

COMMUNICATION IN THE RESUSCITATION ROOM

Kommunikation på akutrummet

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Författare:
Gabrielle Goddard

William Gummesson

Handledare:
Katarina Bohm
Klas Karlgren
Examinator:
Ann-Charlotte Falk

ABSTRACT

The emergency nurse specialist provides advanced nursing care to critically ill patients in the emergency care setting. The resuscitation room at the emergency department is where critically ill patients are treated and cared for. It is fundamental for nurses to create an opportunity for patients to participate in their given care. Person centered care sees the person as an individual and requires nurses to work from the individual's need, and not only as a person with a medical condition. Including the patient in clinical decisions and making them a part of the team is vital for person centered care. Communication with the nurse specialist, patient and family is a necessary prerequisite for person centered care. Poor communication amounts to almost 70 percent of deviation reports. Standardised means of communication amongst healthcare staff have been put in place to reduce these risks. The use of closed loop communication can have significant reductions in errors made when caring for critically ill patients.

The aim of the study was to observe communication in the resuscitation room.

The study used a quantitative research design. Ten real-time observations were conducted at a tertiary teaching hospital in Stockholm, Sweden. Two observers were present in the resuscitation room using an observational sheet to document communication.

Closed loop communication was not seen to be used by all healthcare staff and was found to be dependent on the team working. Communication with the patient was the highest overall documented speech in the resuscitation room, which could suggest good patient participation.

The results show predominantly positive amounts of time spent communicating with the patient. Whereas closed loop communication was used equally as much as non-closed loop communication.

Keywords: Closed loop communication, Communication, emergency nurse specialist, person centered care, resuscitation room

SAMMANFATTNING

Sjuksköterskor med specialistutbildning inom akutsjukvård ger avancerad omvårdnad till kritiskt sjuka patienter i en akutvårdskontext. Kritiskt sjuka patienten ges omvårdnad och medicinsk vård på akutmottagningen i ett akutrum. Det är grundläggande för sjuksköterskan att i akutrummet skapa en möjlighet för patienten att vara delaktig i sin egen vård. Personcentrerad vård bidrar till det att skapa den möjligheten och är ett förhållningssätt där patienten ses som en individ med individuella behov och inte enbart som en person med en medicinsk åkomma. Att inkludera patienten i kliniskt beslutsfattande och göra den till en del av teamet är grundläggande inom den personcentrerade vården och kommunikationen mellan akutsjuksköterskan, patienten och familjen är av största vikt. Dålig kommunikation bidrar även till att patientsäkerheten försämras och 70 % av alla avvikelserapporteringar innefattar bristfällig kommunikation. Därför används standardiserad kommunikation mellan sjukvårdspersonal för att minska risken för bristfällig kommunikation. Användandet av closed loop kommunikation kan bidra till att kommunikationen vid vårdande av kritiskt sjuka patienter förbättras vilket minskar risken för misstag.

Syftet med studien var att observera kommunikation på akutrummet

Studien använde en kvantitativ forskningsdesign. Tio realtidsobservationer utfördes på ett akutsjukhus i Stockholm, Sverige. Två observatörer var närvarande på akutrummet och observerade kommunikation med hjälp av ett verktyg skapat för ändamålet.

Closed loop kommunikation användes inte av all vårdpersonal utan var beroende av vilket larmteam som tjänstgjorde. Andelen kommunikation med patienten var den högst mätta parametern gällande tal på akutrummet vilket skulle kunna tyda på god patientdelaktighet.

Resultatet visar en övervägande positiv andel tid som spenderas genom att kommunicera med patienten på akutrummet. Användandet av closed loop kommunikation var lika vanligt som kommunikation som inte kategoriseras som closed loop.

Nyckelord: Akutrum, akutsjuksköterska, closed loop kommunikation, kommunikation, personcentrerad vård

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BACKGROUND

Emergency care

The International Covenant of Economic, Social and Cultural Rights (ICESC) founded in 1966, is the United Nations leading body on human rights and recognises everyone's 'right to health'. In Article 12 it clearly states; "*Everyone has the right to the enjoyment of the highest attainable standard of physical and mental health*". Thereby States are required to provide its citizens with accessible health care (World health organisation, 2008). Emergency medicine is considered a very young specialty. Only in the past 50 years have many countries identified it as its own specialty, among the first were America, Australia, Canada and England (Smith et al., 2020 & Chung, 2000). At the beginning of 2000, emergency care as a speciality began to develop in Sweden to establish a more effective and safer organisation for its patients. Research has found that emergency medicine as its own specialty ensures better patient care and patient safety (Kurland, 2017).

The Swedish National Board of Health and Welfare defines emergency care as the management of acute illnesses and accidents, of all ages, within a limited amount of time and with available resources. This includes alert systems, prehospital care and treatment in the emergency department (ED) (Socialstyrelsen, 2015). EDs provide acute medical care 24 hours a day, 365 days of the year with an objective to receive, triage and stabilize patients, prioritizing the critically ill requiring immediate care to less critical conditions that can wait. Patients present with different signs and symptoms of illness or injury which require varying needs of healthcare. It is mainly patients that experience pain with different kinds of external causes, for example chest pain, headaches and abdominal pain, or injuries such as trauma and wounds that cause patients to seek emergency care. Patients arrive at the ED by ambulance or walk-in, initiating the first healthcare worker contact at the ED. Being the first healthcare staff to meet the patient entails making life saving decisions whilst creating a good rapport with the patient and family. The ability to meet the patient's physical needs, support their presenting situation and involve them in their healthcare are important attributes nurses need (Elmqvist et al., 2011).

There is a process to follow whereby patients are triaged. This includes taking vital signs, assessing the patients presenting condition and past medical history. From the initial assessment and information received, the triage nurse can then use the Rapid Emergency Triage and Treatment System (RETTTS) to priorities patients depending on urgency: red the highest, orange, yellow, green and blue the lowest priority (Ruge, 2019). Patients are then, depending on their urgency, sent to allocated areas of the department to be treated. Patients requiring non urgent care are sent to the assessment area whilst patients requiring urgent treatment, priority red, are taken to what is now known as the resuscitation room (College of emergency nursing Australia, 2014).

Resuscitation room

It is of great importance that urgent medical conditions requiring time-sensitive management receive early recognition by both nurses and doctors. Priority red classifies as life threatening and are patients in need of immediate care (Widgren, 2013). Throughout this thesis priority red patients will be defined as critically ill patients. To ensure these patients receive immediate lifesaving care the World Health Organisation (WHO) endorse a standardized approach of using resuscitation rooms for treatment of these patients. These areas are easily accessible from the ambulance entrance, main entrance as well as the triage area. The space is

large enough to hold essential lifesaving equipment and multiple health care providers. The essential equipment includes monitors for vital signs, key medications for critically ill patients, airway management equipment for emergency intubation, radiology equipment for procedures such as ultrasound and X-rays. Having easy access to intensive care units, radiology and operating rooms are also important (WHO, 2020). Staff are trained to respond immediately to patients transferred to the resuscitation room and focus primarily on those patients (WHO, 2020 & Australian college for emergency medicine, 2014).

When critically ill patients arrive in the resuscitation room an entire team is awaiting them, size and team members may vary depending on what condition the patient presents with (Stimson, 2020). The mix of the multidisciplinary team can include, but is not limited to emergency doctors, two RNs and enrolled nurses (EN). In some cases, anaesthesiologist and nurse anaesthetist are also notified. The most senior RN acts as a scribe, ensuring that documentation clearly states what is occurring and time specific as well as assisting colleagues in nursing care. The second RN obtains vital signs, administers medications, performs or assists in phlebotomy procedures and urinary catheter placement. The EN assists RNs and medical staff where needed. (Tiel Groenestige-Kreb et al., 2014). This set up varies depending on hospital and country. With such patients focus lies on the urgency of the situation and sometimes nursing care can become subordinate to the medical measures taking place. Early identification of the nursing care needs, through prevention and action are important measures to promote prognosis, nursing care and patient length of stay (Widgren, 2013).

Emergency nurse specialist

In Sweden a one-year master in emergency nursing has only been available to undertake at universities from 2013 (Statens offentliga utredningar, 2018). The demand for emergency nursing to become its own specialty arose given the complex workplace environment and tasks that emergency care entails, therefore requiring specialist competency. A nurse with a specialty in emergency care must be able to work independently to a greater level compared to a nurse with a bachelor's degree. The International Council of Nurses (2009) defines the nurse specialist as: *"...a nurse prepared beyond the level of a generalist nurse and authorised to practice as a specialist with advanced expertise in a branch of the nursing field. Specialist practice includes clinical, teaching, administration, research and consultant roles."*

The national association for emergency nurses (2017) state that a RN with a graduate in emergency nursing care, should have the readiness to give advanced nursing care and treatment to those suffering from sudden illness. The ability to identify life threatening conditions based on signs and symptoms, initiate investigation and pharmacological treatment is fundamental knowledge for the emergency nurse specialist. As well as identifying and prioritizing the appropriate level of care which is necessary to ensure the right care is provided at the right time for each patient and relative (Swedish Nursing Association, 2017).

The competencies of the emergency nurse specialist must be met in relation to the six core competencies for all health care personnel, although higher requirements are expected. Within person centered care; the specialist nurse strives to preserve the patient and families integrity and dignity without compromising the safety of the patient. Collaboration within the team; specifically other professions in the ED as well as other departments in the hospital are of importance. Evidence based practice; the nurse specialist should implement evidence-based knowledge into the department. Quality development: includes improvement in nursing care within their area of specialty as well as constantly developing and improving care. Safe care: the specialist nurse needs to ensure safe care is given to patients; this is done through ensuring

up to date routines are in place. Informatics: the specialist nurse engages in the development of digital information and communication systems to ease every day care within the ED setting (Riksföreningen för akutsjuksköterskor, 2017).

The national association continuously analyses and improves future plans and visions for the emergency nurse specialist (SENA, n.d.). Some of those goals include the emergency nurse specialist working closely with the most critically ill patients requiring the most advanced nursing care. Boman et. al, (2020) found in their study that despite there not being clear differences in RN and nurse specialist professional roles and responsibilities, there is a clear difference seen in competence and role realization. In acute situations the emergency nurse specialist was seen to be a great asset, having more advanced skills in teamwork and communication. This was also perceived regarding patient care, the level of nursing care critical patients received was more developed and advanced (Boman et al., 2020). McDonnell et al (2014) found in their study that the nurse specialists have seen to be a valid contributor to patient satisfaction, have a positive impact on staff members and assist in organizational outcomes.

Patient safety

Errors made by healthcare staff in the ED can have a profound impact on patient care and outcome. Yet not all errors cause patient harm, but all have the potential to risk patient safety (Humphrey, Brichko & Cobbett, 2019). Patient safety is a closely studied field and is defined by WHO in their conceptual framework, the International Classification for Patient Safety (ICPS) as;

The reduction of risk of unnecessary harm associated with healthcare to an acceptable minimum. An acceptable minimum refers to the collective notions of given current knowledge, resources available and the context in which care was delivered weighed against the risk of non-treatment or other treatment. (WHO, 2009, p. 15)

Patient safety is one of the most essential challenges healthcare systems face and implies minimizing the risk of harming patients. The healthcare systems effectiveness as well as individual performance aids in avoiding injuries to patients from the care that is supposed to aid or cure them (Albrecht, 2015 & Troyer & Brady, 2020). Patient safety is by Öhrn (2013) categorized as one of the six fields of true essence for the nurse specialists, regardless of the specialty. The nurse specialist has a fundamental role and responsibility in improving and developing nursing care to minimize the risk for patient harm. Through situational analysis and the reporting of facts, the nurse specialist contributes to the overall engagement in risk management and further contributing to the development of patient safety (Öhrn, 2013). According to WHO, up to 70 percent of all deviation reports within healthcare are due to communication (Socialstyrelsen, 2015). Therefore, to increase safe communication standardized systems have been put in place to minimize miscommunication. The assumption that safe communication is most likely to be achieved having standardized terminology and procedures. A strategy that has seen to be useful in emergency situations is the use of closed loop communication (Härgestam et al., 2013 & Salas et al., 2008).

Patient perspective of emergency treatment

Already Florence Nightingale realized that the concept of environment was fundamental for patient care and that it was important for nursing practice to create an environment that contributed to the healing process of the patient (Ylikangas, 2017). Environment is a central concept within the nursing care field having a holistic meaning. In order to understand it fully

several aspects within nursing care have to be taken into consideration (Swanson & Wojnar, 2004). The patient often experiences feelings of anxiety and fear when arriving in a new environment such as the ED (Elmqvist & Frank, 2012). The experience is thereafter influenced by the relationships, attitudes, access to information and communication offered by nurses. In order to maintain an environment that is caring and safe the patient must be included in their care. The relationship between patient and healthcare staff is of fundamental value for patient recovery (Swanson & Wojnar, 2004 & Ylikangas, 2017). When the patient arrives at the resuscitation room several healthcare members initiate a number of tasks simultaneously. Critically ill patients often find themselves overwhelmed having difficulties understanding the situation and their condition (Elmqvist & Frank, 2012). Feelings of anxiety and thoughts of the future were common reflections after being treated in the resuscitation room. Patients identified difficulties in gaining contact with nurses as they were solely focused on communicating with one another. This gave patients a feeling of exclusion which was furthermore enhanced with the use of medical language which was hard to understand (Granström et al., 2019). Patients trust healthcare staff in giving them the best medical treatment and care. The attention patients receive revolves around the medical aspects of their illness and could therefore neglect the holistic approach. Caring for the patient as an individual is essential. This can be done by actively listening to the patient's narrative as well confirmation of their illness from nurses. Caring for each patient based on their individual needs and not as a medical condition. In an emergency situation it is fundamental for nurses to give high quality medical treatment and adequate information regarding the patient's care in plain language. Furthermore, to create an opportunity for the patient to be part of their care (Elmqvist & Frank, 2012 & Frank et al., 2009).

Patient participation

The concept of patient participation is not defined in the same way worldwide and various terms are used to describe the same field, such as patient empowerment, partnership, patient collaboration and patient involvement. The core substance involves including the patient in decision making regarding health care issues. However, patient participation contains more than just the decision-making process and relates to aspects of health care such as patient education, self-medication, health ambition and taking part in physical care (Longtin et al., 2010). The nurse's role in encouraging patient participation is built on establishing a patient-nurse relationship, this entails handing over some of the control to the patient, information sharing as well as active engagement in both physical and intellectual activities (Sahlsten, et. al., 2008). Improving patient participation is of great importance in healthcare and can improve care and satisfaction as well as outcome for the person (Frank et al., 2009, Kaufman et al, 2017, Larsson et al, 2007, Longtin et al., 2010).

The meaning of patient participation can differentiate amongst patients as well as within the healthcare team. The patient needs appropriate, credible and sufficient knowledge in both medical and nursing care. Nurses need to provide information in plain language to allow the patient to make decisions regarding their care (Larsson et al., 2007). There are a few variables influencing patients' ability to participate and there are many obstacles to transcend in order to improve patient participation. Factors such as age, type of illness and comorbidity, confidence in own capacities as well as extent of knowledge influence the likelihood of patient participation. Barriers for healthcare staff to enhance patient participation includes their own desire to maintain control, personal beliefs, the time required to inform and respond to the patient (Longtin et al., 2010). A study done by Frank et. al., (2010) on patient participation in the ED revealed that critically ill patients had a higher grade of satisfaction

compared to non-urgent patients. Regardless of this it was noted that improvement in participation in ED care was needed.

Person centered care

Person centered care (PCC) as a concept has been of growing importance over the last two decades where focus lies on the patient's needs, values and preferences. It is a model of care that ensures the patient is highly involved (Ekman et al, 2011 & Ekman & Norberg, 2013). Working from a PCC approach has great organizational benefits, leading to enhanced communication between caregivers and patients which leads to improved quality of care and thereby increased patient satisfaction. Nurses have the most significant role in the implementation of PCC (Ben-Natan & Hochman, 2017). One of the six core competencies for the emergency nurses is PCC.

Communication between healthcare professionals, the patient and family are a central prerequisite for PCC. Travelbee's grand theory, the Human- to- human relationship, expresses the importance of acknowledging the individuality of each person, where nurses have the ability to promote PCC. Communication is one of the fundamental components of Travelbee's theory and a key part of good nursing. Establishing a rapport allows nurses to understand the patients' needs and is just as essential as performing procedures (Shelton, 2016). Travelbee noted: "Nurses who know ill persons are more apt to be able to detect not only obvious changes in an individual's condition but are enabled to recognize the more subtle changes that may be occurring" (Travelbee, 1971, p. 98).

Nurses and patients exchange information through clear communication. A two-way process through expressive and receptive communication whereby the message and perception of both parties is understood (Boykins, 2014). It is not always possible to communicate with patients in the resuscitation room due to the patient being sedated or ventilated. Family members are an important source of information and when necessary, can make decisions on behalf of the patient (Almaze & de Beer, 2017). Other barriers such as language, medical conditions, learning styles and cultural factors impacts on communication. The specialist nurse needs to adapt to each patient to ensure they are included in the decision making and management of their own care (Boykins, 2014).

A study done by Innes et al (2017) observing emergency nurse specialist approach to PCC, revealed that nurses met patients and families physical, emotional, social and spiritual needs through a holistic approach. This was done by showing respect and empathy whilst listening to the patient's history. Ensuring patients and families were included in decision making regarding their condition as well as future care plans. Nurses' use of therapeutic communication techniques met patients' emotional needs when showing signs of distress or anxiety. By establishing therapeutic relationships and the use of effective communication emergency nurse specialists were able to deliver PCC to patients presenting to the ED (Innes et al, 2017).

Closed loop communication

"Communication can be defined as the transfer of meaning from one person to another, (Cyna where there is a sender and receiver (Cyna et al., 2011, p. 190). Communication begins with a message which can take many forms and meanings. A message can be a command, clarification, advice, request for assistance or information or addressing a concern. Communication allows us to connect with others, socially, linguistically and informatively. It allows us to express ourselves and is a tool for information exchange and meaning (Cyna et,

al. 2011). In the healthcare setting active communication is crucial to ensure a high quality of care (Windover, et. al, 2013). Working as a team and the communication within that team is central in order to give good and safe care to critically ill patients. Mistakes within the team's communication has resulted in medical injuries that could have been avoided with well-working communication (Kydonia et al, 2010).

Closed loop communication involves three stages. The first involves the sender conveying the message with a call out, i.e. "*Marcus please help our patient with an upright position to help the breathing*". The second is the recipient obtaining the message and acknowledging the sender by using a check back i.e. "*Change the position, I'm on it*". Thirdly the sender confirms the message has been conveyed and understood correctly i.e. "*Thank you*" (Härgestam et al., 2013). Closed loop communication used by healthcare teams has been seen to be more beneficial for the patient when completing critical tasks in comparison to indefinite ways to communicate (Siassakos et al., 2011). It has also shown to have a significant reduction in errors made when caring for critically ill pediatric patients therefore improving patient safety (Diaz & Dawson, 2020 & Green et al., 2012). While Finn et al. (2015) has shown that performance during cardiopulmonary resuscitation of adults can increase by using closed loop communication.

Rationale

Critically ill patients arrive in the resuscitation room at the emergency department and are immediately treated by several healthcare members. Due to the severity of the patient's illness, healthcare staff often need to act urgently. In order to give the best care and avoid patient harm, efficient communication within the healthcare team is needed. This is a great challenge in all healthcare settings worldwide. By using a standardized approach such as closed loop communication, errors can be avoided. The patient may feel abandoned by nursing staff primarily focusing on the medical aspects of the treatment, neglecting the patient's other needs and possibilities to participate in their care. Having a person-centered approach is essential yet it seems difficult for nurses to attain. Research concerning PCC and participation in the resuscitation room is not well studied. Therefore, the objective was to study communication within the team including the patient through real-time observations.

AIM

The aim was to observe communication in the resuscitation room.

METHODOLOGY

Approach and research design

A quantitative method was chosen. Quantitative research is a type of research which involves using statistical and numerical data collection (Polit & Beck, 2018). An observational study entails making observations about independent variables without manipulating them. In the context of the resuscitation room, such an approach is suitable as cases and patients cannot be randomly assigned to experimental or control groups. The advantage of using an observation study allows observers to collect data in a natural habitat, without introducing external variables (Radhakrishnan, 2013). As the interest on a particular set of behaviours, structured observations were used to collect data allowing quantification of the observed behaviours. Therefore, instead of recording everything that happens, the researcher focuses on specific behaviours of interest (Polit & Beck, 2018).

Participants

Observations were collected one at a time in six different resuscitation rooms at a level one emergency department, at Södersjukhuset hospital in Stockholm, Sweden. Selection criteria included critically ill patients in need of immediate care in the resuscitation room (categorised as red) (Widgren, 2013). Patients triaged as orange, yellow, green and blue were excluded. In cases where multiple critically ill patients presented at the same time exclusion was necessary.

Data collection

Data collection began after approval from the department manager and approval from the ethical board had been authorized back in 2016. Prior to carrying out a study approval from the appropriate workplace manager is needed (Polit & Beck, 2017). As the aim of the study was clear, observations of 10 critically ill patients were conducted in the resuscitation room on the 23rd and 24th of November 2020. Five observations were conducted each day where both observers were present during all observations. Having two observers present during each observation strengthens results (Hohenhaus et al., 2008). If results from both observers are similar, this strengthens the study's overall outcome. Data was collected using an observational sheet embedded in an iPad to collect data regarding communication in the resuscitation room.

The observers received information regarding incoming critically ill patients through the radio communication system, RAKEL (radio communication for effective leadership). The observers would receive further information from the head nurse regarding which resuscitation room the patient would arrive to and be treated in. Prior to the patient's arrival, staff would present themselves and their role. This gave observers the opportunity to present themselves for staff and explain that they were observing for a research study. To make this clearer, observers wore a highly visible vest. It is common to have observers in the ED, usually student, doctors or nurses. The observers were not scheduled to work during the observation days, therefore not interrupting with the staffing on the floor.

Two observers - who were employed by the ED - used a tablet to note behaviours and events that occurred. The observation began when the paramedics entered the resuscitation room and ended when the patient left the room. A few patients already presented to the ED, worsened in their condition and were subsequently moved to the resuscitation room in which the observations started documenting when the patient entered the room.

The iPad application used by the observers was called Obansys (*see appendix A and B*), which stands for Live Observation and Analysis. The application has a number of predefined buttons corresponding to different behaviours and events. These buttons identify the type of speech that occur (discusses patient status, plans ahead, evaluates/ re-evaluates, silence and other talk) and events relating to teamwork and communication (confirm/repeats, clear/ unclear order, unclear confirmation, shares information, suggestion, ask question, re-evaluates, verbalizes plan). These two kinds of data are treated separately. As speech is measured in time, these buttons switch between the different kinds of speech and measure the duration. The events are recorded based on the number of times the type of event occurs. Additional buttons were added to the Obansys application in order to highlight communication with the patient. These included; *communication with patient*, *shares information with the patient* and *asking the patient a question*. Examples of what corresponds to the different speech and events in the Obansys application is seen in table 1.

Table 1. Examples of speech and events that correspond to the different buttons in the Obansys application.

Speech in Obansys	Example
Discusses patient status	“the patient may have a pneumonia because of...”
Communication with patient	“how do you feel right now? We are taking blood samples from you, is this okay?” Also when the patient communicates with the healthcare staff
Plans ahead	“after the resuscitation room, we will go directly to the x-ray”
Evaluate/reevaluates	We have a patient presenting with chest pain, we’ve drawn blood and taken an ECG...”
Silence	Nobody is talking
Other talk	“we’re having problems with the vein catheter, can we get some assistance with this?”
Events in Obansys	Example
Clear order	“Marcus, give the patient 5 mg of morphine”
Confirm/repeat	“5 mg of morphine, I’m on it”
Unclear order	“we should give 5 mg of morphine to the patient” or “the patient might need some morphine”
Unclear confirmation	“Sounds good” or no confirmation at all
Shares information	“Saturation now 88%”
Shares information with patient	“We are now taking blood samples, then we will take an x-ray of your chest”
Asks question to the patient	“do you need anything?”
Suggestion	“should we try a different position to ease the breathing?”
Ask question	“have we taken a bladder scan?”
Reevaluates	Retaking a full set of vital signs (breathing frequency, saturation, blood pressure, pulse, GCS score, temperature)
Verbalising plan	“We will go straight to the ICU after the catheter is in place”

There were 11 different events in the Obansys application, four of which answered to closed loop communication. Two of these indicated that teams were using closed loop communication. A *clear, direct order* was when a team member gave a clear order directed to a specific team member whereas *confirm, repeats* was when a team member clearly confirmed an order and repeated it. In contrast an *unclear order* was when the team member expressed an order which was not clear in content or who it was intended for. Finally, an *unclear confirmation* corresponding to cases when an order was not confirmed (clearly, or at all) or not repeated. Three of the buttons correlate to communication with the patient. In regards to speech, *communication with the patient*, this included all times in which healthcare staff communicated with the patient as well as when the patient was speaking. Specific events

that correspond to this include *shares information with patient* and *asks question to the patient*. These events were used to see how often healthcare interacted with the patient. |

A questionnaire was completed by each observer after all observations. The TEAM (Team Emergency Assessment Measure) document concerns non-technical skills, and more specifically leadership, teamwork, handling of tasks and an overall rating of the team's performance (Cooper et al, 2010 & McKay et al., 2012). The instrument consists of five sections and 13 questions. All questions were answered however question three, *The team communicated effectively*, was of importance for this thesis. This document was used to rate team's overall performance in regards to communication. See appendix C.

Data processing and analysis

Descriptive research designs are used when researchers observe, report and cite specific areas of a situation occurring in its natural habitat. Through this, researchers can pose hypotheses or develop a theory. The data collected using the Obansys application was transferred to and presented in an Excel document. Data from both observers were put into graphs and then overall averages of each *event* or *speech* was presented. In descriptive data, percentages, frequencies and averages are used to describe the data collected. This is normally presented through tables, graphs or other visual figures (Radhakrishnan, 2013). For this study *events* are presented in frequencies whereas *speech* is presented in percentages.

Ethical research consideration

Real time observations can be used in several contexts and are associated with several ethical difficulties, for example in the ED. The observations should be carried out systematically and researchers should strive for objectivity to avoid influencing persons observed (Vetenskapsrådet, 2017). Application for ethical examination of research regarding people was sent to the Regional Ethics Review Board in Stockholm and approved 2016-12-08 (diary number 2016/2102-31/5). Ethical issues could arise if observers were working (Polit & Beck, 2018), therefore designated time for observations was given. According to Polit & Beck (2018) it is important to strive for full disclosure and informed consent of all participants. Prior to observations, observers informed all staff present at the ED that observations were being conducted in the resuscitation room. During sign-in, observers presented themselves for staff, explained that they were observing for a research study and were not to participate in the care of the patient. However, it was not possible to get consent from all participants prior to commencing observations, examples include paramedics and staff from other departments. It was not considered ideal, although it had to be accepted. Gaining consent in advance is known to be difficult in the emergency setting which has been acknowledged by the Regional Ethics Review Board.

If staff required assistance from the observers' data collecting would immediately be ceased. Another ethical question taken into consideration, was the risk of interference. Observers are responsible for preventing interference or obstruction of healthcare staff (Vetenskapsrådet, 2017). The risk of this was seen to be small in this research.

RESULTS

The results are presented in three sections beginning with results regarding closed loop communication in the team followed by results focusing on communication with the patient.

Closed loop communication

The use of closed loop communication varied considerably throughout the ten observations. On day one of observations teams did not display any closed loop communication. In the two cases where patients presented with intoxications, closed loop communication were more frequent. These cases had documented the longest period of time spent in the resuscitation room, 60 respectively 42 minutes. The patient presenting with a cardiac arrest, had the third highest use of closed loop communication. Given the time in the resuscitation room, 17 minutes, this was the most frequent use of closed loop communication per time unit.

Orders and confirmations were selected for a comparison. The results indicate an average of 7,0 *clear, direct orders* and 6,4 *unclear orders* per observation. The average number of *confirm, repeats* were 28,8 and *unclear confirmation* 18,7. See figure 1.



Figure 1: Left bars: Mean value of clear, direct orders (green) and unclear orders (blue). Right bars: mean number of confirm, repeats (green), and unclear confirmations (blue).

Results from question 3 of the TEAM document, *The team communicated effectively*, varied considerably from 1 to 3, with a mean value of 2,2. See figure 2.

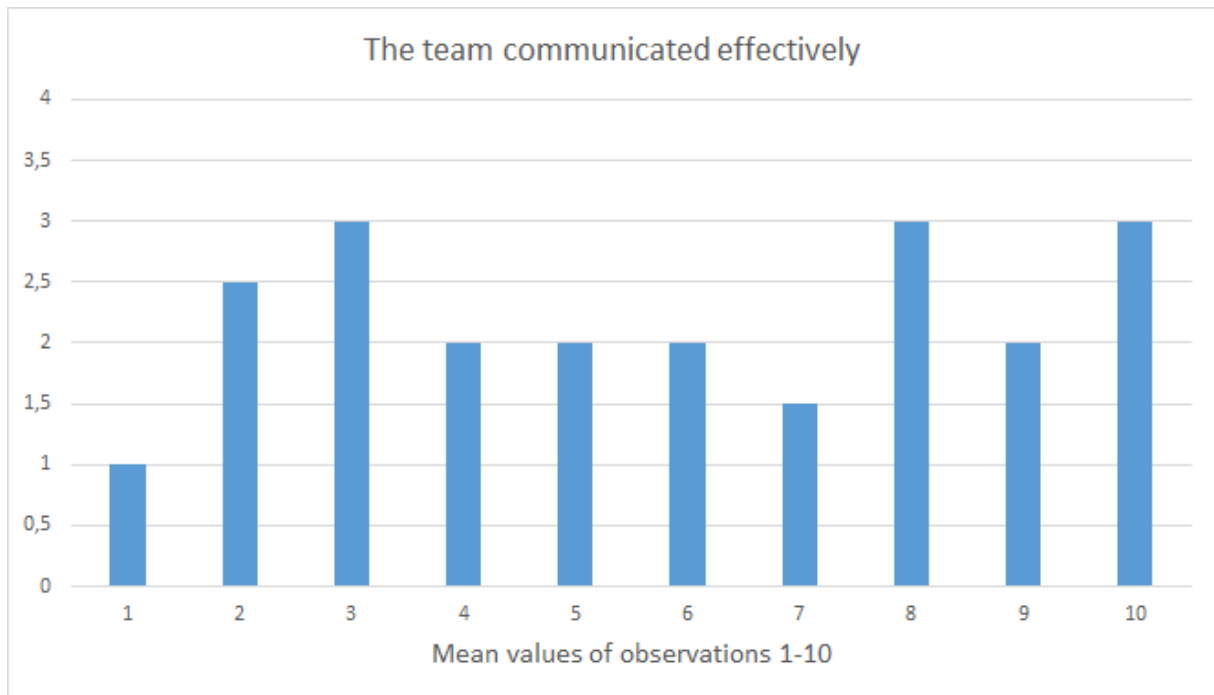


Figure 2: Mean value of question 3 from the Team Emergency Assessment Measure (TEAM) from all 10 observations.

Communication with the patient

Share information with the patient occurred from zero up to 33 times over all ten observations with an average of 18,2. *Ask question to patient* occurred from zero up to 43 times over all ten observations with an average of 23,8. See figure 3.

The patient presenting with a cardiac arrest has no documented events regarding sharing information with the patient. This patient was also the only case where no questions were asked from staff. Other observations documented both these questions.

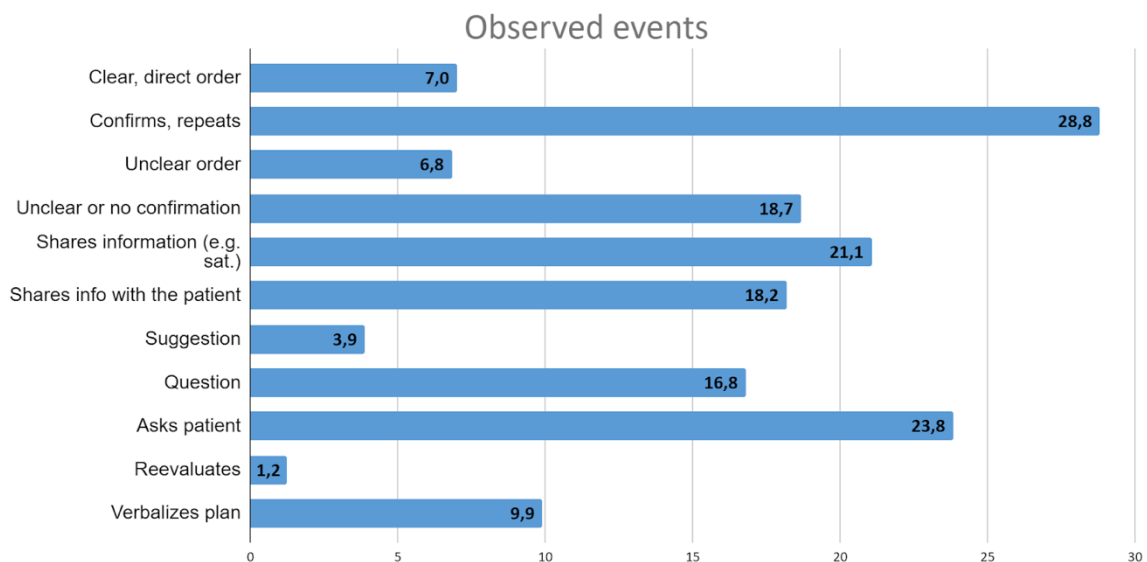


Figure 3: Shows the events. The blue line is the overall mean for each event.

The average percentages were measured in regard to time communicating within the team. Most time spent was *communication with patient*, with a total of 33,5%. See figure 4.

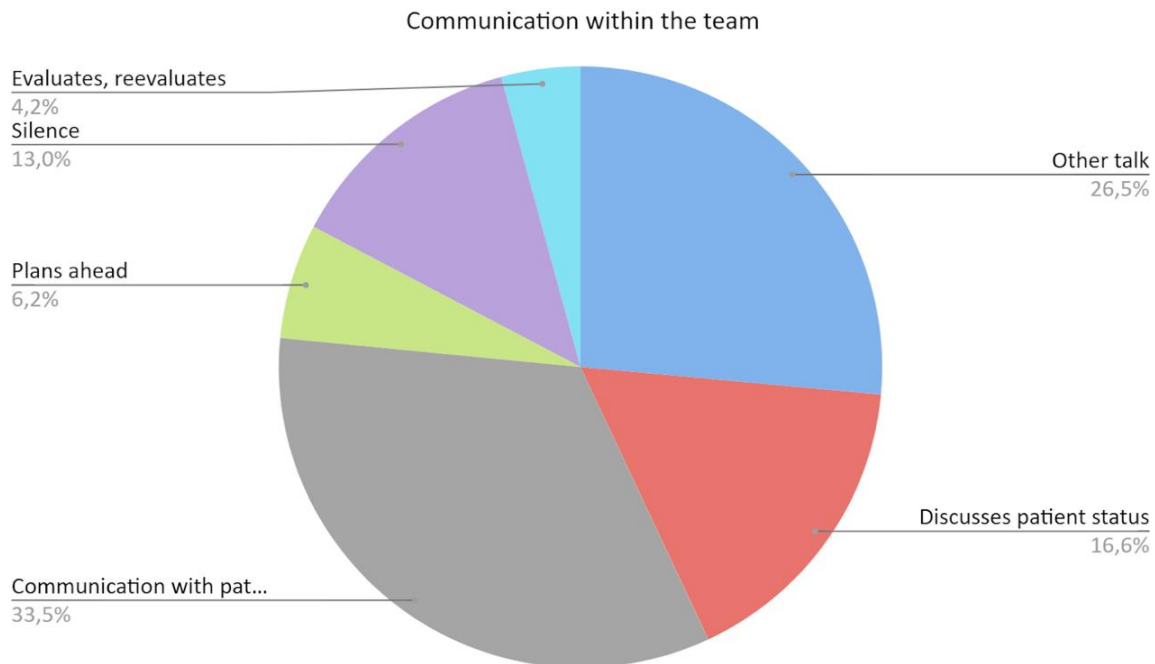


Figure 4: Average percentage of time communicating within the team

DISCUSSION

Discussion of the results

Closed loop communication

While some teams showed clear closed loop communication, it was evident that there was room for improvement in other teams. When a number of staff are caring for a patient, as is the case in a resuscitation room, miscommunication is more likely to occur. When there are an equal amount of *clear, direct orders* and *unclear orders* there is an apparent risk for impaired patient safety (Babiker et al., 2014). The low score from the TEAM document indicates the same risk. In the ED setting a majority of healthcare errors are due to failures in teamwork and communication (Peters et al., 2018), results from this research should be taken into account.

The observation in which the patient presented with a cardiac arrest, had the most frequent use of closed loop communication. Only one *unclear order* was made during this observation which is significantly lower than the average of 6,4. This implies the team had the most effective communication, essential when treating patients with a cardiac arrest. It contributes to an efficient team performance with increased patient safety (Kilner & Sheppard, 2009, Lauridsen et al., 2020). Härgestam (2016) supports this implication, highlighting that when the patient's presenting condition is urgent, communication is more direct.

The slightest medical error in critically ill patients has the possibility of being life threatening which emphasizes the importance of closed loop communication. Simulation based training

has been used to improve closed loop communication. A recent study revealed a significant reduction in medical errors when treating critically ill patients after communication training, enhancing patient safety (Diaz, C, M., & Dawson, K, 2020). Lauridsen et al. (2020) agrees that closed loop communication has proven to be profitable in particular situations for example drawing up medications. However, due to recurrent feedbacks there are doubts that closed loops extend the communication time.

Non-verbal communication is an aspect within communication not researched in this thesis. It can be an important part of communication to improve teamwork and increase patient safety. With gestures, eye contact and vocal nuances the verbal message can be solidified to better the overall communication. Although difficulties may arise when inexperienced team members are involved and non-verbal communication might be misinterpreted (Härgestam et al., 2016). In the critical care setting the nurse specialist has seen to be useful having advanced teamwork and communication skills (Boman et. al., 2020). An increase of closed loop communication could be seen in the resuscitation room with a higher presence of emergency nurse specialists.

Communication with the patient

The result from the study demonstrates that the largest amount of time spent communicating in the resuscitation room was with the patient. However, the subject matter is unknown therefore making it difficult to draw any conclusions if patient participation was high. When frequent interactions occur between healthcare staff and patients, PCC is considered to be greater (Ekman & Norberg, 2013).

Despite not knowing specifically what healthcare staff said or asked patients or what the patient said to healthcare staff in this study, the overall amount of time spent communicating with the patient was the highest percentage documented. This could potentially indicate a high level of PCC (Ekman & Norberg, 2013). When patients are actively involved in and aware of their care, they tend to feel more satisfied and comfortable (Wright, 2011). In a study done by Kaufman et al, (2017) critically ill patients identified what they valued most from healthcare staff in regard to PCC. Staff introducing themselves and explaining the process in the resuscitation room were highly valued from patients. Discussing their prognosis and being included in treatment plans made them feel more part of the team. Their results found that patient centeredness with critically ill patients could be improved with more focus on patient communication (Kaufman et. al., 2017). A central part of Travelbee's grand theory is good communication through sending and receiving messages, signs, and other non-verbal communication. Advocating for PCC is an important role for nurses, recognizing that patients are different individuals in need of different care (Moreira de Freitas et. al., 2018).

The two events that documented interactions with the patient had high overall averages. One case had no results of these events. The reason for this could be due to the patient being unconscious. Barriers impeding healthcare workers ability to communicate with patients can be due to impaired consciousness, sedation or that the patient is on a ventilator. Despite nurses having difficulty communicating with these patients, there is evidence supporting the belief that patients can hear when they are unconscious and communication can have a positive effect (Jesus et al., 2013). Despite having high overall averages some observations lacked communication with the patient. This could indicate more patient inclusion is needed. Improving patient participation is of great importance in health care and doing so can improve patient care and satisfaction as well as patient outcome (Frank et al., 2009 & Kaufman et al, 2017). Staff treating patients presenting to the resuscitation room often priorities treatment of

life-threatening conditions which impacts on the priority of communication and informing the patient (Jesus, Simoes & Voegeli, 2013).

Barriers to effective communication and thus equitable healthcare can be due to language or cultural differences between patients and healthcare staff. Language barriers have the potential to cause increased psychological stress as well as medical errors which in turn can harm an already vulnerable patient (Meuter et al., 2015). It is crucial in the critical care setting that patients requiring time sensitive care understand and have the opportunity to explain their condition. The Universal Declaration of Human Rights states that everyone has the right to express oneself and receive information (United nations, n.d.). The emergency nurse specialist has a role in ensuring critically ill patients participate and are partnerships in their care, especially when patients are in a vulnerable state (Riksföreningen för akutsjuksköterskor, 2017). Boman et. al. (2020) found in acute situations the nurse specialist has seen to be beneficial, having more advanced skills in differentiating the critically ill patient's needs, linked to improved patient outcome.

Improving equality within health care has the potential in improving health in society. Patients with lower income, various gender identifications and those from different ethnical backgrounds are more often marginalised, whereas patients who have mental health issues, disabilities or substance abuse are at greater risk of discrimination. Developing the quality of care within the ED setting for people at risk of social inequalities can help reduce the risk of readmission rates, improve overall care and cut costs within healthcare systems (Varcoe1 et al., 2019). The emergency nurse specialist has an important role in promoting PCC based on each patient's individual needs. By listening to the patient and seeing them as an individual, not as a disease, promotes the quality of care thereby reducing the risk for readmissions and promoting sustainable healthcare.

Discussion of methodology

Authors chose to perform an observational study with quantitative design. The study's aim was to observe communication in the resuscitation room, a relevant topic to study within emergency care. According to Polit and Beck (2017), this is suitable in the medical field where independent variables cannot be manipulated or would be unethical. An alternative would have been a qualitative research design through interviews giving a deeper result (Williams, 2018). Authors would have collected more information on how communication in the resuscitation room occurred between staff and the patient. More detailed information would have been subtracted from the observations (Williams, 2018). This method was removed as it was seen to be too in-depth, given that authors found little previous studies on the topic, therefore wanting an overall view of the question.

When conducting an observational study random sampling is recommended (Polit & Beck, 2017) which is done when patients present to the ED. Inclusion criteria was chosen based on the aim. When conducting research on adults, children should not be included (Kjellström, 2017). Children under the age of 18 were excluded as observations were conducted at an adult ED.

Observations were conducted at a tertiary teaching hospital which could have provided good transferability of communication in the resuscitation room. Factors that enabled communication with patients were documented in circumstances other than that of what it normally looked like. The study was conducted at an ED under prevailing circumstances with

an ongoing Covid-19 pandemic. New policies and guidelines may have affected communication with patients as well as closed loop communication. Relatives were unable to accompany patients to the ED as well as staff wore face masks and visors which could have had an impact on verbal communication.

When evaluating the overall quality of the study, generalizability of the study are taken into account (Polit & Beck, 2018). The authors consider the generalizability to be low. The reason for this could be due to the obvious variation in closed loop communication documented on the first and second day of observations. This implies the team's communication methods varied considerably depending on team members. Having a small sample size are common inaccuracies in observational studies. A larger sample size observing more healthcare teams would make the possibility of generalizability higher. Thereby eliminating the sampling bias which may have taken place and given a result more resistant to contingencies (Carlson & Morrison, 2009, Polit & Beck, 2018 & Watts, 2011).

As observations occurred over two days the same group of staff were observed multiple times. This may have affected the results compared to if observations had been done over a longer period of time where participants were registered and could only be observed one time. This could have given different results due to more staff participating who may work differently. The time-of-day observations were conducted could also be of interest for the results. Observations were conducted between 08.00- 17.00 on weekdays. In order to have a more comprehensive data collection, observations should have also been conducted on weekends and during night shifts (Hohenhaus et al., 2008). Doing so could possibly have given another result.

Having multiple observers present has its benefits in ensuring better results. A downfall to more than one observer is that they may be looking in different directions as well as their selective attention. This includes where, what and how they perceive a situation. What is observed can also be affected by their own interests and experiences of the situation. This may affect the observations made and could create inconsistencies in the results (Cohen, 2007). Observational methodology must be taught and nurtured and held to the highest standards as for any other scientific discipline. RNs are because of their knowledge in the field seen to be good observers (Hohenhaus et al., 2008). The observers for this study both worked in the ED as RNs and regularly work in the resuscitation room which may have affected the results. Observers did not receive instructions by experienced observers prior to data collection which may lower reliability.

To minimize observational bias and increase the reliability of the observations, five tests were conducted prior to the actual observations to improve consistency by making clear definitions of what constitutes different behaviours. This was done to grasp the instruments used and gave the observers time to discuss observational issues. Prejudice and expectancy effects from observers cannot be eliminated. Both the observers had expectations of finding certain behaviours based on their own experiences and findings from similar studies that may have influenced the observations (Cohen et al., 2007). The researcher's experiences and theoretical knowledge is of great significance and can have a both positive and negative impact. Prejudice of the phenomena may increase the possibility to gain new, deeper understanding but may also create bias in the research (Lundman & Hällgren Graneheim, 2012). Both authors were aware of this, nevertheless there was a risk that the analysis and the result were unknowingly affected. In order to minimize the risk, both authors have reflected and deliberated throughout the research. Expectancy effects can be overcome by ensuring the

observers do not know the purpose of the research, having a double-blind approach (Cohen et al., 2007). That was not possible due to several reasons but may have caused a different result.

Observations were chosen to be conducted at the authors workplace as a continued organizational improvement was of interest after the study. From an ethical perspective, this can be discussed as it may have affected the results and that those observed felt uncomfortable having colleagues present. However, authors believe this to be an advantage having someone they know in the room rather than a stranger. Although, when having either a colleague or an unfamiliar observer the participants may change their behaviours in which they think the observer wishes (Cohen et al., 2007 & Goodwin et al., 2017).

The participants were not told what kind of communication that was being observed, which is not in line with Polit & Beck (2022) who strive for full disclosure from an ethical point of view. The reason for this could be that participants behave differently and therefore might cause a biased outcome. Polit & Beck (2022) regard this as a more controversial technique that should not be carried out without good reasoning. If the study involves minimal risk to participants and offers benefits to society, withholding information is seen to be more acceptable (Cohen et al., 2007 & Polit & Beck, 2022). The observers explicitly made sure not to collect any identifying information of healthcare staff nor evaluate individuals to further prevent biased behaviour and to promote ethical aspects of the study (Cohen et al., 2007 & Christenbery, 2009). Information collected during observations could not be used against participants or be traced to an individual. This ensured participants were protected from exploitation (Polit & Beck, 2022). This was important for both researchers and participants since information was gathered during stressful situations where mistakes are more likely to occur.

The risk of interference with healthcare staff physically was seen to be small since the observers took place in corners of the room where no devices were obstructed, yet the risk cannot be fully excluded (Carlson, 2017). The risk of emotional interference for healthcare staff or patients is more difficult to determine as mentioned above and can be seen as intrusive or unpleasant by participants in observational situations. The observers were informed to disrupt the observation if any kind of interference was at risk. Healthcare staff could demand observers to leave the resuscitation room if they felt uncomfortable during observations (Hohenhaus et al., 2008). No observations were disrupted.

When doing research where severely ill patients are studied it is important to pay particular attention to the ethical dimensions of the study (Polit & Beck, 2018). As the patient is seen to be the most vulnerable person in the study no data collected other than the amount of time spent communicating with healthcare staff. No identification or conversations were collected. All results were reported at a group level, participating individuals were anonymous and data that could reveal identities have not been presented (Hohenhaus et al., 2008 & Vetenskapsrådet, 2017). In summary the risks of harm to the patient or healthcare staff were considered to be small. The possible increase of knowledge from this research contributes to nursing care considered to balance the potential risk of harm.

CONCLUSION

From the observations it was apparent that the quality of closed loop communication varied from case to case. The use of it was dependent on the healthcare team working, some having a higher amount of closed loop communication and some not using it at all. Further

observations are needed to gain a better understanding of how much closed loop communication is used in the resuscitation room. The results of the study in regard to communication with the patient tend to be predominantly positive. The most amount of time spent communicating in the resuscitation room was done with the patient, suggesting patient participation. Continued research regarding patient participation in the resuscitation room is needed to gain more understanding of the dialogue between patients and healthcare staff as well as what it entails. |

CLINICAL APPLICATION

This thesis may contribute to increased knowledge of how much time is spent communicating with the patient in the resuscitation room, identifying the importance of including the patient in the team as well as PCC. Due to the lack of research made in the resuscitation room focusing on communication both with the patient and within the healthcare team, it is of great importance within the ED setting to broaden the understanding of this topic. The emergency nurse specialist is still a relatively new specialty in Sweden although they are seen to be valued contributors to the care of critically ill patients. Their role in the resuscitation room includes strengthening communication with the patient in addition to communication within the healthcare team. Further studies with a more in-depth research approach will contribute to a deeper understanding of what communication with the patient entails lifting PCC. This study shows that closed loop communication is used irregularly, and a larger scale study is needed to draw more assertive conclusions.

REFERENCES

- Albrecht, R. M. (2015). Patient safety: The what, how, and when. *American Journal of Surgery*, 210(6), 978–982. <https://doi.org/10.1016/j.amjsurg.2015.09.003>
- Almaze, J. P. B., & de Beer, J. (2017). Patient- and family-centered care practices of emergency nurses in emergency departments in the Durban area, KwaZulu-Natal, South Africa. *S Afr J Crit Care* 2017;33(2):59-65. Doi:10.7196/SAJCC.2017.v33i2.317
- Australaian college for emergency medicine. (2014). *Emergency department design guidelines*. Received 10 december, 2020, from https://acem.org.au/getmedia/faf63c3b-c896-4a7e-aa1f-226b49d62f94/G15_v03_ED_Design_Guidelines_Dec-14.aspx
- Babiker, A., El Husseini, M., Al Nemri, A., Al Frayh, A., Al Juryyan, N., Faki, M. O., Al Zamil, F. (2014). Health care professional development: Working as a team to improve patient care. *Sudanese Journal of Paediatrics*, 14(2), 9–16. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/27493399> <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC4949805>
- Ben Natan, M., & Hochman, O. (2017). Patient-centered care in healthcare and its implementation in nursing. *International Journal of Caring Sciences*. 10(1), 596–600. Retrieved from www.internationaljournalofcaringsciences.org
- Boman, E., Levy-Malmberg, R & Fagerström, L. (2020). *Differences and similarities in scope of practice between registered nurses and nurse specialists in emergency care : an interview study*. (1), 492–500. <https://doi.org/10.1111/scs.12753>
- Boykins, A.D. (2014). Core communication competencies in patient-centered care. *The ABNF journal*, 25(2), 40-45. Reviewed 20-01-2021, from <https://pubmed.ncbi.nlm.nih.gov/24855804/>
- Carlson, E. (2017). Etnografi och deltagande observation. I M. Henricsson. (Red.). *Vetenskaplig teori och metod – från idé till examination inom omvårdnad*. (p. 189-204). Lund: Studentlitteratur
- Carlson, M. D. A., & Morrison, R. S. (2009). Study design, precision, and validity in observational studies. *Journal of Palliative Medicine*, 12(1), 77–82. <https://doi.org/10.1089/jpm.2008.9690>
- Christenbery, T. L. (2009). Manuscript peer review: A guide for advanced practice nurses. *Journal of American academy of nurse practitioners*, 23. Doi: 10.1111/j.1745-7599.2010.005752.x
- Chung, C. H. (2000). The evolution of emergency medicine. *Hong Kong journal of emergency medicine*, 8(2), 84-89.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. Ruthledge: New York

- College of emergency nursing Australia. (2014). Practice Standards for the Emergency Nurse Specialist. *Australasian Emergency Nursing Journal*, 17(2), 77–90.
<https://doi.org/10.1016/j.aenj.2014.02.001>
- Cooper, S., Cant, R., Porter, J., Sellick, K., Somers, G., Kinsman, L., & Nestel, D. (2010). Rating medical emergency teamwork performance : Development of the Team Emergency Assessment Measure (TEAM) &. *Resuscitation*, 81(4), 446–452.
<https://doi.org/10.1016/j.resuscitation.2009.11.027>
- Cyna, A., Andrew, M., Tan, S. GM., Smith, A. F. (2011) *Handbook of communication in Anaesthesia and critical care. A practical guide to exploring the art.* Oxford university: New York
- Diaz, M. C. G., & Dawson, K. (2020). Impact of Simulation-Based Closed-Loop Communication Training on Medical Errors in a Pediatric Emergency Department. *American Journal of Medical Quality*, 35(6), 474–478.
<https://doi.org/10.1177/1062860620912480>
- Ekman, I & Norberg, A. Personcentrerad vård – teori och tillämpning. (2013) I A.-K. Edberg, A. Ehrenberg, F. Friberg, L. Wallin, H. Wijk & J. Öhlén (Red.), *Omvårdnad på avancerad nivå – kärnkompetenser inom sjuksköterskans specialistområden.* (p. 29-61). Lund: Studentlitteratur
- Ekman, I., Swedberg, K., Taft, C., Lindseth, A., Norberg, A., Brink, E., & Sunnerhagen, K. S. (2011). Person-centered care - Ready for prime time. *European Journal of Cardiovascular Nursing*, 10(4), 248–251. <https://doi.org/10.1016/j.ejcnurse.2011.06.008>
- Elmqvist, C., & Frank, C. (2012). Att vara patient på akutmottagningen. I S. Almerud Österberg & L. Nordgren (Red.). *Akut vård ur ett patientperspektiv.* (p.51-64). Lund: Studentlitteratur
- Elmqvist, C., Fridlund, B., & Ekebergh, M. (2011). On a hidden game board: The patient's first encounter with emergency care at the emergency department. *Journal of Clinical Nursing*, 21(17–18), 2609–2616. <https://doi.org/10.1111/j.1365-2702.2011.03929.x>
- Finn, J. C., Bhanji, F., Lockey, A., Monsieurs, K., Frengley, R., Iwami, T., Lang, E., Ma, M. H., Mancini, M. E., McNeil, M. A., Greif, R., Billi, J. E., Nadkarni, V. M., & Bigham, B. (2015). Education implementation, teams chapter collaborators: Part 8: education, implementation, and teams. *International consensus on cardiopulmonary resuscitation and emergency cardiovascular care science with treatment recommendations*, 95, 203–224. doi: 10.1016/j.resuscitation.2015.07.046
- Frank, C., Asp, M., & Dahlberg, K. (2009). Patient participation in emergency care - A phenomenographic analysis of caregivers' conceptions. *Journal of Clinical Nursing*, 18(18), 2555–2562. <https://doi.org/10.1111/j.1365-2702.2008.02477.x>
- Granström, A., Strömmer, L., Falk, A. C., & Schandl, A. (2019). Patient experiences of initial trauma care. *International Emergency Nursing*, 4e, 25–29.
<https://doi.org/10.1016/j.ienj.2018.08.003>

- Goodwin, M. A., Stange, K. C., Zyzanski, S. J., Crabtree, B. F., Borawski, E. A., & Flocke, S. A. (2017). The Hawthorne effect in direct observation research with physicians and patients. *Journal of evaluation in clinical practice*, 23, p. 1322-1328. Doi: 10.1111/jep.12781
- Green, N. A., Brecher, D., Durani, Y., DePeiro, A., Loiselle, J., & Attia, M. (2012). Emergency Severity Index version 4: a valid and reliable tool in pediatric emergency department triage. *Pediatric Emergency Care*, 28(8), 753-757. doi: 10.1097/PEC.0b13e3182621813
- Hohenhaus, S. M., Powell, S., & Haskins, R. (2008). A practical approach to observation of the emergency care setting. *Journal of emergency nursing*, 34(2). Doi: 10.1016/j.en.2007.09.019
- Humphrey, K., Brichko, L., & Cobbett, J. (2019). Breaking down the silos of medical error. *EMA - Emergency Medicine Australasia*, 31(4), 659–661. <https://doi.org/10.1111/1742-6723.13350>
- Härgestam, M., Hultin, M., Brulin, C., & Jacobsson, M. (2016). Trauma team leaders' non-verbal communication: Video registration during trauma team training. *Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine*, 24(1). <https://doi.org/10.1186/s13049-016-0230-7>
- Härgestam, M., Lindkvist, M., Brulin, C., Jacobsson, M., & Hultin, M. (2013). Communication in interdisciplinary teams: Exploring closed-loop communication during in situ trauma team training. *BMJ Open*, 3(10), 1–8. <https://doi.org/10.1136/bmjopen-2013-003525>
- Innes, K., Elliott, D., Plummer, V., & Jackson, D. (2017). Emergency department waiting room nurses in practice: an observational study. *Journal of Clinical Nursing*, 27, 1402–1411. doi: 10.1111/jocn.14240
- International council of nurses. (2009). *ICN Framework of competencies for the nurse specialist*. Received 10 februari, from, https://sigafsia.ch/files/user_upload/08_ICN_Framework_for_the_nurse_specialist.pdf
- Jesus, L. M, Simoes, J. F., & Voegeli, D. (2013). Verbal communication with unconscious patients. *Acta paul enferm*, 26(5), 506–513.
- Kaufman, E. J., Richmond, T. S., Wiebe, D. J., Jacoby, S. F., & Holena, D. N. (2017). Patient experiences of trauma resuscitation. *JAMA Surgery*, 152(9), 843–850. <https://doi.org/10.1001/jamasurg.2017.1088>
- Kilner, E., & Sheppard, L. A. (2010). The role of teamwork and communication in the emergency department: A systematic review. *International Emergency Nursing*, 18(3), 127–137. <https://doi.org/10.1016/j.ienj.2009.05.006>
- Kjellström, S. (2017). Forskningsetik. I M. Henricson. (Red.), Vetenskaplig teori och metod - Från idé till examination inom omvårdnad. (p.57-80). Lund: Studentlitteratur

- Kurland, L. (2017). *Sverige – akutsjukvård i nästan 20 år*. Finska läkaresällskapets handlingar, (7), 10–14.
- Kydona, C. K., Malamis, G., Giasnetsova., Tsiora, V., & Gritsi-Gerogianni, N. (2010). The level of teamwork as an index of quality in ICU performance. *Hippokratia*, 14(2), 94-97. Received from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2895292/pdf/hippokratia-14-94.pdf>
- Larsson, I. E., Sahlsten, M. J. M., Sjöström, B., Lindencrona, C. S. C., & Plos, K. A. E. (2007). Patient participation in nursing care from a patient perspective: A grounded theory study. *Scandinavian Journal of Caring Sciences*, 21(3), 313–320. <https://doi.org/10.1111/j.1471-6712.2007.00471.x>
- Lauridsen, K. G., Watanabe, I., Løfgren, B., Cheng, A., Duval-Arnould, J., Hunt, E. A., ... Nadkarni, V. M. (2020). Standardising communication to improve in-hospital cardiopulmonary resuscitation. *Resuscitation*, 147(December 2019), 73–80. <https://doi.org/10.1016/j.resuscitation.2019.12.013>
- Longtin, Y., Sax, H., Leape, L. L., Sheridan, S. E., Donaldson, L., & Pittet, D. (2010). Patient participation: Current knowledge and applicability to patient safety. *Mayo Clinic Proceedings*, 85(1), 53–62. <https://doi.org/10.4065/mcp.2009.0248>
- Lundman, B. & Hällgren Graneheim. U. (2012). Kvalitativ innehållsanalys. I M. Granskär., & B. Höglund-Nielsen. (Red.). *Tillämpad kvalitativ forskning inom hälso- och sjukvård*. (p. 187-201) Lund: Studentlitteratur
- McDonnell, A., Goodwin, E., Kennedy, F., Hawley, K., Gerrish, K., & Smith, Christine. (2014). An evaluation of the implementation of advanced nurse practitioner (ANP) roles in an acute hospital setting. *Journal of advanced nursing*, 71(4), 789-799. doi 10.1111/jan.12558
- McKay, A., Walker, S. T., Brett, S. J., Vincent, C., & Sevdalis, N. (2012). Team performance in resuscitation teams: Comparison and critique of two recently developed scoring tools. *Resuscitation*, 83(12), 1478–1483. <https://doi.org/10.1016/j.resuscitation.2012.04.015>
- Moreira de Freitas, R., Abreu de Moura, N., Feitosa, R. M. M., Cavalcante Guedes, M. V., de Freitas, M. C., da Silva, L. F., & Macedo Monteiro, A. R. (2018). Nursing process based on the joyce travelbee model. *Journal of nursing UFPE*, 12(12), 3287-3294. doi: 10.5205/1981-8963-v12i12a235051p3287-3294-2018
- Peters, V. K., Harvey, E. M., Wright, A., Bath, J., Freeman, D., & Collier, B. (2018). Impact of a TeamSTEPPS Trauma Nurse Academy at a Level 1 Trauma Center. *Journal of Emergency Nursing*, 44(1), 19–25. <https://doi.org/10.1016/j.jen.2017.05.007>
- Polit, D. F., & Beck, C. T. (2018). *Essentials of nursing research: appraising evidence for nursing practice (9th ed.)*. Wolters Kluwers
- Polit, D. F., & Beck, C. T. (2022). *Essentials of nursing research: appraising evidence for nursing practice (10th ed.)*. Wolters Kluwers

- Radhakrishnan, G. (2013). Non-Experimental Research Designs: Amenable to Nursing Contexts. *Asian Journal of Nursing Education and Research*, 3(1), 25–28. Recieved 13-04-21 from <https://ajner.com/HTMLPaper.aspx?Journal=Asian Journal of Nursing Education and Research;PID=2013-3-1-7>
- Meuter, R. F. I., Gallois, C., Segalowitz, N. S., Ryder, A. G., & Hocking, J. (2015). Overcoming language barriers in healthcare: a protocol for investigating safe and effective communication whrn patients or clinicans use a second language. *BMC health service research*, 15:371. Doi: 10.1186/12913-015-1024-8
- Riksföreningen för akutsjuksköterskor & svensk sjuksköterskeförening. (2017). Kompetensbeskrivning. Legitimerad sjuksköterska med specialistsjuksköterskeexamen med inriktning mot akutsjukvård. Recieved 20-12-2020, from <https://beta.swenurse.se/download/18.9f73344170c00306231c00/1584088433640/Kompetensbeskrivning%20sjuksk%C3%B6terskor%20inom%20akutsjukv%C3%A5rd.pdf>
- Ruge, T., Malmer, G., Wachtler, C., Ekelund, U., Westerlund, E., Svensson, P., & Carlsson, A. C. (2019). *Age is associated with increased mortality in the RETTS-A triage scale*. 1–6. <https://doi.org/10.1186/s12877-019-1157-4>
- Salas, E., Wilson, K.A., Murphy, C.E., King, H., & Salisbury, M. (2008). Communicating, coordinating, and cooperating when lives depend on it: tips for teamwork. *Jt Comm J Qual Patient Saf*, 34(6), 333-341. doi: 10.1016/s1553-7250(08)34042-2
- SENA. (n.d.). *Specialistsjuksköterskan inom akutsjukvård. Nulägesanalys och framtidsvisioner*. Recieved 20-03-2021, from https://sena.se/natverket-gallande-specialistsjukskoterskans-funktion-pa-akutmottagning/?fbclid=IwAR1rfTY_d0domx8Z94f6tQ2-u88PPFssagCjCZ_xgaBcGukVeDvWZMWX0ko
- Shelton, G. (2016). Appraising Travelbee’s human-to-human relationship model. *Journal of advanced practitioner in oncology*, 7(6), 657-661. doi: 10.6004/jadpro.2016.7.6.7
- Siassakos, D., Bristowe, K., Draycott., T. J., Angouri, J., Hambly, H., Winter, C., Crofts, J. F., Hunt, L. P., & Fox, R. (2011). Clinical efficiency in a simulated emergency and relationship to team behaviours: a multisite cross-sectional study. *International journal of obstetrics and gynaecology*, 118(5). doi: 10.1111/j.1471-0528.2010.02843.x
- Socialstyrelsen. (2015). Läkarnas specialiseringstjänstgöring. Målbeskrivningar. Received 11 december, 2020, from <https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/ovrigt/2015-4-5.pdf>
- Socialstyrelsen. (2018). *Jämlik hälsa, vård och omsorg*. Recieved 09-03-2021 from, <https://www.socialstyrelsen.se/utveckla-verksamhet/jamlik-halsa-var-d-och-omsorg/>
- Svensk författningssamling, Hälso- och sjukvårdslag 1982:763. (1982). Reviewed 03-03-2021 from, https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/halso--och-sjukvardslag-1982763_sfs-1982-763

- Smith, J., Date, P., Spencer, W., De Tonnerre, E., & Taylor, D. M. D. (2020). Evolution of methodology and reporting of emergency medicine quantitative research over a 20-year period. *Emergency Medicine Journal*, 37(6), 324–329. <https://doi.org/10.1136/emered-2019-209140>
- Statens offentliga utredningar. (2018). *Framtidens specialistsjuksköterska – ny roll, nya möjligheter*. Recieved 1-12-2020, from <https://www.regeringen.se/4a71bb/contentassets/6f67c0e786f0491899a98579a002508c/framtidens-specialistsjukskoterska--ny-roll-nya-mojligheter-sou-201877>
- Stimson, C. E. (2020). Role identity during the resuscitation of trauma patients. *Journal of trauma nursing*, 27(6). DOI:10.1097/JTN.0000000000000547
- Swanson, K. M., & Wojnar, D. M. (2004). Optimal Healing Environments in Nursing. *The Journal of Alternative and Complementary Medicine*, 10(1), 43–48. <https://doi.org/10.1089/1075553042245935>
- Tiel Groenestege-Kreb, D., Van Maarseveen, O., & Leenen, L. (2014). Trauma team. *British journal of anaesthesia*, 113(2), 258–265. <https://doi.org/10.1093/bja/aeu236>
- Travelbee, J. (1971). *Interpersonal aspects of nursing* (2nd ed.). Philadelphia, PA: F.A. Davis Company
- Troyer, L., & Brady, W. (2020). Barriers to effective EMS to emergency department information transfer at patient handover: A systematic review. *American Journal of Emergency Medicine*, 38(7), 1494–1503. <https://doi.org/10.1016/j.ajem.2020.04.036>
- United nations. (n.d.). Universal declaration of human rights. Received 05-05-21 from <https://www.un.org/en/about-us/universal-declaration-of-human-rights>
- Varcoe, C., Bungay, V., Browne, A. J., Wilson, E., Wathen, N., Kolar, K., Perrin, N., Comber, S., Blanchet Garneau, A., Byres, D., Black, a., & Roberta Price, E. (2019). EQUIP emergency: study protocol for an organizational intervention to promote equity in health care. *BMC health service research*, 19. doi.org/10.1186/s12913-019-4494-2.
- Vetenskapsrådet. (2017). *God forskningsed*. Recieved 21-01-2021 from <https://www.vr.se/analys/rapporter/vara-rapporter/2017-08-29-god-forskningssed.html>
- Watts, J. H. (2011). Ethical and practical challenges of participant observation in sensitive health research. *International Journal of Social Research Methodology*, 14(4), 301–312. <https://doi.org/10.1080/13645579.2010.517658>
- Widgren, B. (2013). *RETTTS. Rapid emergency triage and treatment system*. Received 4 december, 2020, from <https://vardgivarwebb.regionostergotland.se/pages/206450/RETTTS.%20Handledning.pdf>
- Williams, C. (2018). Research methods. *The Cambridge Handbook of Social Problems*, 1(3), 23–37. <https://doi.org/10.1017/9781108656184.003>

- Windover, A. K., Boissy, A., Rice, T. W., Gilligan, T., Velez, V. J., & Merlino, J., & D, M. (2013). The REDE model of healthcare communication: Optimizing relationship as a therapeutic agent. *Journal of patient experience*, 1(1), 8-13. <https://doi.org/10.1177/237437431400100103>
- World Health Organisation. (2008). *The right to health. Fact sheet no. 31*. Recieved 11 december, 2020, from <https://www.who.int/gender-equity-rights/knowledge/right-to-health-factsheet/en/>
- World Health Organisation. (2009). *Conceptual framework for the international classification for patient safety: version 1.1*. Recieved 5 december, 2020, from https://www.who.int/patientsafety/taxonomy/icps_full_report.pdf
- World Health Organisation. (2020). *Designating a resuscitation area in the emergency unit*. Recieved 21 january, 2021, from <https://www.who.int/publications/i/item/resuscitation-area-designation-tool>
- Wright, A. J. (2011). Trauma resuscitations and patient perceptions of care and comfort. *Journal of Trauma Nursing : The Official Journal of the Society of Trauma Nurses*, 18(4), 231–238. <https://doi.org/10.1097/JTN.0b013e31823a49eb>
- Ylikangas, C. (2017). Miljö – ett vårdvetenskapligt begrepp. In L. Wiklund Gustin, & I. Bergbom (Red.), *Vårdvetenskapliga begrepp I teori och praktik*. Studentlitteratur: Lund
- Öhrn, A. (2013). Säker vård. I A.-K. Edberg, A. Ehrenberg, F. Friberg, L. Wallin, H. Wijk & J. Öhlén (Red.), *Omvårdnad på avancerad nivå – kärnkompetenser inom sjuksköterskans specialistområden*. (s. 181-216). Lund: Studentlitteratur

14:38 tors 7 jan.

58 % 

Pause

00:00:12

Stop

Tal

00:00:00

Annat prat

Diskuterar status på pt (just nu)

Planerar framåt

Tystnad

Utvärderar/Reevaluerar

Kommunikation med pt

Händelser [+]

00:00:00

+Tydlig, riktad order

-Otydlig order

+Bekräftar, upprepar

-Otydlig/ingen bekräftelse

Delar info (ex saturation)

Fråga

Förslag, idé

Reevaluerar

Verbaliserar plan

Frågar pat

Delar info med pat



Team Emergency Assessment Measure (TEAM)

Introduction

This form has been designed as a teamwork observational scale to assess the performance of emergency medical teams (e.g. resuscitation and trauma teams). The form should be completed by expert clinicians to enable accurate performance rating and feedback of leadership, teamwork, situation awareness and task management. Rating prompts are included where applicable. Please rate the first 11 items using the following scale and the last item using the 10 point scale.

Never/Hardly ever	Seldom	About as often as not	Often	Always/Nearly always
0	1	2	3	4

Team Identification

Date _____ Time _____ Place _____

Team Leader _____ Team _____

Leadership: *It is assumed that the leader is either designated, has emerged, or is the most senior – if no leader emerges allocate a '0' to questions 1&2.*

0 1 2 3 4

1. The team leader let the team know what was expected of them through direction and command

2. The team leader maintained a global perspective

*Prompts: Monitoring clinical procedures and the environment?
Remaining 'hands off' as applicable? Appropriate delegation?*

Team Work: *Ratings should include the team as a whole i.e. the leader and the team as a collective (to a greater or lesser extent).*

0 1 2 3 4

3. The team communicated effectively

Prompts: Verbal, non-verbal and written forms of communication?

4. The team worked together to complete tasks in a timely manner

5. The team acted with composure and control

Prompts: Applicable emotions? Conflict management issues?

6. The team morale was positive

Prompts: Appropriate support, confidence, spirit, optimism, determination?

7. The team adapted to changing situations

*Prompts: Adaptation within the roles of their profession?
Situation changes: Patient deterioration? Team changes?*

8. The team monitored and reassessed the situation

9. The team anticipated potential actions

Prompts: Preparation of defibrillator, drugs, airway equipment?

Task Management

0 1 2 3 4

10. The team prioritised tasks

11. The team followed approved standards/guidelines

Prompt: Some deviation may be appropriate?

Overall

1 2 3 4 5 6 7 8 9 10

12. On a scale of 1-10 give your global rating of the team's performance

Comments: _____
