

³ Available at: https://www.who.int/patientsafety/education/learning_from_error/en/

Part 1: Human factors and teamwork (1 ECTS)

Objectives:

To deepen the knowledge of the role of human factors and teamwork in the context of patient safety, specifically to

- understand the relationship between human factors and patient safety and apply this knowledge in the clinical/professional setting,
- learn how to prevent errors through leadership,
- deepen the knowledge and skills regarding team competencies: the roles and functions of the team members, their expectations and competencies in clinical practice (rules, laws, guidelines, protocols and regulations),
- know how to be effective team player.

Learning outcomes

After the completion of the first part of the course the student

- is familiar with the concept of human factors in the context of patient safety and is able to analyze and critically evaluate the influence of human factors on patient safety;
- knows the influence of human factors on patient safety and the possibilities of human factors interventions;
- understands the roles and responsibilities of each member of healthcare team in the context of patient safety;

Summary of the content

Human factors, engineering or ergonomics is the science of the interrelationship between humans, their tools and the environment in which they live and work. The concept of human factors covers the human-to-human interactions such as communication, and therefore the knowledge of human factors will improve communication, teamwork and organizational culture, but also the human-machine and human-system interactions. Using different learning methods and materials (role play, case study, situational videos etc.) in the shared learning process the master students and nurse practitioners will obtain deeper understanding of the relationship between the human factors and patient safety as well will have opportunity to put their knowledge into practice.

To be a good team player the students should understand how teams improve patient care, what are effective teams and effective leadership and know the communication techniques for healthcare teams. Also, the knowledge the barriers to effective teamwork and knowledge and skills techniques for resolving disagreement and conflict are needed. In the shared learning process the students will deepen their theoretical knowledge about different techniques as well will practice the obtained knowledge in intraprofessional study group.

Recommended learning materials for the part 1: Reading materials/ (video)lectures, students' presentations based on reading materials, case study.

Part 2: Safety culture (1 ECTS)

Objectives:

To understand the importance of safety culture in the healthcare organization, specifically to

- promote attitudes and values that encourage openness to report and discuss experiences that is a threat to patient safety;
- learn how to create a work environment that feels safe, and staff that are open to share experiences and feelings;

Learning outcomes

After the completion of the second part of the course the student

- understands the role of reporting and learning systems to promote the patient safety and safety culture in the healthcare organization;
- is confident in his/her ability to report adverse events without fear of reprimands;
- has knowledge and skills to avoid a culture of putting the blame on someone/each other;
- has knowledge and skills how to reduce nurses' and other healthcare staff's fears of being reprimanded when reporting accidents and situations they have been involved in.

Summary of the content

In the second part of this course, the students will get the knowledge about the concept of safety culture and learn the impact of the safety culture on different aspects of patient safety. They will understand how the culture of the workplace will impacts upon team functioning as well the human factors, and how the safety culture of the healthcare organization may affect or have a positive influence on the patient safety.

Another topic in this section is focused on the effective use of incidence reporting and learning system – how to build up the reliable reporting and learning system and how to encourage the healthcare staff to report the incidence in the blame free environment. Additionally, the concept of second victim will be introduced.

Recommended learning materials for the part 2: Reading materials/ (video)lectures, students' presentations based on reading materials, case study.

Part 3: Patient involvement in patient safety (1 ECTS)

Objectives:

To promote the patient involvement in patient safety, specifically to

- understand the benefits of the patient involvement on patient safety;
- promote the knowledge and build up the skills for cooperation in patient safety.

Learning outcomes

After the completion of the third part of the course the student

- has knowledge about the patient's role in their own safety;
- understands the patient role in healthcare team;
- understands the benefits of cooperation in building up patient safety in an organization;
- is able to implement the strategies of patient involvement into their own care and into patient safety developments.

Summary of the content

This section is focused on the patient empowerment and their involvement the patients, their families and carers in the healthcare team as partners. Using the simulation, case studies and examples from practice, the students will learn how patient involvement in the care process will help to reduce errors and improve care for patients. To understand the continuum and different levels of patient involvement the multidimensional framework for patient and family engagement in health and health care will be used^{4,5}

Recommended learning materials for the part 3: Reading materials/ (video)lectures, students' presentations based on reading materials, case study.

⁴ Carman et al. Patient And Family Engagement: A Framework For Understanding The Elements And Developing Interventions And Policies. Health Affairs 2013;2:223-31. doi: 10.1377/hlthaff.2012.1133

⁵ PATSAFE (2021). Framework for Patient Involvement in Patient Safety. PATSAFE Toolbox No. 5. Available at: <https://kliinilinemeditsiin.ut.ee/en/patsafe-toolbox>