

Introduction

Withdrawal of life sustaining treatment (WLST) is the process by which a patient has life supporting measures removed when a decision is reached that further care is futile. This process is a complex interplay of medical science, the healthcare teams' past experiences, and communication with the patient's family/decision maker. Family members are commonly called upon to make critical decisions regarding the provision or withdrawal of patient care. This process often occurs in a rapid sequence of events which does not afford decision makers excess time to prepare for or process the situation at hand. These circumstances create an environment which can be difficult to navigate and cause tensions to rise. Previous studies have sought to evaluate the experience from the view of healthcare providers, however to our knowledge the family/decision maker perspective has not been completely studied. Our objective was to describe the perceptions and experiences of the family members of patients who were admitted to an intensive care unit after resuscitation from an Out of Hospital Cardiac Arrest (OHCA).

Aims and Objectives

AIM I: To evaluate the experience and perceptions of decision makers/family members regarding provision and WLST for OHCA patients who survive to hospital admission.

AIM II: Identify gaps and barriers to effective communication between health care providers and patient decision makers/family members in the setting of OHCA patient care after admission to the hospital.

Methods

We conducted survey study to evaluate the experiences of OHCA patient's family/decision maker experiences regarding WLST. Our survey included yes/no questions, Likert scale ratings of experiences, as well as open-ended responses regarding experiences of family members/caregivers. We created our survey with the goal of obtaining generalized descriptive data to better understand our target population with an emphasis on their perceptions of communication between themselves and the healthcare team. We further divided our survey to evaluate the experience in the emergency department, Intensive care unit, and overall hospital stay. We further specified our population as family/decision makers of patients who survive to admission after OHCA during 2020 and 2021 at one of four Beaumont hospitals: Royal Oak, Troy, Farmington Hills, and Grosse Pointe. This population was identified through the Cardiac Arrest Registry to Enhance Survival (CARES) database. After Identification we established a list of possible participants according to chronologic order starting with January 2020 and ending with December 2021. We mailed surveys with a cover letter explaining our study, listing contact information should participants have questions, with a preaddressed return envelope. After the first batch of surveys we added a web address to our survey which allowed participants to complete the survey online. This online survey was created using REDCAP software. As we collected responses we logged their responses and evaluated the data for common trends. Below are some examples of the survey questions we used.

1.) Did you perceive that they were effective and competent in providing medical care?

Not Competent 1 2 3 4 5 Extremely Competent

2.) Did you perceive that they were caring and compassionate?

Not caring 1 2 3 4 5 Extremely caring

3.) Were they able to communicate information effectively to you?

Not effective in communicating 1 2 3 4 5 Extremely effective

4.) Do have any general comments regarding the physicians and nurses that cared for your loved one?

Results

During the study period, 243 Surveys were sent by mail, of these 35 were undelivered, 183 surveys received no response, five declined participation, and 20 surveys were completed and returned. Of note, 41% of the 243 patients identified for this study underwent targeted temperature management (TTM) during their post arrest care. Four patients from the 20 responses received underwent TTM. The data we collected from this study can be divided into general descriptive data of our target population, and data regarding the populations perceptions of communication and patient care. Respondents were family members or life partners with an average age of 62.2 years with a range from 20-87. Respondents were more commonly female (60%) than male (40%). Further information on respondent and patient relationship can be found in table 1 below. The majority of respondents expressed satisfaction with both communication and overall patient care during their time in the hospital. For details regarding regarding satisfaction see table 2.

Table 1: Respondent Relation to OHCA Patient

Spouse	Child	Sibling	Parent
13	5	2	1

Table 1: This table lists the relationship each participant had to the OHCA patient on who's behalf they were responsible for making medical decisions.

Table 2: Satisfaction Rating of Family/Decision Makers in the setting of OHCA and WLST Consideration

	Competent Care	Compassionate Care	Effective Communication
Emergency Department	75%	70%	70%
Intensive Care Unit	95%	95%	85%
Overall Hospital Course	80%	85%	85%

Table 2: This table shows the percentage of 5/5 satisfaction responses across 3 subject areas(competent care, compassionate care, and effective communication) in the setting of Emergency department care, Intensive care unit care, and overall hospital care. The information in this table is specific to family/decision makers of out of hospital cardiac arrest (OHCA) patients who survived to hospital admission with consideration of withdrawal of life sustaining treatment (WLST).

Conclusions

This preliminary data showed that most respondents felt they were well informed regarding the patient's status, they were given consistent information regarding the patient's clinical status, and the respondent had adequate time and support to make critical decisions on behalf of the patient. Most respondents identified caregivers as competent and compassionate. This preliminary data provides new insights into family members experiences and how they are engaged in the decision making process for a critically ill patient.

References

- Dale CM, Sinuff T, Morrison LJ, Golan E, Scales DC. Understanding Early Decisions to Withdraw Life-Sustaining Therapy in Cardiac Arrest Survivors: A Qualitative Investigation. *Ann Am Thorac Soc*. 2016;13(7):1115-1122. doi:10.1513/AnnalsATS.201511-751OC
- Dragancea I, Wise MP, Al-Subaie N, et al. Protocol-driven neurological prognostication and withdrawal of life-sustaining therapy after cardiac arrest and targeted temperature management. *Resuscitation*. 2017;117:50-57. doi:10.1016/j.resuscitation.2017.05.014
- Ong CJ, Dhand A, Diringier MN. Early Withdrawal Decision-Making in Patients with Coma After Cardiac Arrest: A Qualitative Study of Intensive Care Clinicians. *Neurocrit Care*. 2016;25(2):258-265. doi:10.1007/s12028-016-0275-5
- Perman SM, Havranek EP. Exploring Providers' Perspectives on Early Decisions to Withdraw Life-Sustaining Therapy after Cardiac Arrest. One Side of the Story. *Ann Am Thorac Soc*. 2016;13(7):1008-1009. doi:10.1513/AnnalsATS.201604-315ED
- Wilson ME, Kaur S, Gallo De Moraes A, Pickering BW, Gajic O, Herasevich V. Important clinician information needs about family members in the intensive care unit. *J Crit Care*. 2015;30(6):1317-1323. doi:10.1016/j.jcrc.2015.07.028
- Wiegand DL, Cheon J, Netzer G. Seeing the Patient and Family Through: Nurses and Physicians Experiences With Withdrawal of Life-Sustaining Therapy in the ICU. *Am J Hosp Palliat Care*. 2019;36(1):13-23. doi:10.1177/1049909118801011
- Meeker MA, Jezewski MA. Metasynthesis: withdrawing life-sustaining treatments: the experience of family decision-makers. *J Clin Nurs*. 2009;18(2):163-173. doi:10.1111/j.1365-2702.2008.02465.x
- Zahuranec DB, Anspach RR, Roney ME, et al. Surrogate Decision Makers' Perspectives on Family Members' Prognosis after Intracerebral Hemorrhage. *J Palliat Med*. 2018;21(7):956-962. doi:10.1089/jpm.2017.0604
- Tennyson CD. Family presence during resuscitation: Updated review and clinical pearls. *Geriatr Nurs*. 2019;40(6):645-647. doi:10.1016/j.gerinurse.2019.11.004
- Sandroni C, D'Arrigo S, Nolan JP. Prognostication after cardiac arrest. *Crit Care*. 2018;22(1):150. Published 2018 Jun 5. doi:10.1186/s13054-018-2060-7
- Swor RA, Chen NW, Song J, et al. Hospital length of stay, do not resuscitate orders, and survival for post-cardiac arrest patients in Michigan: A study for the CARES Surveillance Group. *Resuscitation*. 2021;165:119-126. doi:10.1016/j.resuscitation.2021.05.039
- Perman S, Shelton S, Stry-Bove B, Mayer K, Matlock D, Haukoos J, Abella B, Daugherty S, and Havranek E. 2021. Abstract 13114: Effectiveness of a Novel Decision Aid for Surrogate Decision Makers of Comatose Survivors of Cardiac Arrest: A Pilot Study of the "Tool to EMPOWER Surrogate Decision Makers" (TEMPO). *Circulation*, 144(Suppl_2).

Acknowledgements

We would like to thank the Beaumont Research Institute for their help in providing resources to conduct this study as well as the Oakland University Library Team for their help in the literature review process.