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The Tanzanian nurses' experiences of caring for patients with life threatening conditions at a hospital in a small community

A qualitative interview study with nurses at a hospital in Bagamoyo, Tanzania

Den Tanzanianska sjuksköterskans upplevelser av att vårda patienter i livshotande tillstånd på ett sjukhus i ett litet samhälle

En kvalitativ intervjustudie med sjuksköterskor på ett sjukhus i Bagamoyo, Tanzania

Abstract

Background: Tanzania is a low-income country where many people struggle to afford health care. Previous research on emergency health care in Tanzania shows that there are limited resources when it comes to both education in emergency care and acute care equipment. Furthermore, there is limited information concerning experiences from nurses working with emergency care under these conditions.

Aim: The aim of this study was to examine the Tanzanian nurses' experience of caring for patients with life threatening conditions at a hospital in a small community.

Method: The study has a qualitative design with a semi-structured interview method where six registered nurses with experience of caring for patients who suffers from life threatening conditions at the Bagamoyo District Hospital in Tanzania were interviewed. The interview transcriptions where analyzed with a qualitative content analysis method described by Granheim and Lundman (2004).

Results: The result shows that the nurses works in an environment where recourses are limited and how they have found alternative ways to provide care under the given circumstances. It reveals how the nurses' cope with these situations, their emotional challenges and how they manage feelings that comes from caring for patients with life threatening conditions under the prevailing circumstances.

Discussion: The result was discussed in relation to Roy's adaption theory where the main focus was on the human being and its ability to adapt in order to maintain health and quality of life while interacting with a changing environment.

Keywords: Nursing, Tanzania, Critical care, Coping

Sammanfattning

Bakgrund: Tanzania är ett utvecklingsland där många människor har svårt att bekosta sjukvård. Tidigare forskning rörande akutsjukvård i Tanzania visar att det finns en brist på utbildning och utrustning inom akutsjukvården. Det finns få studier som undersöker sjuksköterskans erfarenheter från att arbeta med akutsjukvård under de bristande förhållandena. Utifrån detta väcktes ett intresse för att utforska sjuksköterskans upplevelser utav att vårda patienter i livshotande tillstånd under dessa bristfälliga förhållanden.

Syfte: Syftet med studien var att utforska den Tanzanianska sjuksköterskans upplevelser av att vårda patienter i livshotande tillstånd på ett sjukhus i ett litet samhälle.

Metod: Studien har en kvalitativ utformning med semistrukturerade intervjuer. Intervjuer hölls med sex sjuksköterskor som arbetar på Bagamoyo District Hospital i Tanzania med erfarenhet av att vårda patienter i livshotande tillstånd. Intervjuerna transkriberades och bearbetades enligt en kvalitativ innehållsanalys som beskriven utav Granheim och Lundman (2004).

Resultat: Resultatet visade att sjuksköterskorna arbetar i en miljö där resurser saknas och hur de funnit alternativa vägar för att kunna ge omvårdnad trots detta. Resultatet visar också att sjuksköterskorna ställs inför känslomässiga utmaningar och hur de hanterar känslorna som uppkommer då de vårdar patienter i livshotande tillstånd under bristfälliga förhållanden.

Diskussion: Resultatet diskuterades i relation till Roys adaptionsteori med tyngdpunkt på människan och dess förmåga att adaptera för att upprätthålla hälsa och livskvalitet i en föränderlig miljö.

Nyckelord: Akutsjukvård, Coping, Omvårdnad, Tanzania

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Introduction

In low-income countries the emergency and critical care is one of the weakest parts of the health system. Baker, Lugazia, Eriksen, Mwafongo, Irestedt and Konrad (2013) made a survey where they looked at the emergency and critical care at ten hospitals in Tanzania. Only 60 % of those hospitals had an emergency room and 30 % had a triage area. In 80 % of the hospitals no staff members were trained in triage or critical care and 60 % were not trained in emergency care. Forty percent of the participating hospitals had formal systems for triage but none had written guidelines for triage, emergency treatment or critical care. As a contrast to the low level of emergency and critical care knowledge amongst hospital staff, the hospitals were more or less well stocked with drugs and equipment necessary for this type of care. Emergency and critical care has not been prioritized due to the fact that it is not age or disease specific and very few health care workers are specialists in the subject (Baker et al., 2013).

Häggström, Mbusa and Wadensten (2008) have performed a study where they have looked at the Tanzanian nurses' experiences of their work in different care settings in Tanzania. It shows that the nurses are facing ethical dilemmas and workplace distress. In developing counties, the knowledge of nurses' work experience is scant compared to the knowledge on the same subject in developed countries. Based on this we found an interest in exploring the Tanzanian nurses experiences of caring for patients with life threatening conditions.

Background

Tanzania – an overview

Tanzania is located in east Africa and is populated by 52 million people. About 26 % of the inhabitants of Tanzania lives in the cities where-as the rest lives in rural areas (http://www.globalis.se). Even though Tanzania receives several contributions and loans it is one of the poorest countries in the world. According to the United Nations, Tanzania is a member of the LDC-countries which stands for Least Developed Countries and includes 48 countries who has a significantly low social and economical development. Tourism, mining and financial markets have increased significantly over the last years in Tanzania, but because of the significant growth of the population, the poverty has remained (Höglund, 2015). The gross domestic product per capita, expressed as purchasing power parties (PPP $ int.) for a Tanzanian was 2 591 in 2013 which means that about 28 % of the population is living below the federal poverty line and about 32 % is malnourished (http://www.globalis.se).

Tanzania is striving to reach the Millennium Development Goals (MDGs) set in the United

Nation and the Sustainable Development Goals (SDGs) that are built on the MDGs (http://www.un.org/sustainabledevelopment/). Looking at the MDGs, Tanzania has reduced the number of people who suffers from extreme poverty and hunger and they have reduced the infant mortality. They are still working towards goals such as fulfilling primary education for all children, reducing the maternal mortality and reducing the spread of HIV and AIDS (http://www.globalis.se).

Health issues

Due to the amount of people living under the poverty line in Tanzania the majority of the population do not have enough resources for health care services, as for example medicine which becomes un-affordable (World Health Organization [WHO], 2015). According to WHO the total, per capita expenditure on health (PPP int. $) in 2013 was 126 dollars and the total governmental per capita (PPP int. $) expenditure of health was 46 dollars. As a percentage of the gross domestic product (GPD) the total expenditure on health was 7,3 %. The average life expectancy of a Tanzanian is 60 years for women and 58 years for men (http://www.globalis.se) and according to WHO 70% of the men and 62% of the women died before the age of 70 in 2012.

The poverty in Tanzania influences on the health of the inhabitants and the health influences on the poverty and it has become a vicious circle. Lately there have been some improvements, as for example an improvement regarding neonatal deaths where in 2005 a number of 42 000 babies died during their first 28 days in life. The number for the neonatal deaths in 2015 was 39 000 (WHO, 2015). The HIV prevalence amongst adults aged 15 to 49 has decreased with seven percent between 2003 and 2007. The number of people infected with malaria decreased from 2012, where there was 1 986 000 reported and confirmed malaria cases to 1 552 000 reported cases in 2013.

In Tanzania there are 223 hospitals divided on twelve mainland regions (Baker et al., 2013). According to Cox and Saho (2007) the ratio of doctors to the population is 1:40 000 and nurses 8:20 000. The number of psychiatrists who worked in a mental health sector per 100 000 in 2014 was 0.01 (WHO, 2015). These digits show that the Tanzanian health care struggle with a limitation concerning educated health care personnel.

Mortality rates and life threatening conditions

In 2013 the percentage of all the Tanzanians under the age of 15 was 44,8 % (WHO, 2015).

Even though a large percentage of the population is young, Tanzania do have a high amount of deaths among younger inhabitants. In 2012, 23 % of the men and 20 % of the female died before the age of 15. The main cause of death for both male and female, all age groups, are HIV and AIDS. These diseases killed about 73 000 people in 2012. HIV and AIDS is followed by respiratory infections, diarrhoeal diseases and malaria which all together killed about 77 000 people and almost 50 000 deaths were caused by an acute respiratory infection. There was 84 000 reported deaths caused by malaria in 2013. A number of 13 000 inhabitants died due to maternal causes such as birth asphyxia and birth trauma. Eleven thousand deaths were caused by an ischemic heart disease, 9 000 died due to diabetes mellitus and almost 15 000 due to a stroke.

Callender et al. (2014) states in a review-study where facts about heart failures in low- and middle income countries are summarized over the last two decades that heart failures are on a rise to become a major public concern due to changes in demographic and epidemiological patterns. Also the number of strokes in developing countries are increasing according to Walker et al. (2015). In their study they looked at the number of admissions due to stroke in Northern Tanzania and since the 70's the number have increased from 1.3 stroke cases per year to 153.0 cases in the twenty first century. Walker et al. adds that even though the population in the Northern area of Tanzania nearly has doubled over this period of time the numbers do indicate that the quantity of admissions has increased significantly. Road injuries is also a large cause of fatalities in Tanzania which in 2012 caused 11 000 deaths (WHO, 2015). Zimmerman, Jinadasa, Maegga and Guererro (2014) made a survey on road traffic injuries on rural roads in the Bagamoyo District in Tanzania and they state that in low- and middle- income countries the road traffic injuries leading to death is becoming a major public health concern on a rise and also that the African region has the highest road traffic fatality rate.

In the survey by Cox and Saho (2007) they also examined the challenges of emergency care in Tanzania and they found that some patients died before reaching a hospital due to long travel with private transport or the police to the hospitals. Ambulance care must be paid for by the patient which is an issue since many patients cannot afford that cost. Cox and Saho also elucidate that there was a lack of equipment, drugs and first aid educations for staff members. They conclude that many non-governmental organizations are working to upgrade emergency services for diseases like cholera and plague outbreaks but the upgrade of emergency care is going slow. Baker et al. (2013) reasons that the slow upgrade is due to the fact that there are a few amount of emergency and critical care specialists in the country and they say that

according to a survey in 2006, only 19 % of the hospitals nationwide were able to have a twenty-four-seven emergency care service. Baker et al. also discuss that the weak parts of the emergency and critical care in Tanzania are due to the infrastructure which is not designed to care for critically ill patients, a lack of routines for dealing with priorities of critical ill patients and due to a low level of emergency care training amongst the health care staff.

Providing health care in Tanzania

The nursing education in Tanzania is run by the Ministry of Health and has a four-year long curriculum and results in a diploma in nursing and midwifery. Since 1997 nurses can get a bachelor of science which has a three-year curriculum and is run by the Faculty of Nursing. Both educations offer a theoretical and a practical course in nursing (Sandin, Grahn & Kronvall, 2004). In Tanzania critical care is a subspecialty to anesthesia and in 2013 there were less than twenty anesthesiologists in the country and before 2009 no doctors were trained in the specialty at all (Baker et al., 2013). Songstad, Rekdal, Massay and Blystad (2011) assessed the nurses' experiences of their working conditions. They found that Tanzania suffers a shortage of fully-trained health workers, both nurses and physicians, which was counteracted by deploying workers with shorter training, even despite the long education in health care. The Primary Health Services Developing Program 2007 - 2017 has a major interest in developing the health care in Tanzania and their prime focus is on increasing the number of people working in health care. According to Songstad et al. the Human Recourse for Health Strategic Plan between 2008 - 2013 noticed there was a challenge in maintaining health care workers that are motivated and they stated that the situation left human resources considerably under-motivated for the job to function effectively.

In Tanzania there are two groups of substitute physicians; clinical officers and assistant medical officers (Songstad et al., 2011). In many health facilities the assistant medical officers replace the fully-trained physicians while the clinical officers are working at public health facilities and are in charge at many rural dispensaries. Among the nurses in the public health sector it differs from enrolled nurses, registered nurses to nursing officers where the length of training qualify for the category. The public health sector has been undergoing reforms to improve the quality of health care. One of these reforms is the restructuring of the salary scale of government employees. The current salary scale has grouped together different clusters of health workers in broad salary categories in order to create less distinction between the groups, whereas the previous salary scale differed between the type of training and the length

of it. All this is due to the reason that the Ministry of Health want to ensure good performance in work which is better rewarded and motivates the health workers.

Problem statement

Articles on emergency health care in Tanzania show that there are limited resources when it comes to education in emergency care and acute care equipment. Furthermore, there is limited information concerning experiences from nurses caring for patients with life threatening conditions. Therefore, we found an interest in exploring how nurses experience caring for patients with different life threatening conditions in a small community in Tanzania, a low-income country where resources are limited and many patients struggle to afford health care.

Aim

The aim for this study was to describe the Tanzanian nurse experience of caring for patients with life threatening conditions at a hospital in a small community.

Theoretical framework

Roy's adaption model

The adaptation model by Sister Callista Roy was applied to the study as the authors wanted to examine how the nurses in a small community in Tanzania experience caring for patients with life threatening conditions. The model says that the main goal of nursing is to foster successful adaptation and the purpose is to prevent or change ineffective behaviors to adaption in a situation (Masters, 2015, s. 113-126). The model sees the person as a holistic adaptive system who constantly interacts with the environment in order to bring optimal health and quality of life. In a changing environment the person has the opportunity to grow and develop. In what way a person adapts has its foundation in both genetically determined and learned coping processes. Roy's nursing theory is a universal theory that can be applied not only in a patients' perspective but on human level perspective in its unique environment.

Masters (2015) refers to the adaption as a process where an individual or a group interacts with its environment out of awareness and elaborated choices. The theory sees the individual in a holistic perspective, compound by unique biological, psychological and social fragments. The individual tries to maintain a balance between its biological, psychological and social parts as it interacts with the surrounding environment. The human being wants to achieve a

balance to be able to cope with the environmental demands and to receive optimal health and well-being.

Besides the human biological adaption process where the fluid, electrolyte and acid-based balance is affected there is also a cognitive adaption process which Roy splits in to four channels that has its foundation in the human beings' mental processes and individual ways to interpret sensory information. The perceptual and informational channel includes activities of selective attention, coding and memory. The learning channel involves imitation, reinforcement and insight. Judgement is the third channel and it includes problem solving and decision making. The fourth channel is described as the individual defense to seek relief from anxiety and make affective assessments and attachments through the emotions. The function of these channels are to maintain integrated life processes which are shown in behaviors of the individual or the group (Masters, 2015). The human behavior takes the form of either adaptive or ineffective responses. The individual uses the responses as feedback in order to decide whether to increase or decrease its efforts to cope with the environmental stimuli. A person's capability of adapting in a given situation affects the human systems ability to respond positively. The human behavior can be viewed in four adaptive modes and it is through these modes responses to and interaction with the environment can be enforced and adaption can be observed. The human adaptive modes are; physiologic-physical mode, self-concept-group identity mode, role function mode and interdependence mode. The way a person adapts depends on, not only the individual exclusively but also on social factors as family, community and group settings surrounding the person.

Roy identifies the human being as an adaptive system where the sub-systems are acting to maintain adaption to the four adaptive modes (Masters, 2015). Environment is an important part of the adaption model and the constant changes to the environment stimulates the individual to respond adaptive or ineffective and in a changing environment the person has the opportunity to grow and develop. In order to achieve adaption there has to be a successful integration between the individual and its environment.

Method

Study context

The study took place at the Bagamoyo District Hospital in the Bagamoyo district in Tanzania. The hospital has seven wards; obstetrics and labour, male, female, children, tuberculosis, neonatal and one ward for patients with national insurance. The hospital also has a theatre to

perform surgery and also includes a care and treatment center (CTC). At the Bagamoyo District Hospital the nurses meet patients seeking help with sever conditions. The most common critical conditions that the nurses come across are related to pregnancies, cesarean sections and new born babies. The nurses meet patients, both pregnant and not pregnant with severe HIV and AIDS in different stages, malaria, anemia, infections, pneumonia, tuberculosis. The nurses also cross paths with road injuries and wounded patients, care for pregnant women who delivers still born babies or end up with post partial hemorrhage. A side from all the severe cases the nurses also work in the CTC where they meet patients with, for example, diabetes and hypertension. At the CTC the nurses also assist patients with wound care, stitch removals, counseling and immunizations. The nursing profession at the Bagamoyo District Hospital also includes teaching students and new nurses.

Data collection

The study has a qualitative design assigned to collect the participants' subjective experiences (Henricson & Billhult, 2012). A semi-structured interview method was chosen to collect the participants' subjective experiences. The procedure allowed the participants to share their experiences freely but still stay within the subject of the study. The purpose of letting the participants share their narrations freely is to collect the true phenomenon out of the narrations and out of that reach an understanding. Semi-structured interviews as a method were conducted in order to structure the interviews and to keep the narrations relative to the subject. The questions through the interview guide (appendix 1) were open-ended allowing the nurses to share their experiences freely. The same opening and closing questions were asked in every interview. All the participants were asked if they had anything they wanted to add before ending the interview. Through the interviews an accommodative and flexible approach was being used in order to encourage the narratives (Kvale & Brinkmann, 2014). In order to find the true phenomenon in the participants' narrations it is adequate to have as little preconceptions as possible (Henricson & Billhult, 2012).

The interviews were performed with one interviewer and one participant at time in a private setting, each author conducted three interviews. All interviews were recorded with permission from the participants and the recorded material was kept confidential by the authors and was clarified to the participants in the written consent (appendix 2). The interviews lasted between 23 minutes to 41 minutes each. The average time was 33 minutes.

Procedure

After e-mail contact with the manager at the Bagamoyo District Hospital the authors got approval to conduct the study at the hospital. The study was also approved by the Bagamoyo District Executive Director after an application and an introduction letter was sent there. Selection of participants was made with help from the manager at the hospital whom chose six registered nurses based on their experience from caring for patients in life threatening conditions, well spoken English and their agreement to participate. It is not known if any nurse at the hospital declined to participate in the study after being asked as the authors were not involved in the process of asking participants to take part.

Before any interview started, the written consent (appendix 2) was read through by the participant and then read through together with the interviewer orally to further clarify. The location for the interviews was chosen by the hospital manager and the ambition was to find a quiet and private setting. The interviews were conducted in the hospital manager's office as it was the only available private setting at the hospital. The setting was secluded and private but the surroundings were busy and interfering.

Participants

The study is based on interviews with six nurses at the Bagamoyo District Hospital in Bagamoyo, Tanzania. The ages of the participants varied from the age of 25 to 57 (m= 28,5 years). Among the participants were two males and four female nurses. The participants had been working as registered nurses between eight months and 35 years. All the participants had an exam in midwifery through their education and one of the participants had a subspecialty as an anesthetic nurse. The nurses had been working at the Bagamoyo District Hospital between eight months and nine years. The participants had experience from working at different wards at the hospital and the experience of working with emergency care varied but all nurses had cared for patients in various life threatening conditions.

Data analysis

Before starting the analysis of the transcript text the authors listened to the recorded material several times, first separately and then together. When analyzing the transcribed material, a qualitative content analysis was being used as described by Granheim and Lundman (2004). When using a qualitative content analysis there is always some subjective preconception coming from the author. That preconception could interfere with the trustworthiness of the

study (Granheim & Lundman, 2004). The interviews were transcribed verbatim, where pauses, laughter and other affective communication also were preserved. In the transcribed text there are some blanks where words or sentences are lost as the authors were unable to perceive it from the recorded material. The transcribed material contained 11 800 words.

During the process of analyzing the transcriptions, the text was read through several times by the authors in order to reach an understanding of the collected data as a whole. The collected data were read through first separately and then together by the authors followed by a discussion about each authors understanding of the data. From the transcribed interviews, meaning units concerning the purpose of the study were picked out from the text. The meaning units were constituted by both authors together. From the meaning units' core meanings were found, meaning that the units were condensed without any loss of the content. The condensed meanings were then turned in to codes that were divided into sub-themes. The sub-themes were then gathered in to main themes in order to respond to the aim. The meaning units, condensed meanings, codes, sub-themes and themes were put in different columns and collected in a table (appendix 3). The themes and sub-themes are described in the result of the study. The data collected was decoded during the transcription in order to decrease the risk of any participant being identified. The main themes identified were; the nurses' challenges when caring for patients with life threatening conditions and the nurses' ways of coping when caring for patients with life threatening conditions.

Ethical considerations

When the nurses were asked to participate in the study they obtained a written consent which they were asked to sign (appendix 2). The consent explained to the participants how the study would take place, that it would be recorded and also that the participation is voluntary and therefor they could drop out without any reasons or consequences. Before any interview started, the interviewer explicated the information from the consent orally as well.

Ethical approval was given by The Research Ethic Committee at the Department of Health Science at Ersta Sköndal University College. It was approved on the 26th of January 2016 (DNR 1601/A).

Results

This study contains two main themes and five sub themes presented below (figure 1). Each sub theme will be discussed and quotes from the interviews will exemplify the content of the sub themes. Some of the quotes out of the narrations could fit in to more than one theme but they are only exemplified once under one sub theme.

Figure 1

Main themes	Sub themes
The nurses' challenges when caring for patients with life threatening conditions	• Obstacles that prevent the nurse to provide good care • The nurses' emotional challenges
The nurses' ways of coping when caring for patients with life threatening conditions	• Coping in a critical situation • Picturing yourself in another ones' shoes • Managing feelings arisen when caring for patients with life threatening conditions

The nurses' challenges when caring for patients with life threatening conditions

Obstacles that prevents the nurse to provide good care

This sub-theme focuses on narratives concerning practical difficulties such as lack of equipment, blood, medication and poor infrastructure which affects the nurses' possibilities to save lives in critical situations. When the nurses were asked to describe critical situations that they had experienced, both that ended good and bad, all of the participating nurses pointed out challenges they have met caused by limitation in resources. One nurse said:

"I need to provide a good qualitative care to the patient but I fail to do it so, because of all the poor equipment and the environment also".

The nurses shared narrations about having the knowledge of how to help the patient and what care the patient need but not being able to provide it due to the absence of the proper resources for the specific situations. One nurse explained:

” Most things you know, each and everything about the patient, which things, good things, right one for that patient but you do not have that equipment.”

The participating nurses had experienced situations where they had lost a patient to severe bleedings and anemia as the blood bank had been out of blood. These situations most commonly occurred when there was an emergency caesarean section or a postpartum hemorrhage. One nurse described a situation where a patient had a severe bleeding and the nurse wanted to give a blood transfusion. The nurse sent a colleague to get the blood, but she came back empty handed telling the nurse that there was no blood at the blood bank. The nurse then tried to contact the ambulance to refer the patient to another hospital but the ambulance was far away. By the time the patient had reached the other hospital it was too late and the nurse lost the patient.

The lack of ambulances and the poor infrastructure were also issues that the participating nurses enlightened. Due to the poor infrastructure it can take over an hour before the ambulance collects the patient to then transfer him 65 kilometers on rural roads to a larger hospital. Because of the blood bank not working, and due to shortcoming in materials the nurses have to refer many patients in different conditions in ambulances that sometimes are not properly equipped. One nurse described a situation where a patient was sent with an ambulance:

” Sometimes // ambulances, they have no oxygen. Sometimes they just go with the patient who needs oxygen. They just go with her or him alone with no oxygen, just a nurse in there and the patient and some drips in there and so they end up with death on the way”.

Other nurses explained that the most common obstacles include lack of drips, certain medicines, oxygen, nursing staff to meet the number of patients and lack of beds for the patients. As one nurse said:

” Sometimes the sick newborns they are six and the beds are three so mothers should be two in one bed, that is not proper because they are having different diseases, so the infection is simple to get”.

The nurses described the working environment for health care employees as challenging due to the situation where there is always a lack of some materials. As one of the participating nurses described, the working environments could look like this:

" For our facility, for all Tanzania, most things is lack of everything. I think, lack of staff, lack of equipment, lack of drugs // you come to the facility, you go there to find no gloves, no cannulas, no IV-lines".

The nurses also illustrated the working environment in the light of shortage of nurses including specialized nurses, one nurse described that there are only three nurse anesthetics at the hospital which put them in a tense situation.

The nurses' emotional challenges

In this sub-theme the narrations concern difficult emotions awoken related to obstacles described in the sub-theme above, such as frustration, powerlessness and feeling hindered. The lack of resources and equipment puts the nurses' emotions on a strain. The participating nurses all shared situations where they had felt limited to provide the care they wanted to provide due to the lack of equipment. One nurse said:

" There is things that could hinder you to do everything that you could. You want to save the patient and there is no medicine // no materials in the situation."

Many of the nurses shared stories where they have had to struggle with their feelings. One situation that brought out feelings that were difficult to manage for one of the participating nurses was when a mother in labour lost her child and had to go back home without the child. This kind of situation is something that the nurse has had to accept as it sometimes occurs in her work. She said:

" I am feeling bad, when the client goes back home with no kids. // I used to, to struggle much".

The majority of the nurses told about situations where the lack of equipment and recourses had put them in situations where they have had to ask a patient in a more or less critical condition to go and buy nursing materials in order to receive help. One nurse described:

" I say go to buy this, I need this and this and the patient maybe is very poor".

One nurse shared experiences of asking patients in labour to go and buy gloves and other equipment at the pharmacy before delivering. The nurse explained that the mothers need to have delivery packages with them when they come to the hospital for delivery and if they do not have it, the nurses have to ask them to go and buy it before they can obtain assistance for their delivery. Having to ask a patient in need of aid to provide for materials is an emotional challenge for the nurses. Due to variations in economy among the patients not all can provide for materials. The nurse continues saying that sometimes there are no relatives to ask either and the situation lacks solutions.

" You want to help someone and then you can´t // There is no material and sometimes there is no relatives and no money. Yeah, economics of our patients vary".

Another nurse explained the feeling of wanting to help patients who are struggling due to poverty but not being able to help:

" I feel so bad because you can´t. You want to help someone and then you can´t // So you feel bad but in no way you can put your money in to it. No you can´t. That is so bad."

The nurses' ways of coping when caring for patients with life threatening conditions

Coping in a critical situation

This sub-theme illustrates strategies the nurses use to diminish negative consequences of having to face lack of material and recourses. The narrations concern applying knowledge about ABCDE, relying on colleges in teams and use a good relationship to the patient as an instrument to keep alert regarding the patient's condition. The narrations also illustrate how the nurses use imagination in order to find alternative ways to solve situations where materials are missing

When the nurses described situations where they meet patients with life threatening conditions most of them relates to difficulties connected to pregnancies and acute cesarean sections, severe bleedings, road injuries, wounded patients and patients with infections, late

stages of HIV, AIDS and Malaria. When the nurses told about how they cope with critical situations as they occur they explained that they prioritize the patient whom turned critically ill, they keep an eye on vital signs and stays close to that patient. If the condition would get life threatening the nurses work according to ABCDE. One of the nurses exemplified:

" If the patient has a problem you have to call the doctor but still you have to do ABCD before the doctor is coming."

Many of the participating nurses pointed out the importance of implementing teamwork as teamwork can improve the care for the patients. In the team it is essential that one person takes on a leading position to guide the team through the situation. One nurse described:

" Now within the team, all are important // you work as a team // you should unite in to be one team. I try to work in perfect unit. So teamwork, you can improve in providing services."

Another nurse highlighted the importance of having a good nurse-patient relationship where the nurse knows her patients. When there is a good relationship the nurse means that it is easier to recognize if there are changes to the patients´ condition. The nurse continued pointing out that when a critical situation appears you have to act immediately. The nurse said:

" Tackle the emergency immediately, not to neglect the people and to be ready for any emergency."

Another nurse stated that it is the nurses who are the persons closest to the patient at all times and that they should always stay at the bedside of the patient. If a patient gets critically ill the nurses explained that they work towards stabilizing the patient but also about how they need to refer the patients to another hospital in order to avoid that the patient dies. One nurse exemplified:

" We nurses we run fast and we provide service // then after the condition could be stabile then you could refer him to avoid the death during our service."

The participating nurses told about how they have had to find their own solutions to solve situations when there is an absence of adequate equipment. The environmental conditions have encouraged the nurses to use imagination and creativity to solve situations. The nurses described that they try to adjust to the situations when they are short on equipment and that could mean having to put themselves and the patients at risk. One nurse shared a story where wanting to refer a patient as the right medicine was unavailable but referral was not possible. The nurse was told to use a medicine which is contra indicated with the patients' conditions and then use another medicine to make up for that in order to stabilize the patient.

Another nurse continued to describe that in everyday situations they use their imagination to compensate for material shortage. The nurse said:

" Sometimes we use even a, art and science, cause there is some other shortage of materials".

One nurse was sharing an example of a situation where a patient had a severe bleeding and the nurse had to be inventive in order to save the patient and stay protected:

" I was supposed to have the long gloves // I tried to make my best in to it, in to double some gloves to wear it to my elbow".

Picturing yourself in another ones' shoes

This sub-theme illustrates narrations regarding how the nurses are compassionate with their patients and how they feel obligated to care for the patients because someday the need for care may concern themselves. A common pattern that came up in the nurses' narrations was feeling empathy and sympathy for their patients. One nurse exemplified empathizing with the patients by the words:

" But you try, to think, of the, in to the other ones' shoes."

Many of the nurses talked about how they think of their patients in critical conditions as themselves or as a close one. Picturing the patients in this way makes the nurses keep on struggling even though working conditions sometimes can be frustrating. One of the nurses explained that she keeps caring for her patients because one day maybe one of her relatives needs to receive care. Another nurse described it with these words:

” You have to see that, that condition you feel as if it were you or a relative // I have to make sure the patient is going to survive.”

One nurse explained feeling sympathetic with the patient who gave birth to a still born baby and in order to try and make the mother manage her feelings in this situation the nurse tried to share ideas of how the mother could cope with her feelings. The nurse told about finding coping strategies in previous experiences that are similar to the current situation and also out of other mothers stories that had experienced losing a child. The nurse said:

” The mother give birth the child but the baby was cold // There are other mothers, past the, they tried happened like that situation. So we are exchanging some ideas.”

Managing feelings arisen when caring for patients with life threatening conditions

This sub-theme concerns narrations about different ways to manage and cope with feelings arisen in situations when they have cared for patients with life threatening conditions. Some of the nurses blame the outcome of a situation on good luck or bad luck. As one nurse said:

” By good luck she survived// sometimes we have bad luck.”

Further the nurses described that work affects them psychologically, that some situations can be very painful. One of the nurses’ ways of coping with a painful situation is trying to have faith. Sometimes faith is not enough and in those situations she just wants to forget about what happened during work. She said:

” It affects so much, affects psychologically! You must have faith in. But you try to talk and you try to forget, yeah I try to forget! But it is so painful, it is”.

Another nurse told about finding her comfort when experiencing a difficult situation in the words of the bible and in the hands of God. The nurse explained that a situation turned out in a certain way because it was Gods wishes. The nurse said:

” I believe that the Bible is my final forth // maybe is Gods wishes”.

Some other nurses find their comfort in thoughts about having done everything possible for the patient when a situation turned out bad.

Trying to forget what happened at work came up in a raft of the participants' narrations. The nurses brought up the feeling of wanting to forget about what have happened during work when they leave the hospital. Some nurses talked about meeting friends outside of work to talk about things that are not work related and to discuss amusing topics in order to get their mind on something else. One of the participating nurses illustrated how the emotional challenges faced at work generates in a feeling of appreciating life and wanting to live more:

"You go back home, you try to live more, more and more".

Discussion

Methodological considerations

The purpose of the study was to explore the Tanzanian nurses' experiences of caring for patients with life threatening conditions at a hospital in a small community. In order to collect the participating nurses experiences the authors found a qualitative method with semi-structured interviews suitable. The method encouraged the participants to share their narrations freely since the questions were open ended (Henricson & Billhult, 2012).

As the participating nurses were chosen by the hospital manager it could have interfered with the trustworthiness of the studies outcome. The authors requested nurses whom had major experience from working with emergency care but the participating nurses had a rich variation in their experiences. The study might have benefitted from having the authors making the selection of participating nurses without a third party involved. The setting of the interviews was private but the privacy was interrupted at several times during some of the interviews as people were knocking on the door and entering the room. These interruptions sometimes occurred in the middle of a participants' narration which lead to disruptions in the narration. This could have affected the participants' narrations. As English is one of the official languages in Tanzania the interviews were conducted in English without an interpreter. Even so there was a language barrier present sometimes both for the participants and the authors. This was shown at a few occasions during the interviews and during the transcription of the interviews. This sometimes implied repetitions and explanations of both the authors' questions and the participants' content of their narration. The authors took

precision into miss as few words as possible and not to misinterpret the meaning of the participants' narrations.

The authors used Granheim and Lundmans (2004) model of content analysis. Through the model the authors created a table including the chosen meaning units that responded to the aim of the study. The meaning units were then condensed, coded and thereafter sub themes and themes were created. The authors conducted six interviews and chose to use all of them in the result. This choice was made since the authors believe that all six interviews would give a broader understanding of the phenomenon that was examined. The use of qualitative content analyzes always implies a risk of the authors preconceptions to interfere with the outcome of the study or being directed to answer the aim of the study (Granheim & Lundman, 2004). Through the analyzing process the authors kept the awareness of this in mind in order to increase the trustworthiness of the study.

Discussion on results

The result of the study shows multiply sides of the nurses' experiences when caring for patients in life threatening conditions. The study illustrates that the nurses are put through both physical and emotional challenges in their everyday work. The study also reveals how the nurses cope in different situations when facing these kinds of challenges. The discussion of the result is therefore based on the nurses' challenges, emotional journeys and ways of coping. The result and Roy's adaption model will be discussed in relation to each other through the discussion and the results will be compared to relevant scientific articles.

The result of this study shows that the nurses experience that there is a lack of recourses and equipment which effects their ability to care for patients in critical conditions. Häggström at al. (2008) testifies that lack of recourses is an issue for Tanzanian nurses and a patients' chance of survival is depending on what recourses are available in the given situation. In this study the nurses had all experienced losing patients due to the lack of equipment. The most common cause was losing a patient due to postpartum hemorrhage as there had been no available blood at the blood bank. In this study the most frequently materials missing was medicines, ringer lactate and blood bags. Mkoka, Goicolea, Kiwara, Mwangu & Hurtig (2014) also conclude that shortage of medical supplies is a factor which makes the number of maternal deaths to increase in Tanzania. The article brings up an issue where the availability of drugs and medical supplies at health facilities is an uncertainty and that health facilities in lower levels at the health system are more affected. Mkoka et al. found that the initial

stabilization equipment such as certain medicines to control bleedings, ringer lactate and IV-infusions are common equipment that is missing. The lack of necessary equipment makes it challenging treating patients and causes high numbers of maternal deaths as through postpartum hemorrhage.

In this study the nurses felt that being in a critical situation and not being able to help or save a patient's life due to the absence of materials awoke strong feelings and had put the nurses' emotions at challenge. As Häggström et al. (2008) conclude, these types of situations, where there is a lack of resources causes a great deal of frustration amongst the nurses in Tanzania. In this study it was revealed that the nurses most often suffer from low materials and this is something that has become a part of their everyday work situation. The nurses have got familiar with finding themselves in situations where there is uncertain if the materials needed will be available or missing. Roy's adaption model means that the person interacting with an altering environment either results in the person reacting with an inappropriate behavior or by adapting adequately to the situation (Masters, 2015). The nurses in this study as well as in the study by Häggström et al. had adapted to the environmental conditions with lacking resources by applying creativity into their work and finding own solutions to overcome obstacles related to missing equipment. According to Roy's cognator sub-system, problem solving is a part of the human adaption process (Masters, 2015). The nurses in this study did not let the lacking resources stop them from keep on working, they developed their ability to solve tricky situations and overcome obstacles by using their inventive abilities. The adaption theory means that these alternating environmental conditions can contribute to the person growing and developing. The nurses in this study told about experiences where they had felt that they have had to put themselves or the patient at risk due to the lack of equipment and materials used for protection. Häggström et al. brings up that the nurses working conditions generates distress and feelings of putting their own lives in danger due to lack of protective gear combined with the different infectious diseases they come across on a daily basis, despite this the nurses have adapted successfully to their environment.

The participating nurses brought up that there is a lack of staff at the hospital, including registered nurses and nurses with a further education. It was revealed that only three nurse anesthetists are working at the Bagamoyo District Hospital which had led to them being under hard pressure as they often are involved in critical situations. The issue with lack of staff in Tanzanian hospitals is also revealed in studies by Songstad et al. (2011) and Baker et al. (2013). Baker et al. focuses on how the lack of nurses with a further education, especially nurse anesthetists, is a great issue in Tanzania. Songstad et al. explore that the lack of nurses

could depend on nurses not feeling motivated towards work. However, that phenomenon did not come up in this study. In this study the nurses feel motivated towards work and they illustrate how they keep on working under challenging conditions. As brought up by the participating nurses in this study they think of themselves or a relative whom might be in need of care some day and that is a thought that keeps them working. This study shows that the nurses feel proud of their jobs and they try their very best to provide good care to their patients. Häggström et al. (2008) also enlighten that even though ethical dilemmas and workplace distress appears in the nurses' everyday work they find their work meaningful and keep on working.

The nurses in this study tell about their ways to cope with severe emotions coming up at work to maintain psychosocial balance and achieve good health and wellbeing. According to Roy's adaption theory the human being is a compound unit that tries to find balance between the biological, psychological and social parts as it interacts with the surrounding environment (Masters, 2015). In this study the nurses tried to maintain this balance by different ways of coping such as helping each other out, believing in God and faith, working in teams, developing problem solving abilities, and learn to disconnect from work when finishing a shift. The nurses' ways of coping involve trying to achieve a balance where the psychological, biological and social parts are all provided for.

In this study the nurses shared experiences of caring for patients in critical conditions after being involved in road accidents. As Zimmerman et al. (2014) picture in their survey, road injuries are a great problem in Bagamoyo. It is enlightened in this study that the nurses have experienced loosing patients while waiting for an ambulance or during transportation between hospitals due to poor infrastructure. Cox and Saho (2007) points out that Tanzania is a country that suffers from poor infrastructure which leads to ambulances having difficulties transporting patients to and between hospitals which sometimes leads to patients dying on the way. The participating nurses illustrate how these deaths are also caused due to the number of ambulances being too few to be available when needed and the ambulances not being properly equipped. This study as well as Baker et al. (2013) concludes that the Tanzanian infrastructure is not designed for critically ill patients. This study shows that the nurses feel that they have good knowledge about acute care and how to treat severe conditions but due to lack of the right equipment in certain situations they sometimes feel hindered to provide the care needed in the situation. The nurses' narrations contain situations where they have lost patients due to the lack of needed resources and material but never due to lack of knowledge. Unlike this study, Baker et al. pictures that hospitals in Tanzania are fully equipped with

necessary equipment and medicine for acute situations but that there is a lack of knowledge in acute care among the nurses which results in the nurses not taking advantage of the available recourses. In this study the nurses do not always have the equipment but they feel that they have the right knowledge and they strive towards managing situations where patient's conditions become critical even if they lack materials. As according to Roy's adaption theory this indicates that the nurses adapts to the situation in a successful way as their behavior and way of managing critical situations often results in survival amongst patients in need of severe emergency care, even though they are not fully equipped at all times.

The study shows that the nurses have different ways of handle their feelings when going through a difficult situation. For some nurses using their faith and believes as a tool is one way to cope with severe emotions. Among some of the nurses in this study there is a ruling conviction that the outcome of situations is depending on good and bad luck or by Gods will. As Moyo and Mhamela (2011) describes, the history of nursing in Tanzania is influencing on the nurses' attitude towards nursing today. As said by Moyo and Mhamela, Tanzania has a history of spiritual and religious beliefs. The narrations from this study show that this phenomenon still partly remains amongst Tanzanian nurses today. As shown in both the article and this study, Tanzanian nurses believe that good or bad luck or Gods will can have an impact on the outcome of a situation when caring for a patient. It was also disclosed that some nurses saw the bible as their final comfort when going through a difficult situation. Nurses in this study talked about finding comfort in their faith and religious beliefs as a way to cope with emotions coming out of difficult situations that they had faced at work. In a study with focus on religious components Ekedahl and Wengström (2010) investigated Swedish oncology nurses' way of coping when working with terminal ill patients. Working with dying patients is often stressful and the nurse has to face many existential issues which make functional coping recourses important. In the study some of the nurses used their faith in God as a successful way of coping with different kind of stressors arisen at work. Some nurses turned to God as a coping strategy and as a protector from difficulties that they had faced during work and some nurses found comfort in praying to God for a dying patient. A religious orientation gave a basic trust, it sheltered from difficulties and for some nurses it provided an object to turn to. The nurses in the study by Ekedahl and Wengström as well as the nurses participating in this study have to face difficult situations and existential challenges in their everyday work and religious coping seemed to have a protective function for the nurses in both studies.

Clinical implications

The chance of survival among patients in life threatening conditions is limited in a country where the right materials and equipment sometimes is absent (Häggström et al., 2008). This is substantial in situations where complications occur as mothers deliver and in situations where a patient is in need of a blood transfusion as the blood recourses are weak. In Sweden there is well developed systems for catching and preventing complications in early stages. In Tanzania the limitation of resources could lead to patients dying due to complications not being identified in time and due to not having the materials needed to manage a life threatening situation as it occurs.

The Tanzanian health care system implies that the patients have to provide materials for the health care staff to receive care (WHO, 2015). This can be looked at as an other side of the absent equipment the nurses could face if the patients could not afford the materials needed. In Sweden this situation would most likely not occur. The Tanzanian nurses have learned to work under these circumstances and has elaborated alternative ways to solve situations facing them. To create solutions implicates the nurses to be inventive and have a great understanding of their nursing profession which is a precious knowledge Swedish nurses could benefit from taking part of. The Tanzanian nurses and the Swedish nurses all have valuable knowledge and experiences to gain from one another. The nursing foundation is mutual between the nurses even though environmental and resource availability differ. The nurse-patient relationship is highly valued by both the Tanzanian and the Swedish nurses. Being at the bedside of the patient at all times, helping and caring is of the greatest significance.

Further research

When starting the search for articles on the subject, many articles were found about the Tanzanian emergency care and health care situation but only one article was found that concerned the nurses experience from caring for patients in critical conditions. In industrial countries the nurses work experiences are often elucidated compared to in developing countries. We believe that further research is needed in order to highlight the nurses' experiences and thoughts of their working situations as well as their experiences of caring for patients with life threatening conditions in developing countries such as Tanzania.

Conclusion

The aim of this study was to examine the Tanzanian nurse experience of caring for patient with life threatening conditions at a hospital in a small community. The result of the study mostly confirmed earlier studies on the subject but when it comes to the nurses feeling of having the right knowledge and equipment in acute care it differs. The most significant findings in this study was that the nurses struggled with shortage of equipment which often led to the nurses feeling unable to provide the best care for the patient in need. The situation also led to the nurses inventing their own solutions to solve situations in order to save lives. The nurses' emotional journeys went through feeling powerless due to absence in materials to applying their ways of coping.

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Appendix 1. Interview guide.

When we meet with the participant for the study we will explicate the information about the study that they received in the written consent before hand. We will also inform yet again that the interview will be recorded and that the data we receive will be strictly confidential. The participant will also be reminded that the participation in the study is completely voluntary and that they can, at any time during the interview, withdraw without any further explanation. Before the interview starts we will ask the participants for their age, degree and how many years they have worked as a nurse. We will also ask if they have any further questions for us.

Tell me about your work as a nurse at the Bagamoyo Hospital.

-Tell me about a typical day.

-What patients do you meet?

-For what reason do they come to the hospital?

What are the most common life threatening conditions amongst your patients, that you care for at the hospital?

-Tell me about the last time you cared for someone with a life threatening condition.

-Tell me about a situation where it went well.

-Tell me about a situation where it did not go well.

-What do you feel is of importance in a critical situation?

How do you feel when you are caring for a patient with a life threatening condition?

-What are your strategies to cope with your feelings when you are caring for critical ill patients?

-How would you describe the importance of your role as a nurse in an critical situation?

-How would you say caring for critical ill patients affects your self-image?

Do you have anything you would like to add before we end this interview?

Stockholm January 15, 2016

Appendix 2. Written consent.

Enquiry for you who are a registered nurse at the Bagamoyo District Hospital for participation in a minor field study.

This survey concerns you as a registered nurse at the Bagamoyo District Hospital and pertains to get a view of the nurse experience in treating patients during critical conditions. The aim for the survey is to examine the Tanzanian nurse experience of caring for patients with life threatening conditions at a hospital in a small community.

With this information we ask You if You are willing to participate in our survey.

If You want to participate in our survey You will be interviewed. The interview will be about an hour long and will take place as a regular conversation and with Your consent it will be recorded. The interviews will then be transcribed in order to ease the processing. There will be no names or personal details showing who has been interviewed. The interviewer during the interview will be either Rebecca Sundin or Sara Lindgren. The recorded interview will be saved on a USB-stick and kept confidentially. When all interviews have taken place we will write an report of the collected material and the USB-stick will then be destroyed. The report will be available at the library at Ersta Sköndal University Collage both in paper form and electronically.

Your participation in this survey is voluntarily. You can withdraw from the participation at any time without further explanation. If You have any questions about the study, please contact us through the information on the following page.

If You are interested in participation We will contact you with further information about time and place for the interview.

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