SBAR

Tool for Quality Reporting for Nursing Students

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TAMPEREEN AMMATTIKORKEAKOULU

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ABSTRACT

Tampereen ammattikorkeakoulu
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RENKOLA, HANNA-KAISA & HIETALA, SANNA:
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Gaps in the flow of information, caused by health care workers' insufficient communication and reporting skills, are one of the major causes affecting patient safety. In general, verbal reporting in the nursing field is unstructured. Especially in acute situations, the time pressure causes challenges for quality communication. Through standardising the handover process, gaps in the flow of information can be reduced, and as a result patient safety will be improved. The internationally used the SBAR reporting method is one of the widely studied standardised protocols for reporting. It is a method used for concise communication of the most essential information in the health care field. The SBAR method is proved to be especially suitable tool for reporting in acute situations requiring rapid action.

The purpose of this functional Bachelor's thesis was to prepare teaching material on reporting utilising the SBAR method for Tampere University of Applied Sciences (TAMK). The purpose was also to create a reporting tool for acute situations for the nursing students. The aim of this thesis was to offer nursing students a good basis for reporting, especially in acute situations wherein rapid actions are needed. This was achieved by preparing PowerPoint teaching material and a printable checklist. The language of the teaching material and the checklist is Finnish. The ultimate goal of this Bachelor's thesis was to enhance nursing students' reporting skills, and through this, improve patient safety. Theoretical starting points of this thesis consist of patient safety, communication in the health care field, and teaching material. These subjects were studied through a literature review.

For the future research, one recommendation could be to study if nursing students find the SBAR method useful in practice. Another future recommendation could be to study the SBAR method from the aspect of receiving a report.

Key words: communication, SBAR, patient safety, handover, teaching material.

TIIVISTELMÄ

Tampereen ammattikorkeakoulu
Hoitotyön koulutusohjelma
Sisätauti-kirurginen hoitotyö

RENKOLA, HANNA-KAISA & HIETALA, SANNA:
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Laadukkaan raportoinnin työkalu sairaanhoitajaopiskelijoille

Opinnäytetyö 54 sivua, joista liitteitä 17 sivua
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Terveydenhuollon työntekijöiden puutteelliset kommunikointi- ja raportointitaidot aiheuttavat katkoksia tiedon kulussa. Nämä katkokset ovat yksi suurimmista potilasturvallisuuteen vaikuttavista tekijöistä. Terveydenhuollon raportointi on kautta linjan epämuodollista ja jäsentymätöntä. Erityisesti akuutissa tilanteessa kiire vaikeuttaa laadukasta raportointia. Hoitotyön raportointia yhdenmukaistamalla katkokset tiedonkulussa vähenevät, ja myös potilasturvallisuus paranee. Kansainvälisesti käytetty SBAR-raportointimalli on paljon tutkittu työkalu raportoinnin yhtenäistämiseen. Raportointimalli soveltuu lyhyen ja ytimekkään tiedon välittämiseen terveydenhuollossa, erityisesti akuuteissa ja nopeaa toimintaa vaativissa tilanteissa.

Tämän toiminnallisen opinnäytetyön tarkoituksena oli valmistaa opetusmateriaalia SBAR-raportointimallista Tampereen ammattikorkeakoululle (TAMK), sekä luoda hoitoalan opiskelijoille työkalu raportoinnin tueksi akuutteihin tilanteisiin. Opinnäytetyön tavoitteena oli tarjota opiskelijoille pohja hyvään raportointiin etenkin nopeaa toimintaa vaativissa tilanteissa. Opinnäytetyön tuotteena valmistui suomenkielinen opetusmateriaali PowerPoint-esityksen muodossa, sekä suomenkielinen tulostettava tarkistuslista sairaanhoitajaopiskelijoille. Opinnäytetyön tärkein tavoite oli parantaa potilasturvallisuutta kohentamalla TAMK:n hoitoalan opiskelijoiden raportointitaitoja. Työn teoreettiset lähtökohdat olivat potilasturvallisuus, kommunikointi terveydenhuollossa ja opetusmateriaali. Näitä aihealueita tutkittiin kirjallisuuskatsauksen muodossa.

Tulevaisuudessa tutkimus opiskelijoiden tarkistuslistan käyttökokemuksista olisi perusteltu. Toisena jatkotutkimusehdotuksena olisi tutkia SBAR-raportointimallia raportin vastaanottamisen työkaluna.

Asiasanat: kommunikointi, SBAR, potilasturvallisuus, hoitotyön raportti, opetusmateriaali.

CONTENTS

1 INTRODUCTION

Communication between health care workers is influenced by several factors, such as individual characteristics, cultural background, education, stress, and hierarchy of the working community (Boaro et al. 2010, 111). As a result, communication can become ineffective or vital information is missed. These can result in deterioration of the patient's clinical condition or even death. Moreover, even if problems in communication were not the primary reason, they often are root causes in patient safety incidents (Dunsford 2009, 386, 390). However, in addition to being a threat to patient safety, communication is also a tool to reduce patient safety incidents (Sandars & Cook 2009, 16).

The SBAR reporting method enables concise communication of the most essential information (Rodgers 2007, 7), and therefore improves the effectiveness of the information transfer (Dunsford 2009, 386). The abbreviation SBAR comes from the words Situation, Background, Assessment, and Recommendation; each forming a section including prompt questions structuring the information which is passed on (Shannon, Long-Sutehall & Coombs 2011, 128). Through improving communication with SBAR, also threats to patient safety are reduced (Sandars & Cook 2009, 18), especially when SBAR also provides a template for communication checklist (Dunsford 2009, 386).

The purpose of this functional Bachelor's thesis was to produce teaching material on the SBAR reporting method for TAMK. A checklist was also prepared to aid nursing students in quality reporting with the SBAR method, especially in acute, unexpected situations. The theoretical background of the thesis was built through a literature review.

According to the thesis writers' own experience from clinical trainings and working as substitute nurses, reporting in situations where the patient's condition deteriorates suddenly is highly challenging for an undergraduate, as well as for a newly graduated nurse. This is why the acute viewpoint of communication was emphasised in this thesis. A hope to learn better reporting, and to help future nurses in the beginning of their career was a strong motivational factor during the thesis process.

2 PURPOSES AND OBJECTIVES OF THE BACHELOR'S THESIS

The purpose of this functional Bachelor's thesis was to produce teaching material on the SBAR reporting method for TAMK, as well as to provide a reporting tool for the nursing students of TAMK.

The task of this thesis was to answer the following questions:

- How do reporting and the quality of communication affect patient safety?
- How to enhance the quality of reporting in acute situations?
- What kind of teaching material is the most beneficial considering the student's learning process?

The objective of this thesis was to provide the nursing students of TAMK with a basis for good quality reporting in hospital settings, especially in acute situations. The ultimate goal of this thesis was to improve patient safety through enhancing the nursing students' reporting skills.

3 THEORETICAL STARTING POINTS

Patient safety, communication in the health care field, and teaching material were studied in this Bachelor's thesis as theoretical starting points. The literature review was conducted based on these concepts. The importance and need for products of this thesis was justified through the literature review. The literature review also guided the content of the final products of this thesis.

3.1 Patient safety

It is estimated that one in ten patients is harmed while receiving hospital care in developed countries (10 Facts on Patient Safety 2014; Potilasturvallisuutta taidolla - ohjelmasuunnitelma 2011, 8). In Finland, approximately 700-1,700 people die every year because of malpractice in health care, while road traffic causes 300 deaths and industrial accidents result in 50 deaths yearly (Potilasturvallisuutta taidolla - ohjelmasuunnitelma 2011, 8). Considering these facts, patient safety is evidently an important issue in everyday health care practice.

The World Health Organization (WHO) (2009) defines patient as a person receiving health care, whereas safety is described as cutting down the risk of unnecessary harm to an acceptable minimum. Acceptable minimum means an understanding of current knowledge and resources, the context in which care is delivered, and comparing it to the risk of not treating, or giving another treatment. Combining these concepts, patient safety means that the risk of unnecessary harm related to health care is cut down to an acceptable minimum. (WHO 2009, 15.) In other words, patient safety means that patients are not accidentally injured or harmed as a result of health care (St-Germain & Blais 2009, 60). National Institute of Health and Welfare (2014) considers the term more widely, stating that patient safety includes the principles, practices, and processes of a health care unit, which are used to anticipate and prevent risks and dangerous situations. In addition, preventing human mistakes and learning collaboratively are part of patient safety. (Terveyden ja Hyvinvoinnin laitos 2014.)

However, when a patient is receiving health care, and the risk of unnecessary harm is not successfully cut down to an acceptable minimum, a patient safety incident may occur. Patient safety incident is an event or a circumstance that could have caused or did cause unnecessary harm to a patient. (WHO 2009, 15-16.) The same issue is also described as an adverse event. An event becomes adverse when patient suffers unintended harm because of something that is done, or has not been done by health care providers. This means that harm caused by the patient's condition or disease does not indicate an adverse event. (Henneman, Gawlinski & Giuliano 2012, 10.) In this Bachelor's thesis, the term patient safety incident refers to situations where patient experiences unnecessary harm as a consequence of health care.

All action in the health care field must be of high quality, safe, and appropriately carried out (Halila 2013, 226). Primary health care and specialised health care must create a functional whole, where specialised health care services are provided appropriately together with primary health care. Health care organisations are responsible for having enough employees and up to date equipment to enable safe health care. (Health Care Act 2010.) Therefore, patient safety is also the foundation of health care quality (Potilasturvallisuusopas 2011, 10). Attention to patient safety is required and expected from health care providers, but what is it that keeps patients safe?

3.1.1 Factors affecting patient safety

WHO (2009) lists elements contributing to patient safety: staff, patient, work, and environmental, organisational, and service factors. Staff factors are broken down to cognitive, performance, behaviour, communication, pathophysiological or disease-related, emotional, and social factors. Communication factors contributing to patient safety are further divided into communication method, language difficulties, education and knowledge, and with whom the communication happens. Communication method can be paper based, electronic, or verbal. The communication itself can happen between health care professionals, or between a professional and a patient. (WHO 2009, 90-91.) Since this Bachelor's thesis concentrates on verbal communication between health care professionals, other aspects of patient safety are not discussed in this work despite their importance.

Information essential to patient safety is transferred between organisations as well as between health care professionals (Potilasturvallisuusopas 2011, 27). It is vital to ensure the flow of information between the members of an interdisciplinary team within health care units (Klipfel et al. 2014, 39). Attention must also be paid to the requirements of information flow between units and different organisational levels, as well as between separate organisations. This is because the specialisation of health care causes scattering of the responsibility of care to several different units. Fragmented care processes and service system set challenges for patient centred and safe care. (Potilasturvallisuusopas 2011, 9.)

Nurses and doctors must work together as a team to provide safe care for their patients. Communication between members of the multiprofessional team must be effective, since nurses and physicians are highly dependent on each other in their work. Despite these facts, there is disruptive communication from both the nurses' and doctors' side. (Robinson, Gorman, Slimmer & Yudkowsky 2010, 206-207.) According to the analysis of the Joint Commission on Accreditation of Healthcare Organizations in 2005, communication problems are major causes in almost 70 percent of serious patient safety incidents (Summary of the evidence on patient safety:... 2008, 66; Matic, Davidson & Salamonson 2010, 185). One reason can be the fact that during their education, nurses and physicians are trained to use different kinds of communication styles. Nurses tell descriptively about patients, whereas doctors are taught to report clinical facts and go straight to the point. (Robinson et al. 2010, 213-214.)

When different fields in health care are studied, there is variation in factors affecting patient safety. In a certain Finnish health care organisation, in specialised health care, the second most important cause of a patient safety incident was a problem in information transfer. On the other hand, in this organisation’s institutions providing long term care and in elderly homes, problems in the flow of information were not a similarly significant cause of patient safety incidents. In spite of this, patient safety incidents related to breaks in the flow of information were the third most common type of incidents in this specific health care organisation. Out of these events, 38% were related to verbal communication. Usually the problem appeared when information was missing, the communication was unclear, or some part of the information was not transferred in the situation. In addition, misunderstanding and misinterpretation, as well

as inadequate use of received information were common reasons for patient safety incidents in this organisation. (Kuisma 2010, 24-25.)

A critical incident is something that can happen in any field of health care (Critical Incident Reporting 2011, 19). The word critical refers to a crisis or a turning point of a disease, and it is a synonym to the word acute. Further, acute, when used to describe a disease or symptoms, means severe, but having a short duration. (Oxford English Dictionary 2014.) In practice, this means a serious adverse event experienced by a patient (Critical Incident Reporting 2011, 19), or an acute event occurring because of a surgery, medication, disease or treatment, potentially threatening the patient's life (Wong 2009, 53). Events like these create threats to patient safety, because they appear suddenly and require fast, yet complex action (Manning 2006, 270).

In addition to the elements mentioned above, human factors are a major component affecting patient safety. Mistakes happen in every section of the health care field, since all human action comes with the possibility of mistake and error. (Potilasturvallisuusopas 2011, 9; Patient Safety Checklists 2014.) WHO refers to the definition of human factors issued by the Health and Safety Executive by stating that human factors are environmental, organisational, and job factors, as well as individual characteristics of humans which affect behaviour at work. Therefore these elements also affect patient safety. (Human Factors in Patient Safety:...2009, 5.) Lack of consideration of human factors in design of practices is set on the sixth place on the list of research priorities in patient safety for developed countries (Global Priorities... 2008), and further, communication can be seen as a human factor (Vickers 2009, 8).

As stated above, there are various reasons behind patient safety incidents, and often there are many factors contributing to one incident. Henneman et al. (2012, 14) state that practices used nowadays in health care rely strongly on the supposition that patient safety incidents are recognised and interrupted, instead of aiming at the prevention of those incidents in the first place (Henneman et al. 2012, 14). Global Priorities for Research in Patient Safety (2008) points out areas which should be especially considered when researching and developing safer care. Separate research priorities are set for developing countries, for countries with economies in transition, and for developed countries. The top priority research area in developed countries is the involvement of processes and organisational structures in unsafe care, and lack of

communication and coordination is ranked to be the most important priority. Coordination across organisations, discontinuity, and handovers are included in the coordination. (Global Priorities... 2008.)

3.1.2 Outcomes of patient safety incidents

From the patient's point of view, a patient a safety incident can cause pain and harm if there is for example an infection related to hospital care (10 Facts on Patient Safety 2014). It is also possible that a patient suffers from a disability for the rest of his/her life, and a patient safety incident can also result in the patient's death (Potilasturvallisuutta taidolla -ohjelmasuunnitelma 2011, 8).

Breaks in patient safety have cost some countries six to twenty nine billion US dollars a year (10 Facts on Patient Safety 2014). One way to view the outcomes of patient safety incidents is to look at them from the point of view of the health care organisation. WHO (2009) summarises the outcomes of organisational patient safety incidents as follows: property damage, increase in required resource allocation for patient, media attention, formal complaint, damaged reputation, and legal ramifications. Increase in required resources for the patient are further broken down to increase in the length of stay, admission to special care, additional treatments and tests, disrupted workflow and delays for other patients, additional staff, and additional equipment required to treatment. (WHO 2009, 98.)

3.1.3 How to cut down risks to patient safety?

As discussed earlier, patient safety incidents result from various different reasons, factors and situations. When improving patient safety, it is important to focus on individual topics as well as on structures and processes affecting it. Interventions specific to a certain problem, such as health care associated infections, usually have a more immediate effect on patient safety. However, interventions aimed at structures or processes, such as improving communication, will probably have a broader, more durable effect. (Summary of the Evidence on Patient Safety:... 2008, 3.) When improving processes and ways of working, the goal is to identify risks beforehand and

to anticipate hazardous situations by changing processes and ways of working (Potilasturvallisuutta taidolla -ohjelmasuunnitelma 2011, 9). This is how the occurrence of patient safety incidents can be decreased. However, health care experts and multiprofessional teams must develop skills, knowledge and attitudes towards communication to reach the goal. One way to do this is by practising through simulation (Klipfel et al. 2014, 39).

Furthermore, WHO (2009) lists factors improving patient safety. Factors pertaining to the personnel are good supervision or leadership, good teamwork, relevant persons attended, relevant persons educated, and effective communication. (WHO 2009, 96.) Effective communication in a multiprofessional team can be described as an example with following characteristics: clarity and the precision of message relying on verification, collaborative problem solving, calm and supportive conduct under stress, and the maintenance of mutual respect (Robinson et al. 2010, 209). This means that information which is verified to be correct is passed on clearly and precisely. Other professionals are asked for advice and respected, which helps to build up a relationship between professionals. Professionals also behave calmly and support each other especially in urgent, high stress, and emergency situations. (Fernandez, Tran, Johnson & Jones 2010, 270-271.)

In the WHO's list covering actions to reduce risks to patient safety, one of staff factors is the availability of checklists, protocols, and policies (WHO 2009, 100). Checklists provide their users with a possibility to stop and evaluate their actions before continuing to the next step of action (Patient Safety Checklists 2014). Putting these together, a checklist can be used as a tool in improving communication to ensure nothing is missed in a high risk situation, hence promoting patient safety (Dunsford 2009, 386).

3.2 Communication in the health care field

Communication and handing out information are essential parts of nursing practice. Health care professionals have to work together in a complicated network of clinical relationships, wherein communication plays an essential role. Communication is reliant on the health care professionals' capability to listen, internalise, differentiate, explicate, gather, and share information in continuously altering systems. Communication is a

complicated phenomenon and it encompasses cognition, skill, value, and emotion. (Manning 2006, 268.)

Manning (2006, 268) lists examples of the most critical communication situations concerning the care of a patient in health care settings: compiling and implementing care plans, forwarding the information of these care plans in a form of a handover report, and communication in emergent circumstances. These situations often take place in chaotic, noisy and hectic surroundings, wherein interruptions are common. The need for shared responsibility for concise, explicit, appropriate and timely communication is recognised. (Manning 2006, 268.)

As discussed in the previous section, some of the major factors affecting patient safety are the communication and reporting skills of the health care workers. Failures in communication are the most significant causes of unintended patient safety incidents in health care settings (Manning 2006, 268; Human Factors in Patient Safety:... 2009, 17). In Finland, breaks in the flow of information contribute up to 70 percent of patient safety incidents and mistakes in the health care industry (The Finnish Nurses Association 2013).

Communication in general is a process in which facts, ideas, opinions, feelings, and attitudes are exchanged between two or more persons. Through communication these persons can interact with each other and form a mutual understanding on different subjects. In a verbal communication process, the person communicating sorts, selects and sends symbols to the listener. As a result the listener can perceive and create meaning in his own mind from the meaning contained in the communicator's mind. Communication can happen through several different means. (Rayudu 2010, 2.) In this thesis, communication refers to verbal communication, since it is the relevant way of communicating in acute reporting situations in the nursing field.

As it is stated in the publication Human Factors in Patient Safety: Review of Topics and Tools (2009, 16), a communication process in general can be seen as one-way or two-way; one-way referring to for example written material, whereas two-way communication refers to discussions face to face or via phone or email. In two-way communication, it is possible to give feedback and make sure all parties in the communication situation understand the issue being discussed. This also minimises the

possibility of misunderstandings. In one-way communication, this is not possible. (Human Factors in Patient Safety:... 2009, 16.)

The publication Human Factors in Patient Safety: Review of Topics and Tools (2009, 16) and Manning (2006, 268-269) divide problems in communication into system, message, and reception failures. When people fail to pass on or receive information, or incorrect information is communicated, these problems can occur. System failures happen when there are no necessary channels for communication available, the channels are not working, or they are rarely used. Transmission failures refer to situations where channels for communication exist, but the necessary information is not passed on. The reason can be for example that the message is unclear or ambiguous. Reception failures happen at the other end than transmission failures. In these situations too, channels for communication exist and information is sent, but the person receiving the information is misinterpreting it or receives it too late. Misinterpretation can happen for example because the recipient expects a different message or disregards the message. (Manning 2006, 268-269; Human Factors in Patient Safety:...2009, 10, 16.)

Effective communication, similarly as a continuous and consistent flow of information between health care workers, is a crucial factor in ensuring patient safety and in preventing patient safety incidents (Human Factors in Patient Safety:... 2009, 17; Matic et al. 2010, 184-185). The characteristics of effective communication have been described in detail earlier in this thesis. WHO Collaborating Centre for Patient Safety Solutions (2007) presents study results suggesting that effective communication consists of elements such as exact, unequivocal information which is transferred in a face-to-face situation. As Matic et al. (2010, 184-185) present in their article, ineffective communication has the capacity of affecting clinical decisions, the care given to the patient, and through these, also patient safety.

Manning (2006, 268) emphasises the fact that communication patterns are remarkably fluctuating. Some of the known factors causing problems in effective communication cover human factors and mistakes, lack of knowledge, gaps in the flow of information, time limitations and the amount and quality of information being given (Matic et al. 2010, 185). In addition to the factors mentioned above, individual communication skills and styles, as well as the social dynamics in clinical decision making are brought up in the literature (Manning 2006, 268; Human Factors in Patient Safety:... 2009, 17-23, 29,

33). Individual communication skills and social dynamics include the individual background, history, culture, values, beliefs, and the preceding knowledge level of the parties in any communication situation, as well as social dynamics and relationships in the working environment. Different statuses of health care workers can cause issues in social dynamics and relationships, for example a newly-graduated nurse may find it challenging to speak up. (Human Factors in Patient Safety:... 2009, 17-23, 29, 33; Matic et al. 2010, 185-186.)

The publication Human Factors in Patient Safety: Review of Topics and Tools (2009, 17) also emphasises the challenge that health care workers with different experience and education levels, roles, and viewpoints set to the communication process in health care settings. According to Johnson and Cowin (2013, 122), problems often arise in the handover situations where there is no standard protocol for the handover process. Some of the major communication problems in health care settings include disorganised handoff reports, interruptions, failures in recognising the status of the patient, language issues, and disorientation in the roles of the participating team members. (Johnson, Cowin, 2013, 122.) To conclude, communication in health care settings is a complicated phenomenon and it is vulnerable to errors especially when the patient's care is being transferred in acute situations (Manning 2006, 270).

3.2.1 Handover report

A handover report is a communicative routine between two health care professionals. It takes place when the responsibility of a patient's care is transferred, and therefore information concerning the patient and his/her care is passed between health care professionals (Mayor, Bangerter & Aribot 2012, 1956). As Matic et al. (2010, 185) indicate, the handover process is a key factor in the continuity of a patient's care.

The information transferred during a handover report usually includes the patient's clinical information; current status and situation, any changes or complications in these, the current and ongoing treatment and plan of the care, as well as any social and psychological issues of the patient (Matic et al. 2010, 186). All this data has to be communicated accurately in order to maintain good patient care and safety (Patterson et al. 2004, 125). Handover communication also refers to the information flow between

two organisations and the reporting situation from a health care facility to the patient's home (WHO Collaborating Centre for Patient Safety... 2007). This Bachelors' thesis focuses on verbal handover reporting and communication between health care providers, especially in acute situations.

In health care settings, there are several means of conducting a handover report. In the change-of-shift handover, the most common styles are written and verbal handover report, as well as different kind of combinations of these two. (Matic et al. 2010, 186-187.) The first priority in a change-of-shift handover is identifying deteriorating or unstable patients and ensuring the continuity of care by forwarding the crucial patient information and pending tasks (Patterson et al. 2004, 125). Matic et al. (2010, 186) and Tucker and Fox (2014, 46) mention bedside, silent and written report, as well as tape-recorded handover when discussing change-of-shift reports. The handover process in general is disorganised, informal and lacking structure (Matic et al. 2010, 186-187.) The non-standardised process is usually time-consuming, and has great potential for errors. The need for standardising the handover report has been indicated through several studies. (Matic et al. 2010, 186-187; Tucker & Fox 2014, 44-48.)

In addition, Johnson and Cowin (2013, 121-129) indicate that a handover report is a crucial factor in patient safety. During their stay within health care services, patients may face many different physicians, health care teams and environments, even during one day. Changing staff and environments add risk to patient safety by possibly creating gaps in the information flow. (WHO Collaborating Centre for Patient Safety... 2007; Johnson & Cowin 2013, 121-129.)

3.2.2 Reporting in acute and unexpected situations - SBAR

According to Hirshon et al. (2013, 386-387), an acute care situation is characterised by compelling time pressure and a need for rapid actions and intervention. In this thesis, an acute situation refers to any situation with a rapid change in a patient's status, creating time pressure. Therefore, the time for reporting in these situations is limited. Some examples referring to acute reporting situations in this thesis are consulting an unfamiliar doctor in a critical situation (Manning 2006, 268), consulting a specialist

nurse such as a medical emergency team nurse via phone, as well as transferring a patient for example to the operation room or intensive care unit.

Handover report in general is described above. In an acute reporting situation, the need for a standardised reporting tool is even more evident because of the time pressure (Vardaman et al. 2012, 92). With the help of a structured reporting tool, reporting will become more consistent, the information will become clearly standardised, errors and patient safety incidents will be cut down, and patient safety will improve notably. Moreover, the time used for reporting will be reduced. (Wacogne & Diwakar 2010, 173-174.)

Manning (2006, 269) introduces reporting tools that may help in improving communication and in preventing patient safety incidents: patient safety briefings, daily patient goal sheets, and nurse shift report at the bedside. These are mentioned as methods standardising the handover process. However, the SBAR method has been clearly recognised as the best communication practice in acute situations. (Manning 2006, 269; Boaro et al. 2010, 111.)

SBAR is an international communication method, used as a tool for communicating the most essential information concisely in large organisations. The method was initially developed by the United States military to standardise the flow of information. Later on, the method has been adapted to reporting in the health care field, since it is designed to reduce risks caused by the transmission of inaccurate and incomplete information. Nowadays, the method is widely used in health care settings all over the world. (Rodgers 2007, 7.) SBAR was introduced originally to health care settings to standardise the communication between nurses and doctors within acute care situations. Because of the favour the method received in acute care hospitals in the U.S., it was soon recognised as the best communication method in acute and emergent situations. The method has also been used to standardise the handover process in general. Nevertheless, the focus of its use is, and has been in acute situations. (Boaro et al. 2010, 111.)

SBAR refers to Situation, Background, Assessment, and Recommendation. In practice, this means that first the person communicating states his/her name and in short describes the alarming issue concerning the patient. This is followed by the relevant

clinical background information or context. After that, the person communicating provides his/her own assessment of the matter, and finally suggests a solution or a next step (table 1). (Manning 2006, 270; Rodgers 2007, 7.) According to Manning (2006, 270), the SBAR method helps in limiting the argot and keeping the information accurate and relevant. It further eliminates the influences of personality and hierarchy. (Manning 2006, 270.)

TABLE 1. SBAR (According to Manning 2006, 270)

S - Situation	Identification of the person communicating and the patient in question. Short description of the situation or issue concerning the patient.
B - Background	Description of the patient's background information related to the current situation.
A - Assessment	Assessment of the patient's condition. Evaluation of what the problem is.
R - Recommendation	Suggestion of possible actions to correct the situation.

According to Vardaman et al. (2012, 88-97), study results show that in addition to creating a common language of communication between health care professionals and standardising the communication process, the SBAR method can also help nurses and other health care providers in the schema development. Developing a schema, or a mental model of the reporting situation, further helps nurses in making fast and effective decisions. In addition, developing a schema affords justification for the actions of less experienced nurses and for example nursing students. Study results also propose that SBAR, along with other standard protocols may be a profitable method for the managers in aiding nurses, especially new employees, to find their place in the working community. (Vardaman et al. 2012, 88-97.) WHO and the Finnish Nurses Association recommend using the SBAR method in reporting (The Finnish Nurses Association 2013).

3.3 Teaching material and different learning styles

Teaching material can consist of lecture notes, hand outs, diagrams, or other study supplements. Teaching material is used to support lecturing and to deepen the

knowledge students gain from textbooks and online readings. (Moore, Walsh & Risquez 2008, 41.) In order to be useful, teaching material must be relevant to the purpose for which it is created, and similarly meet the students' level of understanding of the topic (Newble & Cannon 2001, 167). Leopold (2012, 101) states that when considering the quality of teaching from the learner's point of view, the teaching material could be improved by including learning channels that meet the preferences of different learners. To gain further understanding on the matter, and to produce functional teaching material, different learning styles and teaching methods were studied in this Bachelor's thesis.

As Leitola (2001, 17) and Leopold (2012, 98) indicate, people receive information of the surrounding environment through seeing, hearing, feeling, smelling, and tasting. Perceptual learning styles illustrate whether the learner prefers to process information through kinaesthetic, auditory, tactile, or visual means (Leopold 2012, 97). Different learning styles, in other words ways to communicate and conceptualise, can be roughly divided into three different categories: visual, auditory and kinaesthetic intake styles (Leitola, 2001, 30-34; Leopold 2012, 96-98).

These categories are thought to influence on how individuals receive information, how they express themselves, and how they perceive new things. A person whose dominant intake style is visual functions best with communicational elements associated with the sight and seeing, whereas auditive people prefer elements associated with sounds, silence and talking. The best communicational elements for kinaesthetic learners are associated with movement, action, touch, senses, and feelings. (Leitola, 2001, 30-34; Leopold 2012, 96-98.) As Leopold (2012, 98) indicates, commonly learners who prefer studying through reading and writing might be privileged compared to visual, kinaesthetic and auditory learners.

Even though intake styles are categorised as described above, it does not mean that every individual would only use one of these styles. The preference of an intake style also seems to be reliant on the cultural background. (Leopold 2012, 96-97.) Leitola (2001) explains that we all have these intake styles, but how we combine and weight them in our lives differs. Most people use two or even three of these styles quite equally. If only one style dominates an individual's learning process, learning difficulties may occur if teaching happens only with methods not supporting the

individual's learning style. In any teaching session, it should be kept in mind that some learn better through visual teaching material, whereas others through auditory or kinaesthetic teaching methods. It has been estimated that in the whole adult population there are 60% of visual learners, 25% of auditive learners and 15% of kinaesthetic learners. This estimation only takes into consideration individuals' dominant learning style. (Leitola, 2001, 34-35.)

3.3.1 Schema development

As mentioned earlier in this thesis, by developing a schema of any course of action, in this case a reporting situation, it becomes easier for the learner to act out according to this learned, automated model (Salakari 2007, 35; Salakari 2009, 172-174; Vardaman et al. 2012, 90). A schema refers to mental models we have learned during our life span. These models direct our actions in different situations. An example of schema development is driving a car: at first we put more effort in thinking what needs to be done and later on, after practising, driving becomes more automated. (Salakari 2007, 35.)

As Vardaman et al. (2012, 90) indicate, these kind of ready, automated schemas are used in rapid decision making; they help individuals to cut down the time spent on pondering different possibilities and guide their actions according to the mental model. For example in a situation where there is an excessive amount of unnecessary information, schemas aid in finding the most relevant data. Nurses face this kind of situations regularly, and thus schema development is extremely important in the nursing field and in rapid decision making. (Vardaman et al. 2012, 90.) In order to develop automated schemas, people need practise as well as an adequate theoretical background on the subject. (Salakari, 2007, 35-38; Salakari, 2009, 172-174; Vardaman et al. 2012, 90.)

According to Salakari (2007, 38), phases of schema development and factors affecting the learning process have to be taken into consideration when planning a teaching session. This enhances learning results and ensures that students can develop their schemas according to the set learning goals and their level of expertise. If the goal of the teaching session is to learn how to act out in a specific situation, there needs to be

scenarios of this particular situation presented, as well as enough practising included. (Salakari, 2007, 38.)

As Salakari (2007, 35) presents, only after adequate background information and practicing, learning happens and eventually schemas are developed of the studied subject. Within the teaching material prepared as the product of this Bachelor's thesis, the necessary background knowledge of the SBAR method is provided. To provide a possibility to practise the method, a simulation was integrated into the teaching material. The checklist further allows nursing students to practise reporting with the SBAR method in their clinical training placements.

3.3.2 Teaching material of this Bachelor's thesis

PowerPoint presentation

As de Wet (2006, 38) states, PowerPoint presentation at its best can engage students' all senses, and thus it can promote the learning of students with any kind of intake style. It is possible to tailor the presentation with multiple learning opportunities; different teaching methods and tasks for the students can be used, and hyperlinks to different web pages can be added. Furthermore, videos, music and pictures can be used, as long as the copyright is respected. (de Wet 2006, 34-38; Safransky & Burmeister 2009, 19.) The teaching material of this thesis is in the form of a PowerPoint presentation.

Clear and organised content of a PowerPoint show is an important feature of an effective presentation. It is recommended that the presentation starts with a short introductory slide followed by an agenda slide, which briefly introduces the content of the presentation. There should also be a concluding slide. (Safransky & Burmeister 2009, 18-19.) Safransky and Burmeister (2009, 19) also present the concept of KISS; "Keep It Short and Simple". Another key feature of a good PowerPoint show is that the text is easy to read. It is recommended that there should not be more than five to six lines of text per one slide, and there should also be enough empty space within the text to enhance the clear appearance. (de Wet 2006, 37; Safransky & Burmeister 2009, 19.)

De Wet (2006, 37) reminds that students read text approximately 28% slower on a screen than on printed paper. The text should be readable regardless of the technical

devices or the lightning; this is why black on white is the clearest option for the colouring of the text. However, colours can be used when highlighting an important point or in separating concepts on a slide. When selecting the font size, it should be kept in mind that the audience should be able to read it from a distance. It is not recommended to use more than two fonts or font sizes per one slide. (de Wet 2006, 37-38; Safransky & Burmeister 2009, 18-19.)

All in all, the style of the PowerPoint show should be harmonious throughout the presentation. As presented earlier in this thesis, 60% of the adult population are visual learners; this is why it is important to add some visual material to every slide. Features like usage of horizontal and vertical axis and symmetry and asymmetry also support the visual design. Arrows, underlining and other means of indicating important points can be used; however, these should be limited to 10% per one slide. (Safransky & Burmeister 2009, 18-19.) Use of excessive amounts of features like sounds, whistles, and moving text should be avoided, since they can be only disturbing. Handouts supporting the slide show are recommended. (de Wet 2006, 37-38.)

What comes to the teaching session itself, there are many factors the teacher should take into consideration. For example the manner of presenting the PowerPoint show, any special needs depending on the teaching environment, equipment and so on. (de Wet 2006, 35-38). However, in this Bachelor's thesis, the emphasis was rather on producing the teaching material than on carrying out the teaching session.

Simulation

According to Shepherd, McCunnis, Brown and Hair (2010, 43), simulation is becoming a more and more popular teaching method in the nursing education. Simulation is simply learning through doing. It is a learning session that imitates real life situations as faithfully as possible. It can be in form of a role play, computer game or case study. (Salakari 2009, 86; Shepherd et al. 2010, 42-43.) The ultimate goal of teaching with simulation is to create mental models (Salakari 2007, 118). Manikins are also increasingly being used in simulation in the health care education. Simulation advances students' practical skills and also helps to indicate possible defects in them. (Shepherd et al. 2010, 42-43.)

Shepherd et al. (2010, 42) present in their review that simulation aids nursing students to learn clinical skills, can provide learning sessions that would not be possible in practical training placements, and can boost the nursing students' confidence levels in the hospital environment. A simulation situation is also a safe learning environment for the students. It is proved to be an effective method also in improving skills in critical thinking, making decisions, and practising team work. Shepherd et al. (2010, 42) also point out the employers' request for nursing educators to more properly prepare the nursing students for the real life situations in the nursing field. In general, using simulation as a teaching method promotes nursing the students' learning process. However, to indicate the most beneficial means of simulation, more study on the subject has to be implemented. (Shepherd et al. 2010, 43,46.)

Checklist

The use of standardised checklists is justified earlier in this thesis. An efficient checklist must be based on evidence-based practice (Blomgren & Pauniaho 2013, 287). Van Dyke (2014) has created instructions for an effective checklist. These instructions are based on the book Checklist Manifesto written by Atul Gawande. The purpose of a checklist is not to indicate every possible step to be taken, especially when used among professionals who already know the procedure the checklist is guiding. (Van Dyke, 2014.) It rather points out the most crucial steps which, if forgotten, can cause a patient safety incident (Blomgren & Pauniaho 2013, 287), and might be forgotten even by the experts (Van Dyke, 2014).

According to Van Dyke (2014) there are two kinds of checklists; a "Do-Confirm" and a "Read-Do" checklist. In the "Do-Confirm" list, first the task is carried out and then checked from the list, whereas in the "Read-Do" checklist, the task is carried out immediately after reading the list item by item. (Van Dyke, 2014.) The checklist of this Bachelor's thesis is in the form of a "Read-Do" checklist. When and in what kind of situations the checklist is supposed to be used must be considered when creating the list (Blomgren & Pauniaho 2013, 287; Van Dyke, 2014). If the list is long, or otherwise there is a need for a pause, it should be clearly marked on the list. In addition, testing the list and practising its use are important factors in assessing if the list is effective or not. (Van Dyke, 2014.)

Keeping the checklist short enough is important (Blomgren & Pauniaho 2013, 288). To keep the checklist short and clear, items on the list should be limited to nine, so that the whole list fits on one page (Van Dyke, 2014). The language and words in the list should be unequivocal, understandable and familiar to its users (Blomgren & Pauniaho 2013, 288; Van Dyke, 2014). Clear font, as well as upper and lower case text improve the readability of the list, whereas multiple colours or graphics in the checklist can be disturbing (Van Dyke, 2014).

3.3.3 Teaching of communication and reporting for nursing students in TAMK

TAMK has an operating licence and an educational responsibility to organise education in the field of social services and health care. The qualification awarded from the Degree Programme in Nursing and Health Care is Bachelor of Health Care. This enables one to work as a Registered General Nurse. Education in TAMK is provided in Finnish, but according to curricula, teaching in other languages is also arranged. (Tampereen ammattikorkeakoulun tutkintosääntö 1.1.2014 alkaen, 1§, 2§.)

Degree Programme in Nursing and Health Care consists of 210 credits, and contains 75 credits of clinical training (Sairaanhoitajakoulutus 2014). In the curricula, the compulsory study module Basics of Nursing Care and Nursing Science takes place on the first academic year. Professional Communication is one of course units belonging to the study module. (Degree Programme in Nursing and Health Care, Nursing 2014.) The teaching material of this thesis was produced to be used in this course.

After completing the Professional Communication course unit, a nursing student is expected to understand the basics of professional communication, is able to act as a professional in a work community, and can recognise her own strengths and development areas in interaction. In the assessment criteria for the course unit, it is stated that a student performing well knows what team work skills and interaction skills are expected from him/her in the working life. Additionally, the student is capable of reflecting and developing his/her interaction skills. An excellent performance in the course requires for example the ability to analyse professional interaction situations. (Degree Programme in Nursing and Health Care, Nursing 2014.)

4 METHODOLOGY

This section defines and discusses what research is. Additionally, issues necessary to be taken into consideration when conducting functional nursing research are discussed. Moreover, the process of this particular Bachelor's thesis will be described in this section.

Research means an organised study which is performed using systematic methods in order to answer questions or to solve problems (Ross 2012, 21). Expanding, refining and developing knowledge are the ultimate goals of research. Clinical nursing research means a study directing nursing practice and consequently improving health and quality of life of the people nurses are caring for. (Polit & Beck 2012, 3.) In this thesis too, the whole research process aimed at improving patient safety through providing nursing students with tools for better communication.

4.1 Functional Bachelor's thesis

Functional Bachelor's thesis is a form of research which aims to guide, organise and rationalise activities and action in the occupational field it is aimed at. Depending on the occupational field, a functional thesis process can result in producing a guide or instructions for professional use. In a functional thesis process, a concrete product is always prepared in addition to a written thesis report. Depending on the user of the end product, it can for example be a leaflet, book, guide, or a video. (Vilkka & Airaksinen 2003, 9, 51.) As a result, a functional Bachelor's thesis can be said to fall into the category of applied research, which searches answers to already existing problems in the nursing field (Polit & Beck 2012, 16).

When a need for research is recognised, the next step is to create clinical questions the research aims to answer. After that, searching for relevant evidence and appraising it takes place. (Ross 2012, 37.) The newly found evidence must also be linked to information and expertise the researcher previously had, and fitted into the local context the research is performed at. Finally, it is vital to assess the research process. (Polit &

Beck 2012, 36.) These phases overlap and are interconnected with each other (Ross 2012, 36).

4.2 Important aspects of conducting research in this Bachelor's thesis

A literature review is a way to perform research within the already existing information about the research topic (Polit & Beck 2012, 94), when previously made studies are examined again (Hirsjärvi, Remes & Sajavaara 2009, 189). A literature review can also be used for example to give readers an overview of already existing evidence of the study subject (Polit & Beck 2012, 94, 95). These were the purposes of performing a literature review in this Bachelor's thesis too, and thus a literature review was performed to study theoretical starting points of this thesis, as described in the previous section.

When conducting a literature review, finding the primary source is beneficial, since it provides the original information in detail (Vilkka & Airaksinen 2003, 73). These primary source research reports are written by those who conducted the actual research, and in those reports the research and its findings are described (Polit & Beck 2012, 95). Additionally, for example case reports and clinical descriptions can be used to build background for the research (Vilkka & Airaksinen 2003, 77), as well as to broaden the understanding of the research problem and to point out the need for research. However, they do not tell what the current state of evidence on the research problem is. (Polit & Beck 2012, 96.)

In order to guide clinical practice, research findings must be accurate (Vilkka & Airaksinen 2003, 53). This is why research aims at trustworthiness (Hirsjärvi et al. 2009, 231). Trustworthiness comprises confirmability, which means that study results must originate from the literature, instead of originating from the researcher's bias. Similarly, dependability is part of the trustworthiness of the study, meaning that evidence supporting the research is consistent throughout. Besides confirmability and dependability, credibility is also part of research trustworthiness. Credibility means that the researcher has interpreted the material correctly. (Polit & Beck 2012, 174-175.) A study meeting all these qualities can then be performed by another person and the conclusions of the study remain the same (Hirsjärvi et al. 2009, 231).

In nursing research, it is possible that there is confidential information concerning for example the study itself, or the people whose patient information is used as a material in the study (Polit & Beck 2012, 153,154). In this Bachelor's thesis, there are no such ethical issues to be considered. However, another aspect of ethics must be taken into account, since the protection of public trust is an ethical issue (Ross 2012, 154). Fabrication means making up study results, and falsification refers to for example an incorrect presentation of research in the report (Polit & Beck 2012, 167-169). Plagiarism takes place if a researcher uses someone else's ideas, research results, or words without stating it in the text and this way disrespects study ethics (Vilkka & Airaksinen 2003, 78).

4.3 The process of writing the thesis and producing the teaching material

This Bachelor's thesis process started in autumn 2013. From the start, the plan was to prepare a product, thus a functional Bachelor's thesis was the method of choice. A plan for the thesis was made and presented in a planning seminar in February 2014, and after that a study permit from TAMK was applied for. The search for the literature began in the spring and went on during the summer and autumn. The literature review and writing of the Theoretical Starting Points section stretched from spring to autumn. The decision to perform a literature review first was made because that way the contents of the end product came from the research, instead of originating from the writers' bias. This way, ethical problems related to the trustworthiness of the study were avoided.

The thesis considers wide, general concepts such as patient safety and communication. For this reason, not only research articles were used as reference literature. For example WHO's publications were seen as a professional, reliable sources of information when it came to defining concepts. Printed material was obtained at TAMK library, although most of the material used in the literature review was retrieved from electronic databases. CINAHL was the most used database, but some literature was also retrieved from Eric, PubMed and Ebrary. The key words of the thesis were used as search words separately and in different combinations. Searches were further limited to peer reviewed articles, and only articles with full text were included.

After the main areas of theoretical background were researched and written, the preparation of the products began. In the summer 2014, ideas for different teaching materials were discussed. However, the time frame of the whole thesis process and the thesis writers' technical skills set limits to the format of the teaching material. Following the wishes coming from the working life connection, a decision to produce electronic teaching material was made and a PowerPoint presentation was selected as the format. A PowerPoint presentation can also be easily modified in the future by those who use it in their work, so keeping the material up to date is possible.

The outline for the checklist was prepared in early autumn 2014 based on the theoretical starting points of the thesis. The checklist was first presented to the thesis writers' fellow students in a Bachelor's thesis seminar in August 2014. The list was then tested by a few nursing teachers of TAMK. Further feedback of the checklist came from the thesis writers' mentor nurses during their advanced clinical training in the Tampere University Hospital and in the Heart Hospital. After the checklist was corrected according to the feedback from the nursing teachers and nurse mentors, fellow students were asked for feedback of the checklist again. After corrections and improvements, fellow students' feedback indicated that the list was comprehensive and easy to use.

As with the checklist, contents of the teaching material came from the theoretical starting points of this thesis. Accordingly, the theoretical background of the PowerPoint consists of patient safety, communication in health care, and reporting with the SBAR method. In addition, the structure of the PowerPoint presentation follows the guidelines discussed in the Theoretical Starting Points section. Since the working life connection wished for a teaching session not more than thirty minutes, the presentation had to be concise and concentrate on the main issues of the matter. A simulation originating from a real life situation was included in the teaching material. Notes supporting the teaching session were added into the Notes section of the PowerPoint presentation. However, the presentation was prepared with a supposition that teachers using the material would read the whole thesis and familiarise themselves with the PowerPoint presentation before using it. This way, teachers can provide further information from the thesis verbally, and use their own expertise to deepen their students' knowledge.

The PowerPoint presentation begins with two introductory slides and a slide setting learning goals for the teaching session. Right after that, the simulation begins with a

slide stating that students are substituting at an orthopaedic ward, arrive for an evening shift, and read a report of a patient. The next slide contains the patient's background information and details about his current situation, or information usually written into the patient records upon admittance to a ward. This information is written in a disorganised manner and coloured with irrelevant details, to demonstrate a real life reporting situation. The following slide reveals that the patient's condition has deteriorated and vital sign measurements are stated. After that, students are advised to consult a doctor, and as a consequence they must give a report of the patient to the physician. Students are advised to write down the report or to perform it verbally in pairs, depending on the time frame. If there is not enough time, the teacher can move on to theoretical background information straight away, and at the end of the session the same simulation is gone through again, this time with the help of the checklist and the SBAR method fresh in mind.

5 DISCUSSION

5.1 Literature review and theoretical background

The themes and theoretical starting points of this Bachelor's thesis were broad and needed to be clearly outlined. Outlining of the subjects go throughout the Theoretical Starting points section. By this, the authors strived at keeping the theoretical background of the thesis appropriately narrow for its purpose. In the Patient Safety section, the authors wanted to introduce the subject as background information for the product of the thesis. This is because the SBAR method can be used not only in acute situations but also in conducting a handover in general (Boaro et al 2010, 111).

As mentioned in the Methodology section, relevant Internet databases were used when conducting the literature review. Primary sources were preferred when selecting the literature. Another criteria for the sources was that the publication year should not be older than 2000. However, critical thinking was applied when selecting material older than ten years. Most of the articles used in this thesis are published between the years 2006 and 2014. A few books from the library of TAMK were also used as references, especially books considering research methods and methodology. By using reliable sources and by critiquing each other's writing, the thesis writers aimed at respecting study ethics as well as avoiding plagiarism and bias.

From the viewpoint of the literature reproducibility, the terms handover and handoff were used as synonyms when performing the literature review, since they were seen as acts of transferring the responsibility of the patient's care between health care professionals. Conversely, SBAR was used as a search word in the literature review instead of ISBAR. These two terms refer to the same method, but in ISBAR, the identification of the person reporting, and the patient whose matter is being reported is not included in the situation description as it is in SBAR (The Finnish Nurses Association 2013).

The literature used to build the theoretical background formed a uniform base for the checklist and the teaching material. Recurrent themes, conclusions and recommendations arose from the source literature and the sources supported each other.

Consequently, the literature review and the theoretical background provided a good basis for the products of this thesis.

5.2 PowerPoint presentation and the checklist

The teaching material prepared as the final product of this functional Bachelor's thesis was defined by the wishes of the working life connection. In addition, the thesis writers' technical skills set limits to the form of the final product, as already mentioned. The slides of the PowerPoint presentation are written briefly to enhance their readability (Safransky & Burmeister 2009, 18-19). However, due to the time restriction of thirty minutes, there are some slides containing more than six lines of text. Because the slides are written briefly, the presentation would be more fruitful if the teacher would be able to add information when presenting the slides.

Use of simulation as a teaching method for nursing students was justified based on articles found in the CINAHL database. Simulation was implemented into the PowerPoint presentation. Due to the time restriction of the teaching session and the limited resources of the teaching environment, a decision to implement simulation in the form of a case study was made. However, the product users are given freedom to edit the simulation according to any needs of a specific teaching session. As an example, instead of writing down the report, students could perform it verbally in pairs.

As indicated in the theoretical starting points of this thesis, testing the checklist is an important factor when estimating the effectiveness of the list (Van Dyke, 2014). The checklist was modified to better meet the needs of the working life connection according to the suggestions from the teachers of TAMK, the writers' mentor nurses in the Tampere University Hospital and the Heart Hospital, and the writers' fellow students.

Although in this thesis the SBAR method was presented as a tool in an acute reporting situation, it can also be implemented for example into change-of-shift reporting (Boaro et al 2010, 111). The need for a standardised reporting tool specifically in acute situations is justified because of the compelling time pressure, as already mentioned in this thesis (Vardaman et al. 2012, 92). Reporting in acute situations was chosen to be

the emphasis in this Bachelor's thesis, because these situations occur so rarely, yet suddenly, that it would be crucial to already have a schema of how to manage the situation so that the outcome is the best possible for the patient. This idea was brought up in discussions with the authors' fellow students and mentor teachers in one of the first Bachelor's thesis seminars in autumn 2013. The need for a reporting tool in acute situations came up during these discussions. In the same seminar, it was also discussed that a nursing student does not necessarily need to take responsibility in this kind of acute reporting situations, but newly graduated nurses have the full responsibility right away.

One of the limitations of this Bachelor's thesis is that nursing student was not used as a search term when conducting the literature review. However, teaching material in nursing was used in the searches and some study results taking nursing students into account did come up. Simulation as a teaching method for nursing students appeared to be a widely studied subject in the literature. Another limitation is that the first year nursing students are the main target group of the teaching material. They may not yet have in-depth knowledge of the nursing field, and therefore it was challenging to produce understandable and sufficiently informative teaching material. However, the material should also be appropriate to use in advanced nursing studies. This is one of the reasons why the authors of this thesis wanted to leave the material editable.

The main use of the teaching material and the checklist will probably be on the Professional Communication course unit. However, quality reporting as a tool to enhance patient safety could be also discussed during advanced studies. For this reason, teachers could use the teaching material to further refresh the students' memory of the matter later on in their studies as well. The teaching material can also be useful in adult nursing education.

6 CONCLUSION

The purpose of this Bachelor's thesis was to produce teaching material of the SBAR reporting method to TAMK and a checklist for nursing students to support reporting in acute situations. These products were prepared after studying the subject through a literature review.

Communication is a major factor affecting patient safety, and different kinds of failures in communication are contributing elements in most patient safety incidents. Multiprofessional teamwork and the specialisation of the health care field set challenges to patient safety, as they create a need for high quality communication. Especially in acute situations, verbal transfer of accurate and concise, yet sufficiently informative information must happen fast when the responsibility of the patient's care is transferred between health care professionals. The SBAR reporting method improves the effectiveness of information transfer especially in acute situations, thus improving patient safety. SBAR also provides a basis for a checklist which further aids in improving the quality of communication.

In the future, studying the nursing students' experiences of using SBAR as a reporting method, and researching how they feel about reporting with the checklist would provide valuable information. A study considering SBAR as a tool when receiving a report would also be beneficial.

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APPENDICES

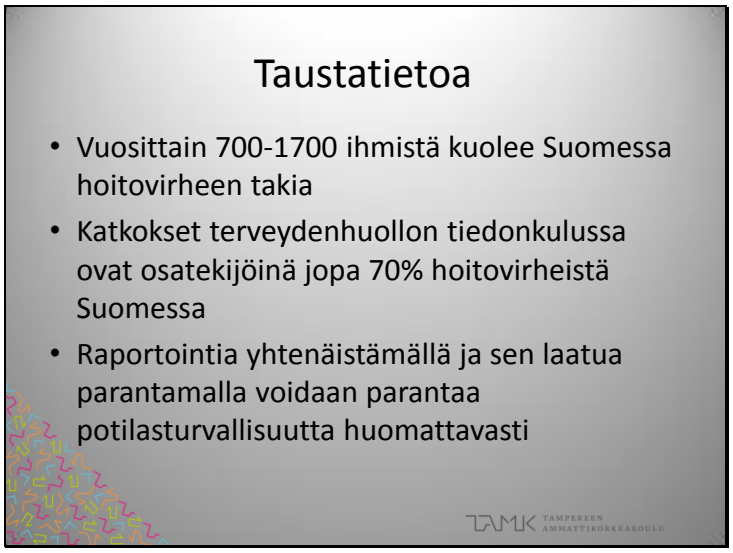
Appendix 1. Checklist

S Situation	**Kuka olet?** **Mistä soitat?** **Kenestä** raportoit? **Miksi** raportoit? (Potilaan tilanne lyhyesti)
B Background	**Miksi potilas on sairaalassa?** **Taustatiedot**/Perussairaudet, Lääkitys? Leikkaukset/viimeaikaiset toimenpiteet? Allergiat? Eristyspotilas?
A Assessment	**Mikä potilaan tilassa muuttunut? Potilaan tuntemukset?** Missä ajassa? Potilaan vitaalielintoiminnot? Muut tekemäsi havainnot potilaasta?
R Recommendation	**Mitä potilaan hoidossa pitäisi mielestäsi seuraavaksi tapahtua?** Mahdolliset hoitotoimenpiteet? Haluatko lääkärin katsomaan potilasta? Pitäisikö potilas siirtää akuutin hoidon yksikköön?

Appendix 2. PowerPoint presentation

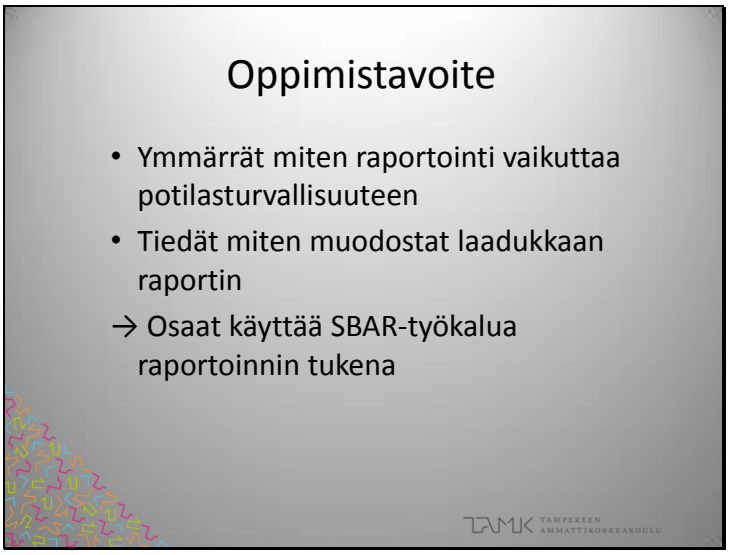
Slide 1

Slide 2



Liikenteessä vuosittain 300, teollisuusonnettomuudet 50 vuosittain.

Slide 3



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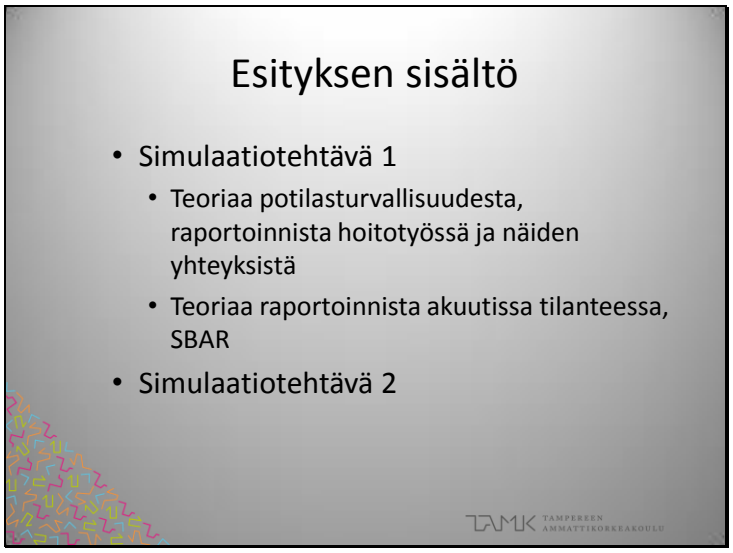

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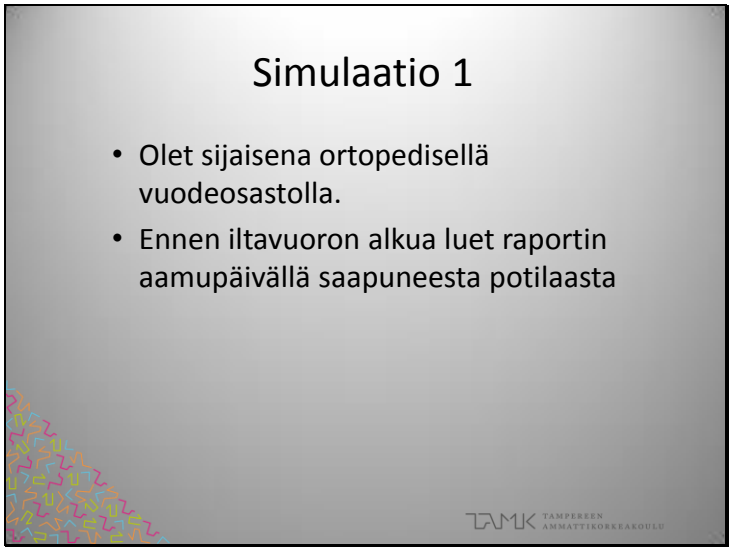
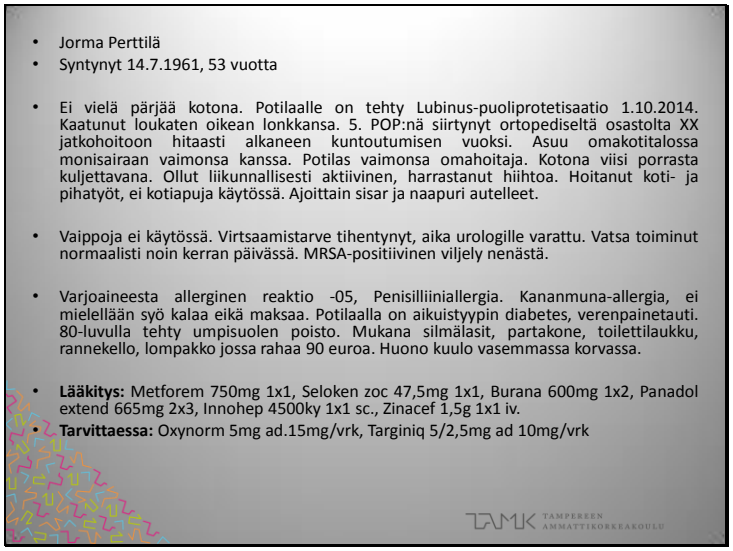


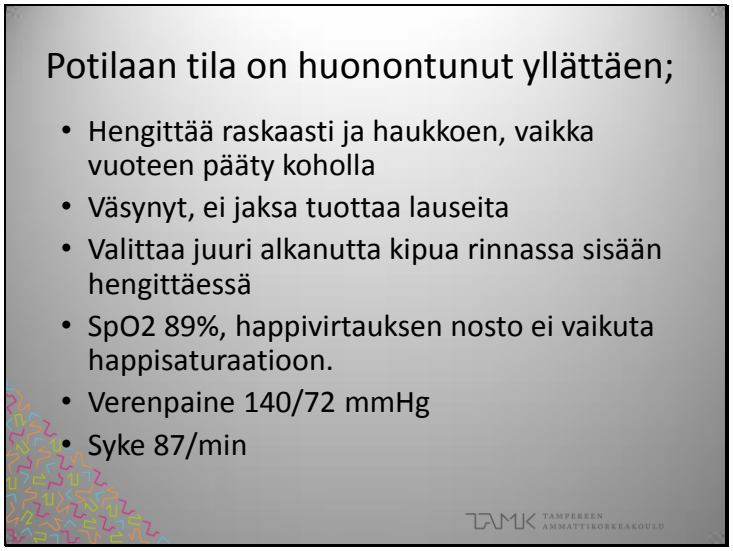
Sama simulaatio alussa ja lopussa; ajan ollessa rajallinen, aluksi simulaatio-tehtävä vain näytetään, ja opetussession lopuksi opiskelijat tekevät sen SBARiin pohjautuen, tarkistuslistaa apuna käyttäen.

Slide 6



Tämä raportti myös tarvittaessa tulostetaan opiskelijoille.

Slide 7

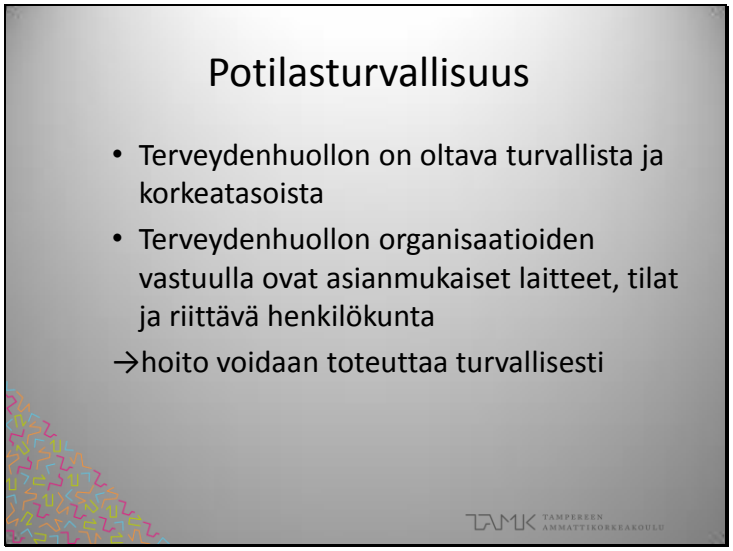


(Tosielämän esimerkissä potilaalla todettiin keuhkoembolia)

Slide 8

Slide 9

Slide 10



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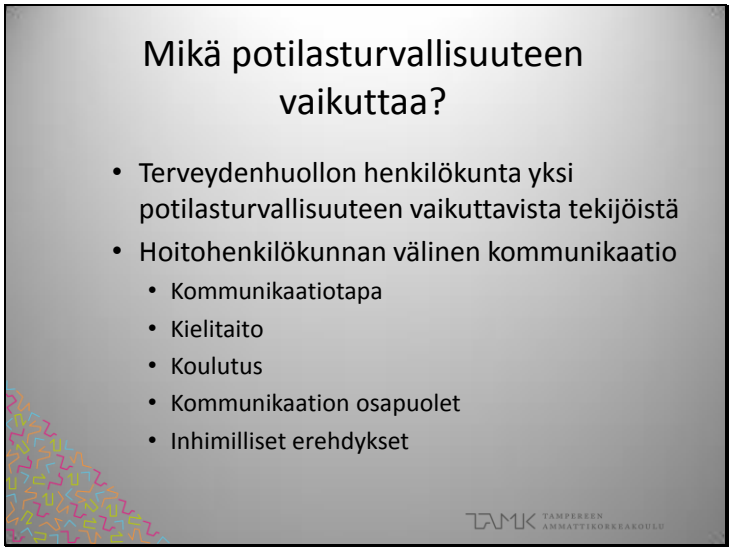
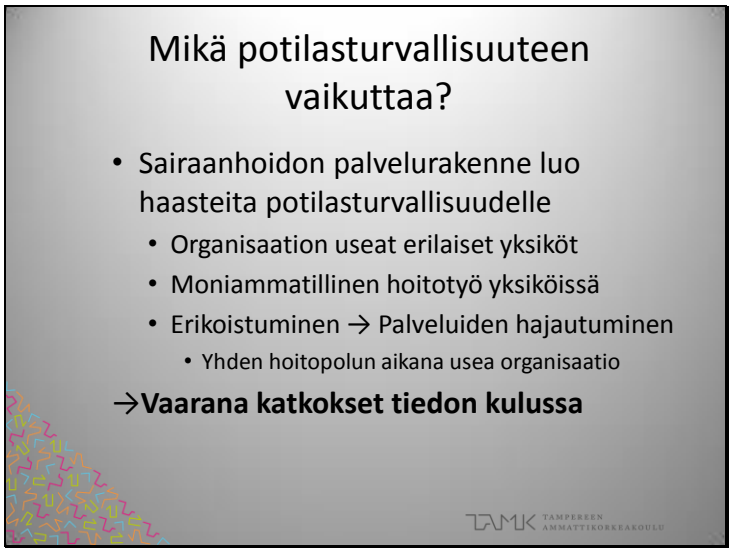


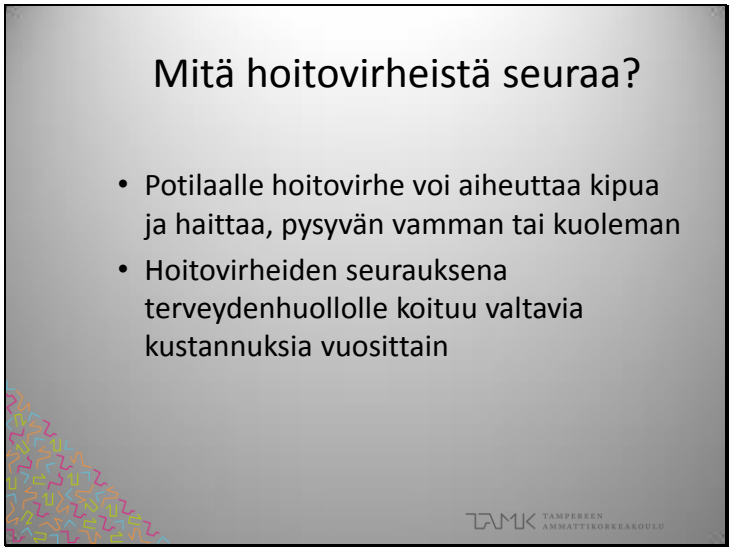
Voi suullisesti myös mainita muita potilasturvallisuuteen vaikuttavia tekijöitä, tässä esityksessä keskitytään vain kommunikoinnin ongelmiin. Kommunikaatioon vaikuttaviin asioihin palataan tarkemmin myöhemmin esityksessä, tässä mainitaan ne nopeasti.

Slide 12



Esimerkkinä kerrotaan herra Perttilän tapaus.

Slide 13



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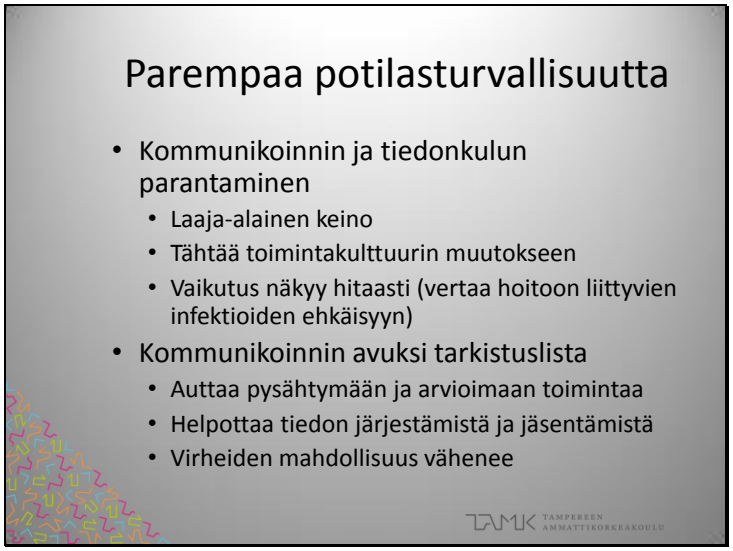
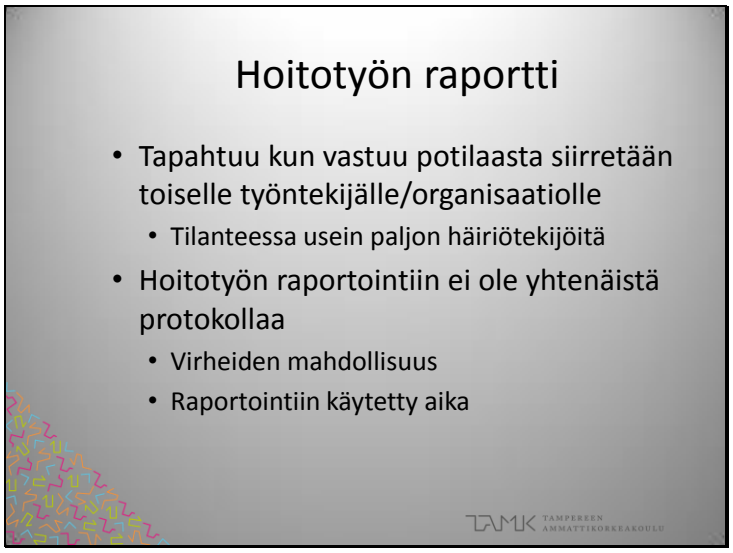


HUOM! Kommunikointi vain yksi osatekijä potilasturvallisuuden parantamisessa. Kommunikoinnin ja tiedonkulun parantaminen kohdistuu hoitotyön taustalla olevaan prosessiin, joten vaikutus organiaasiossa on laaja, mutta näkyy hitaasti. Tarkistuslistaan palataan myöhemmin, tässä käydään nopeasti.

Slide 15

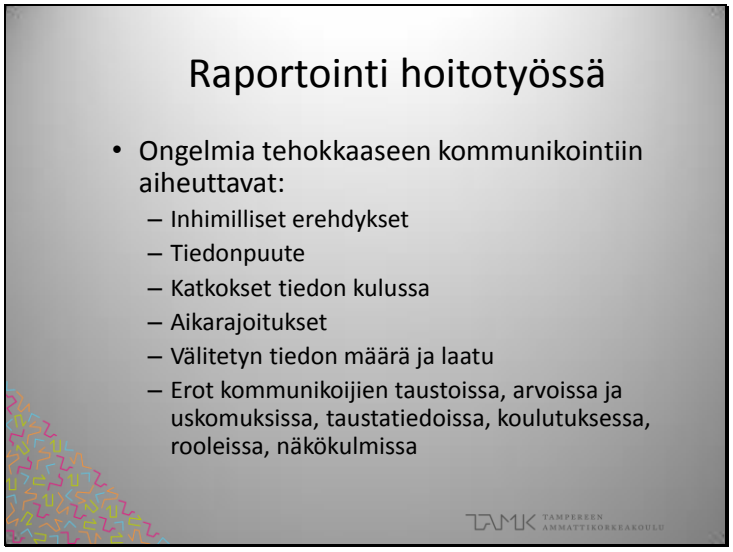


Slide 16

Slide 17

Selvennys verifikaatio: annetun informaation perille meneminen varmistetaan. Toisia ammattilaisia kunnioitetaan ja molemminpuolin voidaan kysyä neuvoa, tämä auttaa ammattilaisten välisten suhteiden muodostumisessa.

Slide 18



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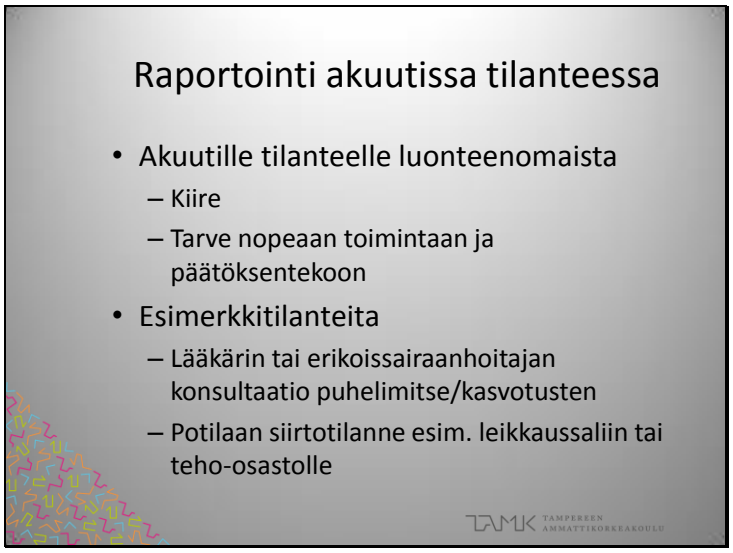

Korosta kiireen ja hälinän aiheuttamaa haastetta omalle toiminnalle ja asioiden järkeistämiselle.

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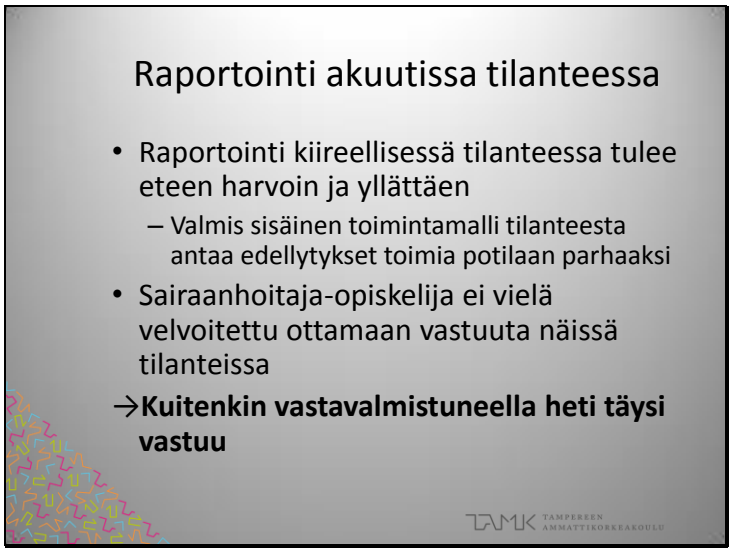

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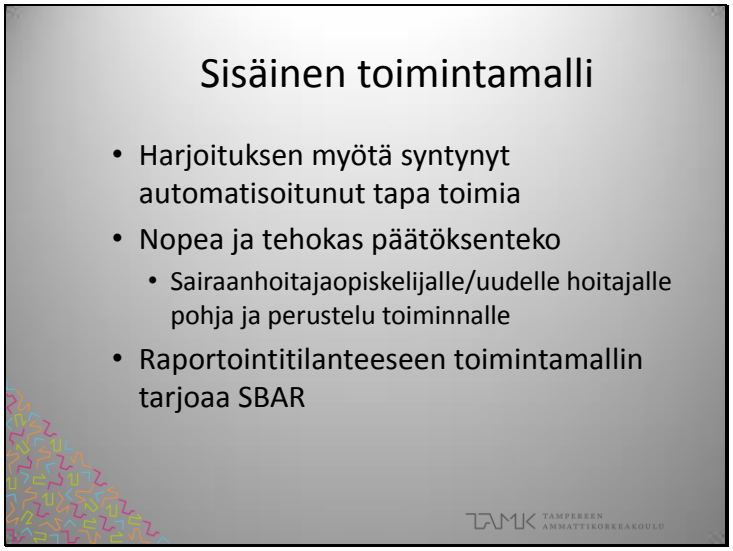
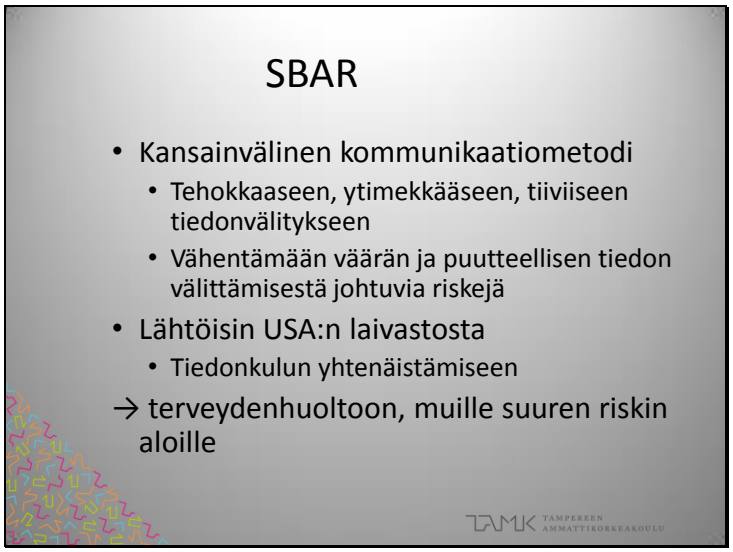


Toimintamalli: Anna esimerkki autolla/polkupyörälllä ajamisesta

Slide 22



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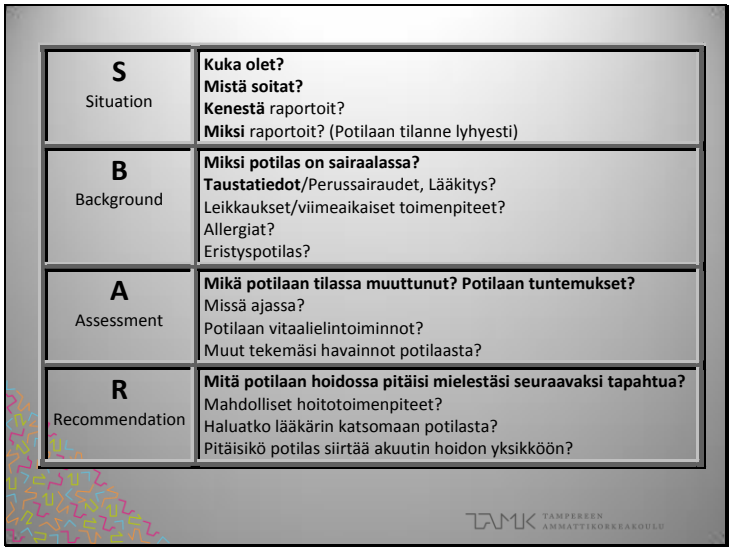
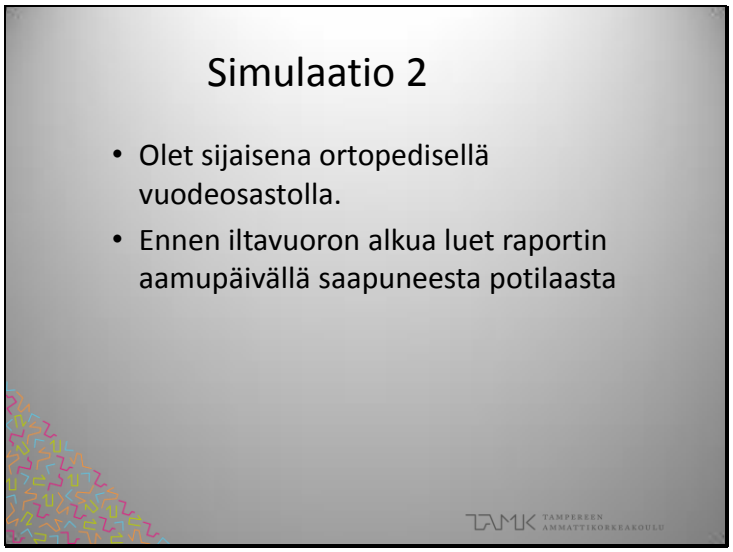
S=Tilanne, B=Taustatiedot, A=Arvio, R=Ehdotus/Suositus. Anna esimerkkejä

Slide 25



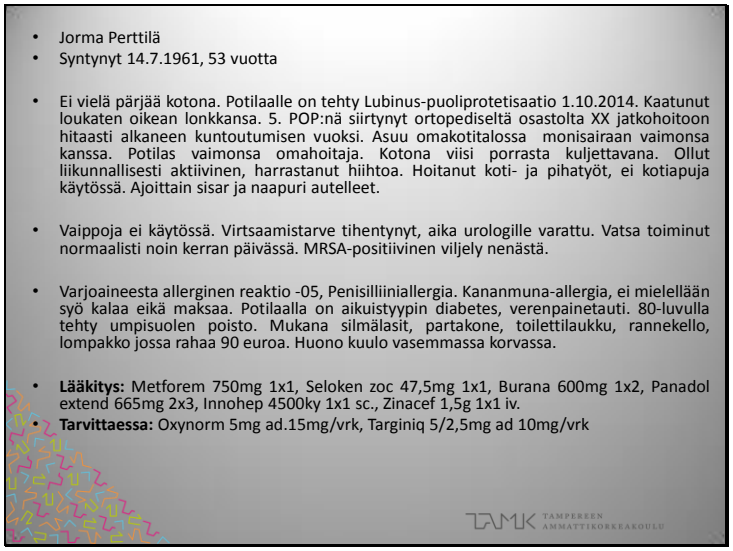
Tulostetaan opiskelijoille.

Slide 26



Nyt opiskelijat ovat saaneet tarvittavat tiedot + tarkistuslistan; nyt tekevät tehtävän esim. kirjoittaen paperille lääkärille annettavan raportin/raportin rungon. TAI antavat raportin pareittain toisilleen.

Slide 27



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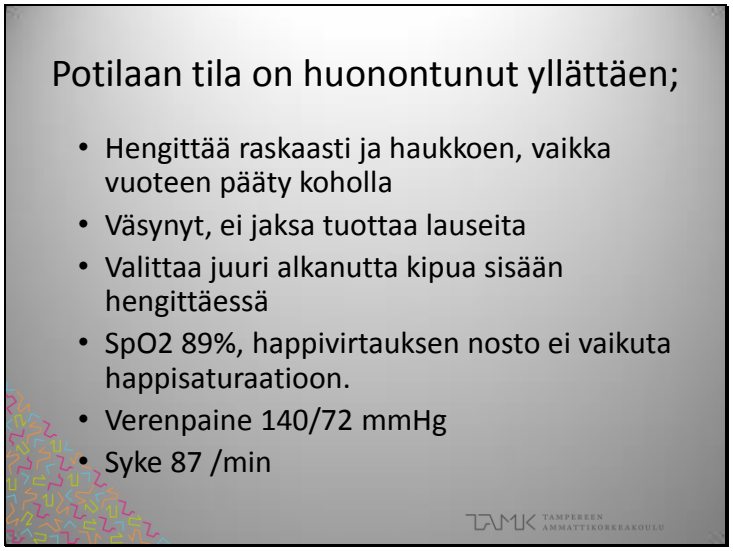
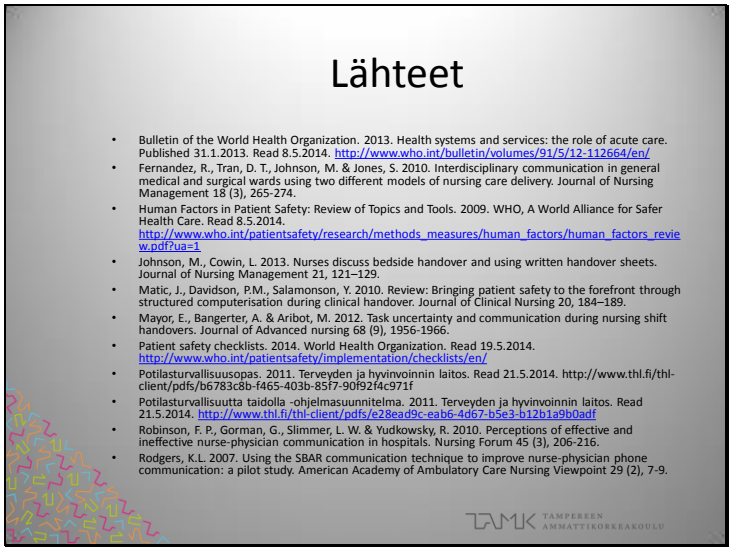


Slide 29

Slide 30

Tilanteesta riippuen yleistä keskustelua/yhteenveto opituista asioista. Raportointi vaikuttaa potilasturvallisuuteen hyvässä ja pahassa. Oikein käytettynä SBAR-metodi todistetusti parantaa potilasturvallisuutta tehokkaan kommunikoinnin kautta.

Slide 31



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