Resuscitation debriefing for nurses at the Accident and Emergency Unit of St Dominique's Hospital in East London (South Africa)

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Abstract

Background

Successful and unsuccessful cardiopulmonary resuscitation are among the most stressful situations that a nurse has to deal with. Nurses, particularly those who are inexperienced, benefit from a debriefing session after experiencing an event involving a cardiac arrest.

Method

In a qualitative study, nurses working in an accident and emergency unit were asked to participate in an interview on the last resuscitation effort that they either participated in or performed themselves. The debriefing that followed this last resuscitation effort was used to explore the quality of the debriefing that the nurses received. With random sampling on the days of the interviews based on availability, the interviewer asked 12 nurses to participate. The interview was conducted by a trained professional nurse, who followed a semi-structured questionnaire with both open and closed questions.

Results

Twelve registered nurses at the Accident and Emergency Unit of St Dominique's Hospital in East London, South Africa were asked to participate in the study. Two of the nurses, however, declined to participate for personal reasons. The majority of the respondents were between 31 and 50 years old, with five males and five females participating. Seven of the respondents had performed their last resuscitation effort less than one month previously.

Two of the nurses had no recollection of any emotions, while one stated that, after an unsuccessful resuscitation, she or he "felt terribly traumatised and heartsore after the death of the child", and another stated that, after a successful resuscitation, she or he "felt good, extremely good, because something was done to help the patient". No respondent experienced any feelings of guilt after a failed resuscitation, while the majority experienced symptoms of anxiety. Three of the respondents experienced anger and one experienced hatred and heartsoreness after a failed resuscitation.

An astonishing 60% shared their feelings on the incident with their spouses. The registered nurses also shared the incident with their mothers, sisters or a friend. A few respondents did not talk to anybody because of confidentiality and because they felt that other people would not understand what they did. Seven of the nurses spoke to someone on the scene, mainly to their colleagues, about the resuscitation effort. Almost everyone talked to their colleagues about their emotions.

According to the registered nurses, the debriefing or discussion should include "a reflection on the correct following of basic life-support protocols", "any improvements on the resuscitation done", "any shortcomings during the resuscitation and, if not done in a perfect way, where improvements could have been made, if any", "this should be done specially for the new staff members" and "a discussion about the emotions of the attendees".

Conclusion

The research proved that the quality of debriefing that nurses received at the Accident and Emergency Unit of St Dominique's Hospital in East London (South Africa) was inadequate. It is recommended that resuscitation debriefing is expanded to contribute towards the improvement of the outcome of resuscitation on both a national and an international basis.

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Introduction

Participation in both successful and unsuccessful cardiopulmonary resuscitation is one of the most stressful situations that a nurse has to deal with.[1] Manderino et al. demonstrated an increase in pulse rate and blood pressure readings in healthcare providers attending a simulation of cardiac arrest.[2] Nurses may also suffer physiological and psychological stress following a cardiopulmonary resuscitation attempt.[1] Furthermore, a small percentage of healthcare providers may suffer from posttraumatic stress disorder after a resuscitation attempt.

A Cochrane Review, however, illustrated that, on the one hand, there was no evidence that single-session, individual psychological debriefing was a useful treatment for the prevention of posttraumatic stress disorder after traumatic incidents,[3] although Burns and Harm found that debriefings were definitely helpful to emergency nurses.[4] Particularly nurses who were inexperienced benefited from a debriefing session after being involved in an event involving a cardiac arrest.[1] Without debriefing, nurses also may not have the opportunity to identify learning needs.[1] The quality of debriefing may therefore improve future resuscitation efforts and could lead to the discovering of learning needs.

Critical-incident stress debriefing is a specific model of psychological debriefing developed by Mitchell in the late 1970s.[5] There are four sequential aspects to debriefing:

a. on-scene or near-scene debriefing, this being mainly a period of observation;
b. initial debriefing, performed within a few hours of the incident;
c. formal debriefing, these formal sessions being held within 24 to 48 hours after the incident; and
d. follow-up debriefing, these sessions being held from several weeks to months after the incident.[6]

The quality of resuscitation debriefing should be measured against a crisis-intervention process that contains both psychological and educational elements based on the debriefing process used by Jimmerson,[1,7] and against crisis-intervention and educational-intervention theories.[3,8,9]

Pulley further qualified the quality of resuscitation debriefing as a complex process of two to three hours that should typically occur two to 14 days after a resuscitation effort.[10] Qualified nurses should drive such debriefing as a peer-driven process to assist the affected nurses, the value of this lying in the discussion and sharing of similar resuscitation efforts. Both group therapy and critique on the resuscitation effort should be avoided; the focus rather should be on the psychological and emotional issues of the individuals.[10]

Guidelines from nursing associations suggest that a critical-incident stress-management programme to assist staff in reducing the negative effects of a critical incident should be implemented. They also suggest that policies should be in place that detail the management of debriefing.[11]

The death of a child after a resuscitation attempt is particularly stressful and emotional for team members. This natural emotional response could lead to the seeking of help from family or friends if there are no debriefing processes in place or no debriefing policies are applied.[10] Debriefing could also have other benefits for team members. Future patient care and the improvement of the resuscitation technique could be discussed, for example, as could the strengths and weaknesses of the critical event. The opportunity to ask questions or simply to offer comments in a peer-driven, holistic group could be of further benefit to each nurse.[12] As has been mentioned, the death of a child following a resuscitation attempt produces strong emotions and feelings.[12] The response from nurses regarding debriefing after a resuscitation effort therefore needs to be assessed, as any resuscitation can be potentially stressful emotionally.[13,14]

Resuscitation should also lead to the opportunity to identify learning needs by nursing staff. Both successful and unsuccessful resuscitation therefore should be seen as a learning experience leading to the improvement of the quality of resuscitation. The performance of each attendee should receive positive and negative critique alike. The time, atmosphere and methods used should define the quality of debriefing; it is, in fact, only if the quality is defined as good that the learning process is adequate. This study could serve as a basis for the development of an appropriate guide to debriefing, which could enhance both resuscitation outcome and patient care.

Any form of health-team debriefing after a resuscitation effort can also have many other benefits, and team members can share emotions and thus safeguard their families from stress as a result of the resuscitation effort.

The study

The study was conducted at the Accident and Emergency Unit of St Dominique's Hospital, a private hospital in East London, South Africa. Nurses working in this Unit were asked to participate in an interview on the last resuscitation effort that they either helped with or performed themselves. The debriefing that followed this last resuscitation effort was used to explore the quality of the debriefing.

The chosen study design was a qualitative study aimed at measuring the "world" of resuscitation debriefing through the nurses' eyes. The emphasis was on a small number of cases and respondents. The basic assumption was that people are not empty vessels but have complex belief systems and that, to understand their thoughts and behaviours, one should begin by examining their rules or sets of beliefs. The "perceived" quality of resuscitation debriefing was therefore considered on the basis of the nurses' beliefs.

After the schedule for the interviews was set, nurses were randomly selected from the unit based on their availability for interviewing. The total number of nurses that were asked to participate in the study was 12. The participating nurses were then asked to take part in an interview with a trained professional nurse who was not associated with the unit. A semi-structured agenda with both open and closed questions was followed, the nurses being asked to answer questions on the last resuscitation effort that they either helped with or performed themselves. The interviewer made notes and used a voice recorder. The debriefing that followed the last resuscitation effort was then used to explore the quality of that debriefing.

The answers in the interviews focused directly on the quality and shortages of the debriefing. This was an excellent opportunity to learn honestly and directly from the nurses what was happening in the resuscitation debriefing at the Accident and Emergency Unit of St Dominique's. An independent interviewer made it easier for the nurses to be honest, as they knew that their answers would be confidential. Furthermore, the interviewer was a trained professional nurse, which means that the nurses being interviewed could talk to a peer as opposed to a doctor, whose position may have served as an inhibi-

tor to the interview. Peer interaction and reassurance from peers have proved to be beneficial in two studies.[13,14,15]

The interviewer was instructed not to lead the questions, and the respondents were asked before the interview to answer as honestly as possible and not to give what they thought should be the correct answer. They were thanked before the start of the interview for their honest answers.

A small pilot study was conducted at Queenstown Private Hospital, also in South Africa, to test the questionnaire and to help the interviewer to familiarise herself with the content of the questionnaire. The pilot study was conducted with three members of the nursing staff of the above-mentioned hospital. This hospital is situated approximately 200 km from the study hospital that was used for the final study. The reasons for the distance pilot study was that any resuscitation that occurred during the time that the pilot study was done and the final adjustments were being made could, with the knowledge gathered from the pilot study, lead to different debriefing questions.

Data from St Dominique's Accident and Emergency Unit were collected on a provided answer sheet with place for extra notes and with a voice recorder. A questionnaire was used to ensure the same questions for each participant. Each recording was marked with a corresponding number, which was used on the answer sheet of each respondent. The data from the answer sheets and from the voice recordings were then analysed by the researcher. Information from the qualitative part of the responses was gathered from the open-ended responses to questions in the interview.

The study was approved by the Ethics Committee of Stellenbosch University, South Africa. The consent process was in English, in which all the nursing participants were conversant. Both verbal and written consent was obtained. No incentive was given for the time taken for the interview.

The only risk to the participants was that some questions could have led to an emotional response due to events from the last resuscitation attempt that was attended. No vulnerable subjects or communities were involved during any of the interviews. To protect the interests of the nurses, all the answers are kept confidential and will be used with strict confidentiality. The interviewer allocated a number to each participant, which was also used on the audio tape recordings, thus obviating the use of names. In this way, the names of the participants will not be identifiable to people who later listen to the recordings. The principal investigator, Dr JS Drotske, is mainly responsible for the protection of the research data in all their forms.

Results

Respondent demographics

Twelve registered nurses at the Accident and Emergency Unit of St Dominique's Hospital in East London agreed to participate in the study. Two registered nurses declined to take part in the study for personal reasons. Ten respondents were positive and contributed their experiences and expertise. Six of the respondents were aged between 31 and 50 years, with two younger respondents and two older respondents. There were five males and five females. Six of the respondents had between 11 and 15 years of experience, two had between 21 and 30 years of experience and two had between one and 10 years of experience. When questioned about the outcome of their last resuscitation effort, the respondents stated that six resuscitations were unsuccessful, resulting in the patients having died, while four were successful and resulted in the patients being discharged from the Accident and Emergency Unit. In reply to the time period in which the respondents performed their last resuscitation effort, it was found that seven of the respondents had performed their last resuscitation effort less than one month previously, while the remaining nurses had performed their last resuscitation effort three to 12 months prior to the date of the interview.

Duties and emotions

Duties performed during the resuscitation effort in question ranged from fetching equipment, performing chest compressions, administering drugs, handling the defibrillator and helping the doctor with endotracheal intubation. In response to the questions relating to how they felt emotionally after the resuscitation effort, a variety of responses was given. Two of the nurses had no recollection of any emotions, while one stated that, after an unsuccessful resuscitation, she or he "felt terribly traumatised and heartsore after the death of the child", and another stated that, after a successful resuscitation, she or he "felt good, extremely good, because something was done to help the patient". No respondent experienced any guilt feelings, while eight experienced symptoms of anxiety. Three of the respondents experienced anger. One of the respondents experienced hatred and heartsoreness after the failed resuscitation.

Incident sharing

The majority answered that they had spoken to someone about their emotions after the resuscitation effort and 20% answered that they had not spoken to anyone about the resuscitation effort or about their emotions following the incident. All the respondents who spoke to someone about their emotions talked to their peers and colleagues. A third of this group spoke to their unit manager.

Remarkably, 60% shared this incident with their spouses. The registered nurses also shared the incident with their mothers, sisters or a friend. A few respondents did not talk to anybody because of confidentiality and because they felt that other people would not understand what they did. The time frame in which they spoke to their colleagues or unit manager varied from immediately after the resuscitation effort to later in the day during the handover period to other staff, to the following day, but no longer than two days after the event.

Seven nurses spoke to their colleagues on the scene. Two respondents talked with the doctor on the scene, one spoke to the doctor about the horror of the incident and one mentioned that the discussion with the doctor was educational and related to the condition of the patient. No one talked to the doctor about their emotions, but almost everyone talked to their colleagues about their emotions. The nurses who did not talk to anyone on the scene reasoned that there was no time to do so, that the unit was too busy and that they were experienced nursing staff.

Nine of the respondents had no formal discussion within eight hours of the incident. One of the respondents could not remember if a discussion took place within eight hours of the resuscitation. In response to the question whether any formal discussion at all took place after the resuscitation effort, it was found that only one respondent had a quick review to check on the care rendered to the patient. All the other respondents stated that no formal discussion at all took place after the resuscitation effort. It is thus clear that formal discussions after a resuscitation effort did not form part of the resuscitation process.

Debriefing

In reply to the enquiry of when would be the best time for a debriefing or discussion after a resuscitation effort, most of the respondents stated "as soon as possible, straight after the resuscitation, while the incident is still fresh in your mind". Other responses included "on the same day", "between four and six hours after the resuscitation, four hours if the patient survived and within six hours if the patient died but before the shift ends" and "within two days from the resuscitation; the incident's emotional effect will only have an effect then". According to the registered nurses, the debriefing or discussion should include "a reflection on the correct following of basic life-support protocols", "any improvements on the resuscitation done", "any shortcomings during the resuscitation and, if not done in a perfect way, where improvements could have been made, if any", "a reflection on the resuscitation steps or protocols that were followed", "this should be done specially for the new staff members", "a discussion about the emotions of the attendees" and "how to receive a patient more efficiently". Of interest was the fact that no recommendations were made to improve future resuscitation efforts after the last resuscitation effort. The opinions of the respondents on who should be present at a resuscitation debriefing included the unit manager, all the staff that helped at the scene, the doctor and a trained counsellor.

Preferred debriefing techniques

The majority of the respondents did not want intensive personal counselling on a one-to-one basis after a resuscitation effort. Reasons given were the following: "Only new staff members should get intensive personal counselling on a one-to-one basis" and "only traumatic incidents should get intensive personal counselling on a one-to-one basis".

The minority of the nurses did not want group counselling or formal debriefing after a resuscitation effort. Reasons given were that they did not view it as necessary, as they saw it as part of their work to carry out resuscitations. It was added, however, that informal discussions could serve as a healing process. Most of respondents reacted in a positive way in explaining that it could be helpful to share their feelings, that it would be better to open up in a group and that a trained counsellor could determine the need for individual counselling. It was also added that emotional group support could be helpful and could be the first steps in the emotional recovery stages after a traumatic resuscitation effort.

Conflict and stress

The registered nurses did not encounter any conflict with other team members of the resuscitation effort. No health professional had been diagnosed as suffering from any mental disorder, such as depression, anxiety, posttraumatic stress or burnout, after a previous resuscitation effort. Some of the respondents did mention, however, that they had previously received professional help on family-related matters, on postnatal depression or on work-related issues, although no link had been found between resuscitation efforts and the above-mentioned disorders.

Discussion and conclusions

The study explored the quality of resuscitation debriefing that nurses received after both successful and unsuccessful resuscitation and found that the debriefing consisted of informal sharing among peers in an unstructured way. The study also explored existing debriefing techniques; these were found to be non-existent. Neither the "perceived" quality of resuscitation debriefing nor the "real" quality of resuscitation debriefing at St Dominique's measured up to a process that contains both psychological and educational elements. The study furthermore explored and indicated reasons for the poor quality of resuscitation debriefing. It was found that the poor quality of debriefing was due to the absence of any structured process or plan and of time frames to support discussions. The following can be regarded as the most important findings:

The respondents were multi-skilled and either helped with various tasks during the resuscitation effort or performed cardiopulmonary resuscitation themselves. The majority of respondents had performed their last resuscitation effort less than one month previously. It was found that the respondents experienced a variety of emotional responses after the resuscitation effort. This finding compared well with the literature study, which found that cardiopulmonary resuscitation was one of the most stressful situations that a nurse had to deal with and underlined the physiological and psychological stress following resuscitation. The respondents also stated that the death of a child was one of the most stressful events, this also correlating well with current literature. Anxiety and anger were the emotions that most respondents had to deal with, from straight after the resuscitation effort to two days after the resuscitation effort. This compared well with the findings of Pulley, who found that debriefing typically occurred two to 14 days after a resuscitation effort.[10] It was felt that qualified nurses should drive this debriefing as a peer-driven process to complement the affected nurses. The nurses at the Accident and Emergency Unit of St Dominique's stated that they spoke to their respective unit managers, who are mostly qualified registered nurses, which furthermore correlated with the literature. The literature states that the value of a nurse debriefing other nurses lay in the discussion and sharing of similar resuscitation efforts. The respondents suggested group debriefing to share their emotions and not group therapy; which also served as confirmation of the literature. Debriefing reduces stress levels, and the sharing of emotions in a group setting seems to be beneficial. Group therapy and critique of the resuscitation should be avoided and the focus should rather be on the psychological and emotional issues of the individuals. A high number of respondents shared the incident with their spouses. This correlated well with the literature, which found that healthcare professionals did not hesitate to seek assistance from their spouses, family or friends after stressful situations.

Most of the respondents talked with their colleagues about the incident on the scene, but did not share their emotions, nor were any recommendations made on how to improve future resuscitation efforts. No formal discussion or debriefing took place after the resuscitation efforts. This did not correlate with the literature, which stated that policies and a critical-incident stress-management programme to assist staff in reducing the negative effects of a critical incident should be in place. Such debriefing or discussion should include reflection on protocols, improvements on shortcomings during the resuscitation effort and the sharing and discussion of emotions. Inexperienced nurses were also deemed to benefit from debriefing. The majority of the respondents disagreed with the need for personal counselling, but agreed to group counselling. The staff at the scene and the unit manager should attend such counselling. It was

found that learning from the doctor could be of benefit, but it was stated that it was difficult to have the doctor available or to make contact with him.

No conflict was encountered during the resuscitation effort and no respondent suffered from any mental disorder after the resuscitation efforts in question. It should be mentioned, however, that a high percentage of the respondents stated that they had obtained previous professional help on family-related matters, postnatal depression or work-related issues, although no link had been found between the resuscitation effort and the above-mentioned mental disorders.

Any form of debriefing after a resuscitation effort can have many benefits. Both the strengths and the weaknesses of the resuscitation effort can be assessed with the goal of improving future patient care. Each team member can be given an opportunity to ask questions or offer comments. Team members can also share emotions and thus safeguard their families from stress as a result of the resuscitation effort.

Recommendations

On the basis of the findings of this study, the following recommendations can be made to improve the quality of resuscitation debriefing at the Accident and Emergency Unit of St Dominique's Hospital in East London (South Africa) and to improve future resuscitation efforts:

Care should be taken that unresolved resuscitation issues or emotions should not to be taken home and shared with a spouse. Debriefings or formal discussions should therefore take place on the scene to address emotional issues such as anxiety, resuscitation protocols and future improvements to a resuscitation effort. In the light of no conflict being encountered during resuscitation, such a debriefing should have a positive, motivational tone. The staff on the scene, the unit manager and the doctor should be available for debriefing or discussion in a group as soon as practically appropriate to resolve questions and to check on protocols followed. There should also be a follow-up within two to 14 days after the incident of such a debriefing for those who need it. Further research should be done to develop a motivational debriefing technique to be followed after either successful or unsuccessful resuscitation.

Final conclusion and recommendation

The research suggests that the quality of the debriefing of nurses at the Accident and Emergency Unit of St Dominique's Hospital in East London (South Africa) was inadequate. It is recommended that resuscitation debriefing is expanded to contribute to the improvement of the outcome of resuscitation on both a national and an international basis.

Conflict of interest: The study was sponsored by the principal researcher.

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