The State of the Science on Family Presence During Resuscitation

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Introduction

Cardiac arrest occurs, "when a person's heart stops beating," stopping the heart from perfusing blood, oxygen, and other nutrients throughout the body (Centers for Disease Control and Prevention, 2018). In 2017, the American Heart Association reported that 350,000 people in the United States experience cardiac arrest (American Heart Association, 2017). In recent years, that number has risen to almost 475,000 (American Heart Association, 2020). On a global scale, over 17.5 million people die from cardiac arrest (Automatic External Defibrillator, 2018). Cardiopulmonary resuscitation (CPR) is an emergency lifesaving procedure that can reverse cardiac arrest (AHA, 2020). Family presence during CPR is a controversial topic that has been the focus of much debate within the medical community. This thesis will focus on examining the body of literature on both sides of this debate in order to clearly identify and describe best practices associated with successful implementation within the United States healthcare system.

Heart Disease and Cardiac Arrest

Heart disease refers to any condition that alters the heart's normal function (Mayo Clinic, 2018b). Heart disease can involve dysfunction of the blood vessels, heart rhythms, and structure of the heart (Mayo Clinic, 2018b). The different mechanisms of heart disease can result in a variety of symptoms depending on the cause. However, pain, especially chest pain, and fatigue are the most commonly reported symptoms (May Clinic, 2018b). The demographic that are most at risk include men, older people, those with a family history of heart disease, and those who suffer from other diseases such as diabetes, hypertension, or high cholesterol. People's behavior such as smoking, poor hygiene, and inactivity can also put them at risk (Mayo Clinic, 2018b).

Heart disease is one of the most common causes of death among both men and women, as well as various race and ethnicities (Centers for Disease Control and Prevention, 2019). Every

37 seconds, someone from the United States dies from heart disease, accumulating to almost 647,000 deaths per year (CDC, 2019). Deaths from cardiac arrest are more than American deaths from colorectal, breast, and prostate cancers, as well as influenza, pneumonia, and motor vehicle accidents combined (AED, 2018). Cardiac arrest occurs when the heart stops beating, preventing oxygen and nutrients, from reaching the body's vital organs (National Heart, Lung, and Blood Institute, 2020). Cardiac arrest is a medical emergency requiring immediate treatment (Mayo Clinic, 2018). Diagnostic tests are rarely performed at the occurrence of cardiac arrest. Rather, they are performed after a cardiac arrest happens. Providers usually perform echocardiograms, cardiac catheterization, blood tests, or an EKG (NHLBI, 2020). Ninety percent of people in the United States who suffer from cardiac arrest die (National Heart, Lung, and Blood Institute, 2018). Therefore, in order to prevent death, the main focus during a cardiac arrest is resuscitation.

Cardiopulmonary Resuscitation

Resuscitation includes any measure taken to revive someone from apparent death or unconsciousness (Resuscitation, 2020). One of the most important interventions to reversing cardiac arrest is cardiopulmonary resuscitation (CPR). CPR is a lifesaving method of resuscitation. Nine out of ten people die from cardiac arrest (CDC, 2018). This chance of survival is almost doubled or tripled if CPR is initiated (CDC, 2018). The most basic roots of CPR began many centuries ago and has since evolved into the process we use today. The term "CPR" itself has only been around for about half a century (Cooper, Cooper & Cooper, 2006). It is built on the idea that three aspects need to be maintained: airway, breathing, and circulation, also known as the ABCs.

The ABC approach is an effective method used to both assess and treat anyone, especially those who are critically ill and may need resuscitation (Resuscitation Council, 2020). The American Heart Association recommends that circulation be maintained before airway and breathing, especially in non-hospital settings (Mayo Clinic, 2018a). In CPR, blood flow can be restored with chest compressions (AHA, 2020). Once it is established that the person is unconscious or unresponsive and the environment is safe, compressions can begin. The goal with chest compressions is to maintain a heart rate of 100-120 beats per minute (CDC, 2018). To perform CPR with successful compressions, the American Heart Association recommends that the compressions be uninterrupted, have proper hand placement in the center of the chest (Mayo Clinic 2018a), and maintain sufficient rate and depth (AHA, 2020). Fluid replacement therapies can also be indicated if there is an issue with circulation during arrest (Resuscitation Council, 2020).

The “A” stands for airway. If someone’s airway is obstructed, oxygen can no longer be delivered to vital organs, including the brain, kidneys, and heart (Resuscitation Council 2020). As long as someone’s airway is patent, or free from any obstruction, air can flow to the lungs. Simply repositioning the person, using the head-tilt chin-lift method (Mayo Clinic, 2018a) can open an airway. In more severe cases, an artificial airway may be warranted. If the person has a patent airway, or an airway has been established, breathing is the next priority. Counting each breath per minute, listening to the chest, breath sounds, and watching chest rise for symmetry (Resuscitation Council, 2020) are a few of the many ways breathing can be assessed. The usual treatment for any impairment in breathing is oxygen. Oxygen treatment can be supplemented with other interventions depending on the cause of respiratory distress (Resuscitation Council, 2020).

Family Presence During Resuscitation

If a cardiac arrest is witnessed outside of the hospital setting, CPR can be performed by anyone. However, for a patient in the hospital, CPR is performed by a team of skilled healthcare professionals, including doctors, nurses, respiratory therapists, etc. The healthcare team is usually very busy assessing the injury, determining the cause of arrest, and performing life-saving resuscitative methods (Joyner, 2018). Traditionally, when a patient experienced cardiac arrest in the hospital, the family members did not have much involvement. If a person went unconscious or unresponsive, the family was normally asked to leave the room and wait in a waiting room, only to periodically receive updates on the patient's condition (Boehm, 2008). However, in recent years the term family presence during resuscitation was developed (FPDR). FPDR is defined as the, "ability of family members to be present in the care area, in a location that affords visual or physical contact with the patient during resuscitation events," (Boehm, 2008, p. 1).

FPDR first emerged in1982 when family members refused to leave the patient's room during resuscitation (Joyner, 2018) at Foote Hospital. Three years later, the hospital from which it originated, created a policy to include FPDR in regular patient and family care (Boehm, 2008). FPDR was gaining popularity, especially in the 1990s, when research articles emerged evaluating the attitudes toward and the effectiveness of FPDR (Boehm, 2008). Multiple studies showed that there were benefits for the patients, as well as barriers that were frowned upon, especially from those in the medical community. Despite those who spoke against FPDR due to these barriers, some hospitals began to implement policy and education regarding FPDR. These policies vary in many aspects, but they normally outline when it is safe for FPDR, and how to communicate with family members if FPDR is used. Since the concept of FPDR has entered

literature, it has been a source of debate among different groups of people. Studies have been done to evaluate various aspects of FPDR. These studies have compared differing attitudes toward FPDR; different types of FPDR policy and educational tools for both patients, families, and providers; and effectiveness of FPDR policies based on surveys, and past experiences Goldberger, Brahmajee, Nichol, Chan, Curtis & Cooke, 2015). Healthcare organizations have also entered the debate and shared their opinions on FPDR. The European Council and the American Heart Association are among those who support FPDR and have provided recommendations for the creation of policy and its implementations in the hospital setting. FPDR and its effects on patients, family members, and healthcare workers have also sparked some ethical challenges.

Resuscitation and Ethics

The topic of resuscitation itself is also highly debated upon among healthcare professionals. Questions about performing cardiopulmonary resuscitation on older individuals or those who would not benefit in the long run are among those being debated. Healthcare professionals strive to instill the ethical principles such as autonomy, beneficence, fidelity, and non-maleficence in all aspects of care (Mentzelopoulos et al., 2018). Technology and policy are constantly changing in order to uphold these principles to ensure that the best treatment and care is available to all patients.

In terms of FPDR, there is ethical conflict in trying to maintain beneficence, autonomy, fidelity, paternalism, justice and non-maleficence but also being able to ensure care is focused on the patient. Providers are torn between their obligations to the patient and their obligations to the family (Khalaila & Avraham, 2015). They are also torn if those same ethical principles hold as much weight when referring to family members as they do when referring to the patient

themselves. The ethical implications of FPDR should always be considered in the development of rules, policies, or regulations (Khalaila & Avraham, 2015).

Stakeholders Involved with FPDR

There are many stakeholders affected when it comes to FPDR. Patients are one of the biggest stakeholders in this issue. They are the ones receiving these lifesaving measures, and resuscitation is warranted based on their current condition. They are also the ultimate decision-makers in allowing FPDR, if they are able to do so. Another group that is affected by this issue is the patient's family. Witnessing resuscitation is a stressful affair and can have lasting effects on the family emotionally and psychologically (DeStefano et al., 2016). The healthcare team, such as doctors and nurses, are another group affected by FPDR. They are the ones performing the resuscitative measures, educating the patient, assisting the family, answering their questions, while also making sure the patient is kept alive. Hospital administration is also affected. Each hospital has its own rules, regulations, and policies regarding patient care, family care, and interdisciplinary care. Hospital administration makes sure that any policy adopted is in the best interest of patients, their families, and the hospital staff, along with making sure it complies with current evidence and best practice guidelines. On a much larger scale, nursing organizations and health organizations are stakeholders of FPDR. They are the ones who share their recommendations based on best practice. Their recommendations are available for the general public, including the stakeholders previously mentioned.

Purpose and Research Questions

With the help of current research and best practice, the intended purpose of this literature review was to explore the attitudes toward FPDR among patients, their families and healthcare workers, specifically doctors and nurses. It will focus mainly on the points of view of family

members, doctors and nurses. It will also examine what makes FPDR successful, and what barriers it faces. In addition, this review will look at policies that some hospitals have adopted surrounding FPDR, placing emphasis on the FPDR facilitator role and the impact that has on all the stakeholders of this issue. This literature review will strive to answer the following research questions:

1. What are the attitudes of family members toward FPDR?
2. What are the attitudes of healthcare workers toward FPDR?
3. What are the attitudes of patients toward FPDR?
4. What are the most common barriers associated with the implementation of FPDR?
5. How can FPDR be successfully implemented within the healthcare system?

Significance in Nursing Practice

Nurses have a responsibility to use their experiences and best practice to drive change within the medical community. The topic of FPDR is important within the scope of nursing. FPDR impacts the role of the nurse. Nurses play a role in educating those they care for and work with. Nurses can provide educational tools on FPDR, as well as material on cardiac arrest, it's treatments, and how it can be prevented. Nurses advocates for themselves, patients, families, and their colleagues. They are responsible for promoting practices that encourage safe patient care.

This review will provide insight as to what the current attitudes toward FPDR are, what FPDR policies may look like, and how the healthcare team can help facilitate effective FPDR. Finding best practice and current literature on this topic would give nurses an idea of any perceived biases and barriers that need to be addressed concerning FPDR. The information they gain can help educate themselves, their colleagues, patients, and their families FPDR. Clearing up any uncertainty on this issue may help uncover any gray areas to help nurses make sure

patients are granted autonomy in their care, families feel included in the patient's care, and healthcare providers feel safe when performing resuscitation.

Background

Theories Involved with FPDR

Family Systems Theory

The family systems theory can be attributed to Dr. Murray Bowen. It suggests that a family is not a group of individual, but a single unit that has a strong emotional connection (GenoPro, 2020). Each member affects another's thoughts, feelings, and actions. They need each other's attention and support, as well as react to their needs (The Bowen Center, 2019). The family systems theory uses eight concepts to explain its core values: triangles, differentiation of self, nuclear family emotional process, family projection process, multigeneration transmission process, emotional cutoff, sibling position, and societal emotional process (The Bowen Center, 2019). These concepts show that families usually have one side of conflict while the other two are in harmony, how parent-child and sibling-sibling relationships impact decisions and behavior, how different relationship problems can develop within a family, and how emotion plays a role in society as a whole (GenoPro, 2020). According to this theory, each family's dynamic is different based on the role they play, their behaviors, and how they handle emotions and conflict. With respect to FPDR, these differences need to be taken into consideration. Assessment of how large a role family dynamics play into a patient's medical care can greatly influence whether or not a family wants to be present during resuscitation or whether or not they are ready for FPDR.

Kolcaba's Theory of Comfort

Kolcaba's theory of comfort has been used in healthcare, education, and research. This theory places increased importance on comfort as a desired outcome in nursing care (Petiprin, 2016). In nursing, this theory is focused on interventions to maintain comfort for the patient, whether that be physical, emotional, environmental, or sociocultural (Petiprin, 2016). Patients include the ill individual, families, and communities. There are three forms of comfort within this theory. Relief occurs if specific needs are met for the patient; ease occurs when a patient is emotionally content; and transcendence occurs when patients overcome their challenges (Petiprin, 2016). If this theory is used to explain FPDR, nurses and other healthcare professionals need to make sure that comfort is experienced not only by the patient, but by the family and anyone involved in the patient's care. Providers need to be able to assess comfort needs of their "patients," and seek treatments or interventions that can meet or surpass these needs. This means assessing whether or not a family member wants to be present or if a patient consents their family's presence. If family members and patients consent to FPDR, healthcare workers need to be able to facilitate this process. If they do not consent, it is still the job of the provider to meet their needs in other ways, like frequent updates, and the ability to have autonomy in medical decisions.

Social Construction of Conditional Permission

The social construction of conditional permission theory states that claiming ownership, prioritizing preferences and rights, assessing suitability, setting boundaries for self and others are the driving factors when forming an opinion toward FPDR (Giles, DeLacey & Muir-Cochrane, 2016). Because everyone processes these factors differently, varied opinions about FPDR are generated. In the event that resuscitation is needed, and a decision needs to be made about FPDR, opinions between patients, family members, and healthcare providers may be conflicting,

inconsistent, paternalistic, and no longer collaborative (Giles, DeLacey & Muir-Cochrane, 2016). This theory urges the importance of creating a standardized policy on FPDR based on best practice in order to make sure that optimal care is given, and safety is considered for all individuals involved (Giles, DeLacey & Muir-Cochrane, 2016).

Healthcare Organizations' Recommendations on FPDR

Following the 1980s, organizations have tried to see how FPDR can be integrated in a practice setting. In 1994 a position statement by the Emergency Nurses Association was created in support of allowing family members to be present in the event that resuscitation or some invasive procedure is indicated (Boehm, 2008). Since then, various organizations such as the American Heart Association, the American Association of Critical Care Nurses, and the European Resuscitation Council have shared their points of view on family presence during resuscitation (FPDR), how it affects the family, and policies needed in order for FPDR to be successful. They have made their recommendations on what they feel is best for the patient, their family members, and the healthcare workers helping the patient.

American Heart Association

FPDR has been available to patients and their families for some time. It has proven to minimize the psychological effects in the even that resuscitative measures need to be taken. This has resulted in the creation of FPDR policies in hospitals. The American Heart Association believes that although work has already been done to create these FPDR policies in some hospital, there are still some concerning factors regarding these policies. These include the unknown safety of FPDR policies and how the policies affect the quality of resuscitation care given (Zachary et al., 2015). The American Heart Association conducted an observational cohort study that looked at these unknown factors. Their study found that there is no significant

difference in outcomes (return of spontaneous circulation, survival, or death) in hospitals with FPDR policies versus those hospitals without a FPDR policy in place. These policies also showed no differences in the quality of care that was delivered (Zachary et al., 2015). These results imply that implementation of FPDR policies in hospitals should have no effect on the quality of resuscitative care, as well as the outcomes in the event a patient would need resuscitation. The American Heart Association wants to continue their research and explore any barriers to implementing a FPDR policy in hospitals that don't already have them and methods to improve FPDR policies in the hospitals that already have them in place (Zachary et al., 2015).

American Association of Critical Care Nurses

The American Association of Critical Care Nurses has their own opinions and regarding FPDR. The organization recommends that hospitals allow FPDR as long as the patient consents because it can prove to have vast positive effects on both the patients and their families such as increased comfort, a better ability to understand the present health condition of the patient, decrease family members' anxiety, provides closure for the family, etc. (Guzzetta, 2016). Research has also shown that FPDR does not interrupt any care given to the patient, as well as it does not increase the incidence of psychological issues such as PTSD or depression (Guzzetta, 2016). The American Association of Critical Care Nurses also recommends the following actions for nursing practice:

- Have policies, procedures, and educational materials on FPDR that support and protect not only the patient and their family members, but also to make sure that health care workers understand their roles in FPDR (Guzzetta, 2016).
- Make sure that healthcare workers are compliant in giving the opportunity for family members to be present during resuscitation (Guzzetta, 2016).

- Figure out standards of documentation for FPDR such as rationale to take away family members' opportunity for FPDR (Guzzetta, 2016).

European Resuscitation Council

The European Resuscitation released guidelines in 2015 for resuscitation and end-of-life care and the ethics surrounding these issues. They have a section within this document specifically dedicated to discussing FPDR. The European Resuscitation Council shows support for FPDR because it has many positive effects on the patients, as well as their families, especially in the reduction of guilt, trauma, and other psychological conditions (Bossaert et al., 2015). They also urge the presence of a FPDR facilitator, an individual that is experienced who would help to support family members during resuscitation (Bossaert et al., 2015).

Patient- and Family-Centered Care

Healthcare is increasingly becoming more collaborative (Clay & Parsh, 2016). Multiple specialists are usually needed to care for a single patient. Hospitals are continuing to find new opportunities for collaboration with families. They value the role family members have in patient care and take into consideration that families need support as well as the patient (Clay & Parsh, 2016). If a healthcare worker wants to provide the best holistic care for their patients, family dynamics need to be taken into consideration. With respect to FPDR, the principle of patient- and family-centered care needs to be applied in individual views on FPDR, assessing family relationships with the patient, educating the patient and family about FPDR in a way that promotes health literacy, and effective communication and collaboration with other members of the healthcare team.

Methods

In order to assess the attitudes toward FPDR, barriers that accompany the implementation of FPDR and the best way to implement FPDR, a literature review was conducted. A total of twenty articles from the years 2004 to 2020 were used. The articles were retrieved from CINAHL, Medline, the American Association of Critical Care Nurses (AACN), and the American Heart Association (AHA). The key words used to search for articles related to this topic included *family presence during resuscitation, resuscitation ethics, family perspective, nurse perspective, healthcare worker, doctor perspective, nursing, patient perspective.*

The inclusion criteria were as follows:

1. Articles that explained what family presence during resuscitation was.
2. Articles that looked at the attitudes of patients toward FPDR.
3. Articles that looked at the attitudes of family members toward FPDR.
4. Articles that looked at the attitudes of healthcare workers toward FPDR, specifically doctors and nurses.
5. Articles that conducted research on FPDR in the hospital setting.
6. Articles that studied FPDR policies.
7. Articles that referred to a FPDR facilitator.

The exclusion criteria were as follows:

1. No articles older than 2004.
2. No data that reflected attitudes of healthcare workers other than doctors and nurses (i.e. respiratory therapists, social workers, clergy members, surgeons, etc.)
3. Articles that did research on family presence during invasive procedures.

The abstracts of the articles selected were read and those that were found to fit the aims of this study were reviewed further and read entirely. Articles that met all inclusion criteria, used concrete methodologies with standardized results and were found to have applicable and useful information were included in the sample used for this literature review. After each article was read, key data was extracted and placed into a literature review table in order to see patterns and main themes. The final search retrieval resulted in twenty articles to be reviewed.

The publication dates of these articles ranged from 2004 to 2020. Thirteen of the twenty articles were published within the last five years. Of the 20 articles, 15 were research studies and five were literature reviews. The literature reviews included in this review are recommendations from different healthcare organizations on FPDR. These articles were helpful in figuring out where healthcare as a whole, stands on FPDR, and what their recommendations are when it comes to creating policy. It is important to have a variety of sources in order to answer the research questions previously stated in the introduction. Three explored patient attitudes on FPDR, eight explored the family members' points of view on FPDR, and seven explored the healthcare workers' (doctors' and nurses') points of view on FPDR. A total of eight articles referenced a FPDR policy, as well as giving or considering education healthcare workers or family members on FPDR. Two articles referenced cultural considerations regarding FPDR, two explored ethical issues with FPDR, and three articles that outlined the recommendations of various healthcare organizations on FPDR. The following table (Table I) shows a breakdown of each article, its purpose, type of study and sample size, methods, and the main outcomes of the research.

Of the 15 research studies seven were quantitative studies, six were qualitative studies, and two were quasi-experimental studies. These studies used interviews, Likert scales, and

surveys to gather their information. The sample size among these research studies ranged from 48 to 41, 468 people. Sample size is important because larger sample sizes can be a better representation of certain populations, therefore the results can be generalized.

It is also important to note the countries that these research studies were conducted in different countries. Most of the studies (8) were conducted in the United States. There were two each from France and Iran, and there was one each from Pakistan, Canada, and Poland. Countries from which the research originated should be taken into consideration in order to see if there are any cultural differences that should be discussed when writing about FPDR. FPDR is an issue that effects patients. Families, and healthcare workers all over the world. Being mindful of where each study was conducted can contribute to how healthcare professionals all over the work approach this issue in order to provide culturally considerate care.

Results and Findings

Table I: List of Sources and Summary of Findings

	Name of Article	Purpose	Type of Study (Research or Review)/ Sample Size	Methods	Main Outcomes
1	"European resuscitation council guidelines for resuscitation 2015: section 11. The ethics of resuscitation and end-of-life decisions" (Bossaert et al., 2015)	To provide the public with knowledge about resuscitation, end-of-life care and the various ethical issues that can occur within these topics.	Literature Review 161 Articles	Online Search Retrieval	-There should be a continued increase in focus on patient centered care and patient autonomy in order for guidelines regarding resuscitation and end-of life care to be successful.
2	"Implementation of a family presence during resuscitation protocol #233" (Bradley, Lensky & Brasel, 2011)	To discuss the key components of a successful FPDR policy.	Literature Review 2 Articles	Online Search Retrieval	-Facilitator • Respond to calls that have FPDR • Assess family, understand dynamic of code team • Social work, chaplain, child life specialist, allied health professionals, nurses • Work beside family during code -Post event support to family AND staff

3	"Family presence during resuscitation: a qualitative analysis from a national multicenter randomized clinical trial" (DeStefano et al., 2016)	To understand how families experience CPR of a relative.	Research Study 540 participants	Qualitative Study	-FPDR is important in the emotional healing of family members. -Policies that don't allow FPDR, should consider allowing families to be present.
4	"Attitudes toward and beliefs about family presence: a survey of healthcare providers patients' families, and patients" (Duran, Oman, Abel, Koziel & Szymanski, 2007)	To describe and compare the beliefs about and attitudes toward family presence on clinicians, patients' families, and patients.	Research Study 336 Participants 202 Clinicians 72 Family Members 62 Patients	Qualitative Study Surveys	-FPDR is beneficial to patients, patients' families, and healthcare providers. -Healthcare workers need to address and act on barriers and be able to accommodate patients' family's needs in order to allow and implement FPDR.
5	"Policies allowing family presence during resuscitation and patterns of care during in-hospital cardiac arrest" (Zachary et al., 2015)	To explore the safety of FPDR policies. To explore the effect of FPDR on resuscitation care.	Research Study 41,568 participants	Observational cohort study	-Hospitals with FPDR have no statistically significant differences in outcomes and processes of care as hospitals without this policy. -FPDR policies may not negatively affect resuscitation care

6	"Family presence during resuscitation and invasive procedures" (Guzzetta, 2016)	To provide the AACN's point of view of FPDR and to provide guidelines regarding FPDR to hospitals.	Literature Review 66 Articles	Online Search Retrieval	-Family and patient centered care supports FPDR (meets psychosocial needs) -Educational programs and policy are needed in order to successfully implement FPDR.
7	"Offering the opportunity for family to be present during cardiopulmonary resuscitation: 1-year assessment" (Jabre et al., 2014)	To evaluate the psychological consequences among family members given the option to be present during the CPR of a relative, compared to those not routinely offered with the option.	Research Study 570 Participants	Prospective, cluster-randomized control trial	-There are clear benefits to offering family members family presence during CPR in the event that the relative has a cardiac arrest.
8	"Family presence during resuscitation: professional considerations and ethical issues"	To examine the attitudes of patients family members, and healthcare providers	Literature Review 41 Articles	Online Search Retrieval	-Hospitals should consider implementing FPDR policy. -Family facilitators should be educated on FPDR policy and be there to accommodate relatives during FPDR.

	(Khalaila & Avraham, 2015)	toward ICU patient family presence during resuscitation. To discuss the relation clinical consideration and ethical issues of FPDR.			-Healthcare workers should be educated on the benefits of FPDR. -Nurses continue to be biggest supporters of FPDR. -Examine cultural implications and ethical issues surrounding FPDR in order to create successful policy.
9	"Family presence during cardiopulmonary resuscitation: cardiac health care professionals' perspectives" (Kosowan & Jensen, 2011)	To examine the perceptions of cardiac healthcare professionals concerning family presence during CPR.	Research Study 169 Participants	Quantitative Study	-Less than half the participants supported FPDR. -Majority of the participants endorsed the development of policy and procedures to overcome barriers to family presence during CPR.
10	"Experiences of families when present during resuscitation in the emergency department after trauma" (Leske, McAndrew & Brasel, 2013)	To describe experiences of family members, present during resuscitation after a traumatic experience.	Research Study 28 participants	Qualitative Descriptive Design	-FPDR helps family members build trust in healthcare providers, fulfills, informational needs, allows family members to gain close proximity to the patient, and support family members emotionally.

11	"Knowledge, attitude, and practice of healthcare professionals regarding family presence during resuscitation: an interventional study in a tertiary care setting, Karachi, Pakistan" (Meghani, et al., 2019)	To evaluate the impact of an educational program on knowledge, attitudes and practices of HCPs toward FPDR in a tertiary care setting.	Research Study 85 participants 30 physicians 55 nurses	Quasi-Experimental	-Educational interventions of FPDR were effective in increasing knowledge of health care professionals and changed their attitude toward FPDR. -Multidisciplinary approach is necessary to effectively implement FPDR.
12	"Ethical challenges in resuscitation" (Mentzelopoulos et al., 2018)	To describe challenges associated with the application of key principles of bioethics in resuscitation and post-resuscitation care. To propose actions to address these challenges.	Literature Review 74 Articles	Online Search Retrieval	-Ethics in resuscitation science need to be addressed, as well as social impact of resuscitation.

		To highlight the need for evidence-based ethics and consensus on ethical principles interpretation.			
13	"Family presence during invasive procedures and resuscitation: The experience of family members, nurses, and physicians" (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004)	To evaluate the experiences of family members, nurses, and physicians during FPDR.	Research Study 135 Participants 39 Family Members 60 Registered Nurses 22 Resident Physicians 14 Attending Physicians	Descriptive Study	-Family members had a positive experience if they decided to opt in for FPDR because they were able to know about, comfort, and connect with a patient during a traumatic time. -Providers have differing views on FPDR. Nurses and attending physicians had more positive attitudes toward FPDR, despite concerns of family members being a distraction. -Benefits of FPDR outweigh the disadvantages and an educational protocol should be implemented to educate family members and healthcare providers.
14	"Impact of a multifaceted intervention on nurses' and physicians' attitudes toward family	To design an implement a family presence program.	Research Study Initial Survey: 86 nurses and 35 physicians	Qualittatvive Study Creation of program (education,	-As staff members were educated on the FPDR program they were more accepting of FPDR.

	presence during resuscitation" (Mian, Warchal, Whitney, Fitzmaurice & Tancredi, 2007)	To evaluate the attitudes of physicians and nurses before and after the implementation of a family presence program in an emergency department at a major academic teaching hospital	Follow-Up survey: 89 nurses and 14 physicians	role-playing, ongoing provision of support and feedback to staff by the researchers) Initial and follow-up surveys	-Nurses were more accepting of FPDR and drove change to implement it in the hospital. -Collaborative, multidisciplinary approach needed in order for a successful implementation of a FPDR program.
15	"Family support during resuscitation: a quality improvement initative" (Mureau-Haines et al., 2017)	To develop a curriculum and train dedicated resuscitation team members whose role is to provide family support during in-hospital resuscitation events.	Research Study 414 Participants	Quantitative Study	-Healthcare providers should be trained in being a family support provider in the event that FPDR is needed.
16	"Experiences and opinions of patients and their relatives to family presence	To analyze the experiences and opinions of patients and	Research Study 1000 Participants	Qualitative Study	-Patients and family members had a negative attitude to FPDR.

	during adult resuscitation in Poland: Quantitative research" (Niemczyk, Ozga & Przybylski, 2020)	family members towards family presence during resuscitation in hospitals in Poland.			-Patients and family members were unaware that FPDR was included in the patient's rights.
17	"Family presence during trauma resuscitation: family members' attitudes, behaviors, and experiences" (O'Connell et al., 2017)	To measure attitudes, behaviors, and experiences of family members during the resuscitative phase of trauma care.	Research Study 126 Participants	Observational mixed-methods study	-There are multiple benefits for FPDR. -FPDR should be a priority, especially during pediatric trauma resuscitation.
18	"Self-confidence and attitude of acute care nurses to the presence of family members during resuscitation" (Rafiei et al., 2018)	To assess the relationship between attitude to the presence of family members during cardiopulmonary resuscitation and confidence of acute care nurses in performing cardiopulmonar	Research Study 150 Participants	Descriptive Study	-Nurses with higher self-confidence showed more support of FPDR. -FPDR should be explored on all units by management.

		y resuscitation in the presence of family members.			
19	"Psychological effects on patients' relatives regarding their presence during resuscitation" (Soleimanpour et al., 2017)	To explore the psychological effects on patients' relatives regarding their presence during resuscitation	Research Study 113 Participants	Quasi-Experimental Study	-Emotional and psychological support and intervention on patients' relatives are effective and can prevent the emergence of psychological disorders.
20	"Being there: Inpatients' perceptions on family presence during resuscitation and invasive cardiac procedures" (Twibell, Siela, Simmonds & Thomas, 2015)	To explore patient attitudes toward family presence during resuscitation	Research Study 48 Participants	Qualitative Analysis Interviews	Patients generally accept FPDR and there are benefits to both the family and the patient.

Patient Perspective on FPDR

Often times, when resuscitation is warranted, the patient is not responsive enough to give their consent. As a result, there has been little research conducted that explores patient perspectives during resuscitation (Twibell, Siela & Thomas, 2015). However, as one of the largest stakeholders of the FPDR debate, their point of view is essential.

A survey conducted in a hospital found that people were more likely to agree to FPDR because they wanted to be present for a family member's resuscitation. However, only 21.2% of people surveyed stated that they would consent to their family being present to their own resuscitation (Niemczyk, Ozga & Przybylski, 2020). Some patients claimed that their consent to FPDR was dependent on a couple factors. The first was severity of the situation. If the environment was too chaotic or could pose as traumatic to the family the patient would not consent (Twibell, Siela & Thomas, 2015). However, if their family members were nurses or worked within the healthcare field, they were willing to consent to FPDR (Twibell, Siela & Thomas, 2015).

A study that surveyed patient attitudes toward FPDR found that patients had a positive reaction to FPDR (Duran, Oman, Abel, Koziel & Szymanski, 2007). Patients who viewed it positively stated that it is the provider's responsibility to offer FPDR because a patient has the right to consent to FPDR (Duran, Oman, Abel, Koziel & Szymanski, 2007). The same study also found that FPDR helped to maintain patient- and family-centered care. Those surveyed viewed FPDR as a source of comfort for the patient during a stressful event. They stated that family may be able to provide valuable health information and make decisions regarding care if the patient were unable (Duran, Oman, Abel, Koziel & Szymanski, 2007). Emotionally, the patients also wanted to maintain some sort of connection with their family.

Another study also assessed patient's points of view on the benefits of FPDR after they were resuscitated. These included that the option for FPDR made them, the patient, feel like they mattered, and even though they weren't able to speak or touch their family members, it was comforting to be able to just see them (Twibell, Siela & Thomas, 2015). Patients in a qualitative study acknowledged that not only would FPDR benefit them, but it could also benefit their families. A qualitative study that surveyed inpatient attitudes toward FPDR found that patients acknowledged the following benefits for themselves: emotional comfort, and a feeling of importance and their needs met (Twibell, Siela & Thomas, 2015). The benefits for the family included; knowledge that everything was done for the patient, promotion of effective coping, and feeling closer to the patient (Twibell, Siela & Thomas, 2015).

Recent literature has found that patients generally support FPDR because it has positive effects for them, their families, and those that take care of them. FPDR provides emotional, physical, and spiritual comfort, as well as readily available medical information (Duran, Oman, Abel, Koziel & Szymanski, 2007). However, it is important to note that that there is some discrepancy in the number of people agreeing to FPDR if it were for a family member as opposed to a patient consenting their family be present for their own resuscitation. If a patient is able to consent, a good assessment of the patient-family relationship, as well as patients concerns about FPDR should be addressed when the healthcare team offers FPDR (Niemczyk, Ozga & Przybylski, 2020).

Family Members' Perspectives on FPDR

Having a loved one in the hospital can put the family under a great deal of stress. If the patient is receiving care in a more acute setting, the risk for decompensation is higher. When and if that situation arises where a patient needs to be resuscitated, hospitals may give family

members the option to be present during resuscitative efforts. This, then, forces family members to make the difficult decision on whether they will be present or not.

Family Members Who Decide Against FPDR

Some family members may choose to refrain from witnessing the healthcare team during resuscitation. For some, the thought of being present in these situations can prove to be extremely traumatic. A quantitative analysis that surveyed family members' decisions to be present during resuscitation concluded that those who decided to decline the offer to be present during resuscitation chose to do so because the thought of being there while their loved one was dying was too disturbing (DeStefano et al., 2016). They couldn't handle the thought of seeing all the medical equipment attached to their relative and assumed it would be traumatic. Family members who refrained from being present during resuscitation did so to protect their own emotional health. Although those interviewed and surveyed by DeStefano et al. (2016) had no prior experience with FPDR, they claimed that they would just let the healthcare team do their jobs. Others said that the trauma of viewing resuscitative efforts may add to the trauma of the event that brought their family member to the hospital in the first place, and may make the experience even more negative than it already has been (DeStefano et al., 2016).

According to a study published in Topics in Emergency Nurses Association (ENA), other reasons that families opted out of FPDR included: a lack of education on resuscitative methods, not being briefed on what happens prior to the initiation of resuscitative efforts, not knowing what to expect during patient resuscitation, as well as fears related to the seeing the pain and suffering their family member could go through, and the possibility of an inability to cope with anything they witness (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004). Along with coping issues, there were some family members that chose to be present during resuscitation, but

had to immediately excuse themselves and leave the situation because it was too overwhelming and their emotions were too unpredictable and out of control (O'Connell et al., 2017). A commonality in much of the literature on family perspectives about FPDR indicates that a perceived inability to cope and lack of comfort in the hospital environment are recurring reasons why some family members decide to opt out of FPDR.

Family Members who Opt for FPDR

Family members who either would choose or have chosen to be present during resuscitation had a variety of reasons that led them to their decision. Primarily the most common reason supporting FPDR was to comfort a patient (O'Connell et al., 2017) in distress, whether that distress be emotional or physiological. Comforting the patient promotes emotional healing for both the family member, and the patient themselves. This again, gives family members a role in resuscitation, and allows them to participate in the care of the patient (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004). Families felt that touch, i.e. being able to hold a patient's hand in these situations, and talking to their loved ones had far-reaching perceived effects in reducing a patient's fear in these tough situations (Leske, McAndrew & Brasel, 2013).

Family is a valuable resource in providing pertinent information for a patient. The healthcare team often uses any information a family member has on the patient's condition, especially in the event that the patient cannot do it themselves. To some family members, this can be extremely empowering, giving them a role in the resuscitation process, and can give some hope to a hopeless situation (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004), thus driving their decision to opt into FPDR. Family members can provide any relevant medical histories (DeStefano et al., 2016), a list of medications the patient is taking and their dosages (Leske, McAndrew & Brasel, 2013), and witness accounts of what led to the patient's decline. In

addition to providing information on the patient's history, FPDR can exercise their roles as powers of attorney or health care proxys on the spot and sign consents and make decisions that could impact the care the patient is receiving from the healthcare team (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004).

If an individual had prior experience in the caregiver role, or had some experience taking care of someone in a similar situation, they would choose to be present (DeStefano, et al., 2016). One of the people interviewed by DeStefano et al. stated that the reason they chose to witness resuscitation of their grandfather was due to the fact that they had already been through a similar situation with their grandmother. And if "[they] had been there for their grandmother, [they] wanted to do the same for their grandfather," (DeStefano et al., 2016, p.9).

There is a sense of comfort in seeing and knowing that everything that could have been done was done to save a family member. They were reassured when they saw the healthcare team going above and beyond to bring their loved ones back (Leske, McAndrew & Brasel, 2013) and felt like they were not a distraction to the healthcare team and did not hinder them in any way (O'Connell et al., 2017). Some felt spiritually comforted in witnessing the resuscitation of their family members. Family members interviewed by DeStefano et al. reported that they were able to process the situation easier and were able to begin the grief process if resuscitation ended in the death of their family member. They also reported feeling a sense of closure as the patient died and stated that "they knew I was there," (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004).

FPDR allowed patients' families to be able to understand the severity of the situation (Duran, Oman, Abel, Koziel & Szymanski, 2007). This is important because sometimes family members are unable to comprehend resuscitation when it is only explained to them, especially if

medical jargon is used. Family members were found resuscitative methods easier to understand when they were educated verbally while simultaneously being able to witness it. They also found it easier to stay calm in real time and would rather be present during resuscitation instead of sitting in a waiting room and wondering what was happening to their loved one (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004).

Positive Experience with FPDR. Those that chose FPDR had an overall positive experience. Families felt that they were well informed and educated throughout resuscitation, the team's explanations were clear and in lay man's terms, and they felt appropriately included by the healthcare team. Some reported an overwhelming sense of relief that their family member was getting help because they were able to see for themselves that everything was done to help the patient, regardless of the outcome (DeStefano et al., 2016). A lot of families claimed that it was their right to be present during resuscitation, and would do anything to get in the patient's room. However, most were in agreement that if conditions proved that FPDR would hinder the patient's health, rather than help them, family members were prepared to give up that right (O'Connell et al., 2017). Jabre et al. and their study of FPDR reported several positive outcomes during their one-year assessment of families who opted to be present during resuscitation. After interviewing and assessing family members' psychological status and grief, it was found that FPDR showed lower rates of complicated grief and less psychological symptoms such as post-traumatic stress disorder (PTSD), depression, and traumatic grief (Jabre et al., 2014)

Negative Experience with FPDR. There were a handful of families within the literature that had negative experiences as a result of FPDR. Some families were not even given the option for FPDR. They expressed their frustrations in the lack of communication between family members and the healthcare team and called it "dehumanizing," (DeStefano et al., 2016).

Families reported experiencing even more fear being able to hear what was going on during resuscitation and not being able to see or be educated on the process. Those that were present and had a negative experience with FPDR reported that even though they could see the resuscitative efforts being made, they were unable to cope with what they had seen (DeStefano et al., 2016). Some could not handle it emotionally and had to leave or be escorted away from the patient's room (O'Connell et al., 2017). Others viewed the resuscitative methods too aggressive and that the patient was a victim of overtreatment (DeStefano et al., 2016) and feared that they were suffering despite the efforts taken to be kept alive. There were a handful that expressed regret because they valued FPDR, but there were so many people in the room and the situation was sp chaotic that they were unable to get as close as they wanted to in order to comfort the patient (Leske, McAndrew & Brasel, 2013).

Most families had a positive attitude toward FPDR. They believed that being physically closer to the patient allowed for increased patient comfort and helped families cope with a loss or health prognosis (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004). They also believed that they could provide valuable medical history and make sound decisions regarding a patient's plan of care (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004). Although families raised concerns regarding FPDR such as it being too disturbing or a lack of education about FPDR to see its benefit (DeStefano et al., 2016), many believed that FPDR was their right and the possibility of FPDR should be offered (O'Connell et al., 2017). To help address the needs of family members during FPDR, a facilitator may be needed who works beside the family and provides support during this stressful time (Bradley, Lensky & Brasel, 2011).

Healthcare Workers' Views on FPDR

Traditionally health care professionals such as doctors, nurses, etc., have disapproved FPDR. Healthcare workers had concerns of families being a distraction during resuscitation, and they feared that FPDR would be emotionally stressful for families, as well as the resuscitation team (Duran, Oman, Abel, Koziel & Szymanski, 2007). Recent literature, however, shows that the healthcare team views FPDR positively, despite having a number of concerns.

A survey conducted by Kosowan and Jensen (2011) surveyed healthcare professionals' opinions on FPDR. They found that, despite varying levels and comfort of FPDR, of the 40.9% who would give families the option for FPDR, 84.6% said that they supported FPDR because it is part of their job to support the family's psychological, social, and spiritual needs, much like they would for the patient they were providing direct care to (Kosowan & Jensen, 2011). The healthcare team supports FPDR because it helps families come to terms with the severity of resuscitation. Providers stated that FPDR helps families make decisions regarding a patient's care (Meghani, et al., 2019) such as signing consents, withdrawing care, etc.

The healthcare team also saw FPDR as an opportunity to educate family members (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004) as they are performing resuscitative methods. They believed that this may help in the healing or grieving process, acknowledge the efforts of the healthcare team, and ensures family satisfaction with care, regardless of the outcome (Meghani, et al., 2019). Educating family members and allowing them to be present during resuscitation could also have the potential to decrease the chances of family members filing malpractice lawsuits against the healthcare team as resuscitation was performed (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004). Perhaps since family is present, healthcare providers are on the alert and are hyper-vigilant of what they say and do around the patients and their families. A study conducted that surveyed the differing points of view between families and

healthcare workers on FPDR concluded that the healthcare teams who have witnessed FPDR noticed behaviors that were more professional among the staff. There was less nonessential conversations, less and more careful word choices during resuscitation (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004).

Although healthcare professionals in recent years now support the decision to allow FPDR, some members of the healthcare team are more ready to accept it more than others. In a study that compared nurses' and doctors' opinions on FPDR, the researchers found that nurses were more willing to accept FPDR than doctors when they saw the positive advantages it had for healing in the families they observed (Mian, Warchal, Whitney, Fitzmaurice & Tancredi, 2007). Other reasons nurses supported FPDR included allowing the family to experience peace of mind and closure during a traumatic situation, and allowed families the opportunity to see the work of healthcare providers and the effort involved in resuscitation. Nurses felt that healthcare workers took care of patients with more dignity and "viewed them as a real person," when a family member was present (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004). There were no significant differences in opinions of nurses from differing units, i.e. intensive care units, emergency departments, etc. (Duran, Oman, Abel, Koziel & Szymanski, 2007).

Doctors were generally supportive of FPDR, but support varied among attending physicians and those who were not, such as interns, residents, and fellows. A study done by Mian, Warchal, Whitney, Fitzmaurice, and Tancredi showed that 79% of attendings supported FPDR compared to 19% of support from resident physicians in Massachusetts General Hospital (Mian, Warchal, Whitney, Fitzmaurice & Tancredi, 2007). Another study from Topics in Emergency Medicine showed similar results, with attending physicians having a more positive

view on FPDR compared to resident physicians. However, there was also a study showed the opposite, with non-attending physicians (interns, fellows, and residents) showing more support for FPDR compared to attending physicians (Duran, Oman, Abel, Koziel & Szymanski, 2007). This leads to the conclusion that although FPDR is a generally accepted practice among healthcare workers, nurses are more willing to support FPDR, while there is still some differing points of view among physicians.

Concerns that have arisen from healthcare workers regarding FPDR related to families as a disturbance, concerns about the emotional well-being of patients' families, and providers' performance anxiety during resuscitation. The major worry among healthcare providers is that FPDR could prove to be a distraction to the healthcare team and other patients and families on the unit. Healthcare workers shared concerns of the following regarding distractions during resuscitation: family overcrowding a patient's room, prohibiting the team from performing their tasks quickly and efficiently (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004); verbal interruptions from families asking too many questions (Meghani, et al., 2019); too much emotional distress and fainting (Duran, Oman, Abel, Koziel & Szymanski, 2007); and the possibility of the family becoming hostile and violent if the outcome of resuscitation is not a desired one (Meghani, et al., 2019). The family may be uneducated about what resuscitation involves. Providers are afraid that they will spend too much time answering families' questions rather than taking care of the patient. They are also afraid that there won't be any focus on the families' emotional well-being at all during resuscitation (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004). There was also some hesitance among healthcare team members because of a lack of confidence in managing family emotions during high stress situations. FPDR can be traumatizing and emotionally scarring. Things could move very quickly, leaving the family in a

state of shock. This could turn into complicated and delayed grief (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004). They feared a lack of experience would hinder how they managed family stress (Meghani, et al., 2019).

Some healthcare providers fear that legal action will be taken against them if a patient's family can see exactly what they are doing but may interpret these actions incorrectly. Providers reported high performance anxiety rates associated with FPDR (Duran, Oman, Abel, Koziel & Szymanski, 2007). To combat these concerns, a study was done on critical care nurses to see if there was a correlation between attitudes toward FPDR and confidence in performing resuscitative methods in front of family members (Rafiei et al., 2018). The study concluded that there was a neutral attitude toward FPDR and a negative correlation between their attitudes and perceived confidence (Rafiei et al., 2018). A lot of providers also stated, in a different study, that their performance confidence in FPDR increased with more years of experience (Duran, Oman, Abel, Koziel & Szymanski, 2007).

Though there is not much extensive research on patient perspective on FPDR, patients see an overall benefit of FPDR because it provides comfort to them, their families, and the healthcare team (Duran, Oman, Abel, Koziel & Szymanski, 2007) and had positive attitudes toward it. However, there were differences in opinion when it came to consent for family to witness their own resuscitation, for fear of emotional stress (Niemczyk, Ozga & Przybylski, 2020). Family members also had a generally positive attitude toward FPDR. They viewed FPDR as a way to cope with a patient's prognosis or condition, support and comfort the patient, and found that they could be useful to the resuscitation team in providing valuable medical information, as well as making decisions regarding to plan of care for the patient (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004). In terms of healthcare providers and FPDR, the

literature showed an overall acceptance for FPDR, despite concerns of families being distraction and having a toll on their emotional well-being (Meghani, et al., 2019), the healthcare team was in agreement that FPDR should be used to help family make choices regarding plan of care, ensure family satisfaction of the efforts of the resuscitation team, and educate families in real-time about the efforts made to resuscitate the patient (Meghani, et al., 2019).

Discussion

Based on current literature about FPDR, the findings of this review imply that healthcare workers (specifically doctors and nurses), family members, and patients have reported positive attitudes toward FPDR, and FPDR should be implemented in most hospitals, especially in areas where resuscitation methods are more likely to occur. Also, within the literature, however, in order for FPDR to be successfully integrated as part of hospital policy, a few factors need to be considered. These include collaboration from various types of healthcare workers and organizations, an awareness to cultural and ethnic differences among patient and family populations and placing emphasis on family care, as well as patient care with a FPDR Facilitator.

Multidisciplinary Approach to FPDR

In order to address the barriers so that FPDR can be effective and integrated into the hospital system, healthcare providers have advocated for a multidisciplinary approach (Niemczyk, Ozga & Przybylski, 2020). Taking care of a patient requires a team of skilled providers, nurses, social work, clergy, etc., well as the family or healthcare proxy. FPDR is no different. Effective communication and support from each member of the team (Bradley, Lensky & Brasel, 2011) will ensure that everyone is acting in the best interest of the patient and their family. Some hospitals and organizations have developed policy to state the guidelines

surrounding FPDR so that everyone on the team and patients' families can be on the same page if FPDR were warranted.

Cultural Considerations

Patients and families that come in and out of hospitals all come from different backgrounds, hold different values, and practice different traditions. In order for FPDR and FPDR policies to be successful, patients' and families' cultures need to be taken into consideration.

The European resuscitation council suggested that variations to these FPDR policies may need to be made or taken into account someone's cultural background as well as personal values (Zachary et al., 2015). A study that surveyed healthcare workers, patients, and their families about FPDR found that it was generally accepted among this group of people. Healthcare workers had some concerns about safety, family trauma, and performance anxiety, but they were in agreement that these factors would have to be taken into consideration on a case-by-case basis (Duran, Oman, Abel, Koziel & Szymanski, 2007). In their discussion, they made recommendations for further research that included studying a more ethnically diverse group to see if culture plays a role in FPDR (Duran, Oman, Abel, Koziel & Szymanski, 2007). In this review, the majority of the articles came from research conducted in the United States, who was generally accepting of FPDR.

There were articles in this review where research was done in different countries, specifically Pakistan and Poland, both of whom had very different results regarding people's attitudes toward FPDR. A study done in Karachi Pakistan discussed that FPDR has not been adopted in this area, despite being accepted in other areas around the world. The study found that an educational FPDR program was effective in changing the attitudes of healthcare workers on

FPDR (Meghani, et al., 2019). Family involvement in the care process is highly valued in this demographic. In the Pakistani culture, family plays a large role in a patient's illness because they are the ones to make medical decisions, or end-of-life decisions, not the individual (Meghani, et al., 2019). It would be interesting to see what Pakistani family members attitudes toward FPDR are. The results for Poland were much different. Both patients and their family members were generally not in support of FPDR (Niemczyk, Ozga & Przybylski, 2020). This could be due to the fact that patients and their families were unaware that FPDR was available to them in the patient rights (Niemczyk, Ozga & Przybylski, 2020), or perhaps culture plays a role. Again, much like the article on Pakistan stated, more studies need to be completed with more ethnically diverse groups of people (Duran, Oman, Abel, Koziel & Szymanski, 2007) in order to successfully integrate FPDR.

FPDR Facilitator

Another attempt to integrate FPDR was the creation of a FPDR facilitator. Traditionally this role would be held by someone on the healthcare team, along with performing lifesaving measures. Having a FPDR facilitator means that another member of the team is solely responsible for the family during this time and not patient care. Multiple organizations have either implemented this position or hypothesized its success and have had positive attitudes and results.

The literature suggests that any member of the healthcare team could be trained to become a facilitator, including physicians, nurses, chaplains, child life specialist, family therapist, nursing student, etc. (Khalaila & Avraham, 2015). FPDR facilitators need certain traits in order to be successful. First, they need to be a good communicator (Khalaila & Avraham, 2015). A large part of this role is making sure that family members are kept in the loop, as

resuscitation can be a hectic time for them, the patient, and other healthcare workers. Facilitators also need cultural awareness (Mureau-Haines et al., 2017) in order to be effective in their role. Every family is different. They come from varied backgrounds and have different dynamics. They may also have different reactions to resuscitation. For example, a family from China will behave differently than a family from Spain. In the same way, both families would react differently to resuscitation than a family with only three members, compared to a family with 9 members. Bradley, Lensky, and Brasel suggest that the best people for this facilitator role are actually social workers and chaplains, because they can easily respond to codes and they are not providing medical care to any other patients (Bradley, Lensky & Brasel, 2011). It would be hard for a nurse or doctor to do this job because they are tending to other patients, as well as helping the rest of the team during resuscitation.

The FPDR facilitator plays a large role during resuscitation. The only caveat is that if this person was chosen as FPDR facilitator, their only responsibility is to the family. They are not going to be taking part in lifesaving measures for these patients. A FPDR facilitator would respond to all codes and see if the family has been contacted. When the facilitator arrives, they will need to do a few assessments. First they need to see how much the family already knows and be able to fill the gaps (Mureau-Haines et al., 2017). They also need to understand the dynamic of the healthcare team who is doing the resuscitation (Bradley, Lensky & Brasel, 2011). Then, the FPDR facilitator needs to brief the family (Mureau-Haines et al., 2017). The family has to be made aware of where to go, what they could see, and the various outcomes that could come from resuscitation (Bradley, Lensky & Brasel, 2011). During a code, the FPDR facilitator stands alongside the family and is there to answer questions, and to provide any emotional support. They are also there if there is any reason to remove the family such as violent outburst

or the feeling that watching resuscitation has become traumatic (Bradley, Lensky & Brasel, 2011). An effective FPDR facilitator also assists the family post-resuscitation and provides emotional support the best they can (Mureau-Haines et al., 2017).

Implications in Nursing Practice and Education

Nurses should consider the attitudes and ways to integrate FPDR from this literature review in their own practices. Nurses should have education on this topic in order to provide more patient- and family- centered care. More importantly, nurses should be educating their patients about FPDR both in an inpatient and outpatient setting. This could be done verbally or through educational material such as pamphlets, brochures, etc. The more that families and other healthcare providers are exposed to the possibility of FPDR in an emergency situation, the more prepared they can be for the assumed barriers including, family readiness and emotional state, performance anxiety, and to relieve any fears of legal issues resulting from FPDR. Ultimately the role of the nurse is to prioritize care for and address the concerns of patients and their families before their own. If FPDR is an option that a patient and their family want to explore and could potentially bring both parties more comfort, it is up to the nurse to advocate for the needs of both the patient and family. Nurses should be an advocate in facilitating FPDR and making sure the healthcare team is aware of the hospital-specific procedures surrounding FPDR to ensure everyone is on the same page. That way the healthcare team is acting in the best interest of the patient and their families, upholding the ethical principles of autonomy, beneficence, fidelity, and non-maleficence.

Implications in Nursing Policy

The background of this review stated that various organizations such as the American Heart Association, European Resuscitation council, and the American Association of Critical

Care Nurses are in support of FPDR. However, concerns from the American Heart Association bring about the conversation of FPDR policy implementation, while also addressing factors like success rates of such policies, as well as effects on the actual resuscitation of the patient (Zachary et al., 2015). The American Association of Critical Care Nurses also addresses these concerns by stating that as long as there is an emphasis on meeting the needs of both the patient and their family during FPDR, FPDR and its policies can be successful (Guzzetta, 2016). They also claim that healthcare the team's adherence to these policies and proper education to healthcare providers, patients, and their families will contribute to the success of FPDR and FPDR policies (Guzzetta, 2016). Implementation of FPDR policies that include new roles like a FPDR facilitator, who will maintain family and patient comfort in an ethical and culturally aware manner, while keeping in mind the recommendations of these nursing organizations, will ensure that the implementation of such policies can occur while promoting safety for the patient, family, and healthcare team.

Limitations

One of the most significant limitations in this review is the lack of literature on patient perspective on FPDR. Often times, when FPDR occurs, the patient is already unresponsive. As previously mentioned, however, patients are one of the largest stakeholders within the topic of FPDR. Their opinions should be highly valued when discussing the implementation of FPDR and when creating policies on this issue. Another limitation was that this literature review only focused on the attitudes of specific healthcare workers (doctors and nurses). It would be interesting to see research that explores attitudes of other healthcare providers such as respiratory therapists, social workers, surgeons, pharmacists, etc. in order to better generalize the attitudes of healthcare providers toward FPDR. One of the research questions posed in the introduction of

this literature review was, “How can FPDR be successfully implemented?” Although this review attempts to answer that with encouraging multidimensional approaches, promoting ethical care and cultural awareness, creating policies, and the use of FDPR facilitators, the question is still open for discussion.

Recommendations for Future Research

Recommendations for future research should focus on collecting data about patients’ opinions toward FPDR. Perhaps this can be done early on in admission, especially if the patient is still alert and oriented, not as a reaction during an emergency situation like the need for resuscitation. Another recommendation for further research includes more recent studies of patients, family, and healthcare worker attitudes toward FPDR from different countries in order to see if there is any cultural significance in FPDR and how certain policies would be affected depending on how FPDR is received. Another area for further research would be studies on the actual effectiveness of the FPDR facilitator in clinical practice. Data that explored the effectiveness of such policies would continue the conversation on how best to successfully implement FPDR in the hospital setting. Perhaps it could also aid and inspire other hospitals and organizations to create or implement their own policies.

Conclusion

This literature review attempted to summarize current data available on causes for resuscitation, what FPDR is, and issues associated with FPDR, while answering questions that explore patient, family, and healthcare worker (doctors and nurses) attitudes toward FPDR, examining barriers associated with FPDR and methods for successful FPDR implementation.

Based on the research collected in this literature review, patients, families, and healthcare workers, specifically doctors and nurses accept the use of FPDR because it promotes comfort for

patients and their families (Duran, Oman, Abel, Koziel & Szymanski, 2007). They also viewed FPDR as a way for families to make decisions regarding plan of care, for healthcare providers to gain important medical history from family members, and a way to promote coping with a patient's prognosis (Meyers, Eichhorn, Guzzetta, Clark & Taliaferro, 2004). Barriers to FPDR include perceived traumatic effects on the family, family members posing as a distraction during lifesaving measures, performance anxiety amongst providers, and fears of legal action against the healthcare team (Meghani, et al., 2019). In order for FPDR to be successful, all of these barriers need to be put into consideration using a multidisciplinary approach in the creation of policy, educating members of the healthcare team about FPDR, FPDR educational tools for patients and families, and creation of additional roles such as the FPDR facilitator; as well as maintaining culturally aware care and ensuring that ethical considerations are addressed.

A complication of heart disease, cardiac arrest affects around 350,000 in the United States (American Heart Association, 2017) and over 17.5 million people in the entire world (American Heart Association, 2020) and requires immediate resuscitation. In the event that resuscitation is warranted, patients' needs are met by the skilled healthcare team who work hard to revive them. However, the healthcare team must not forget another important stakeholder in resuscitation: the family. FPDR plays a large role in meeting the comfort needs of both patients and their family members. FPDR has been a topic of much debate in recent years due to the question of how it can successfully be implemented while maintaining the safety of the patients, their families, and healthcare workers. To effectively use FPDR in the hospital setting, health organizations and hospital administration should acknowledge that as long as FPDR has profound positive effects, it should be implemented; and that the barriers associated with FPDR

are addressed among various healthcare workers, while keeping in mind the uniqueness of each patient situation and patient and family background.

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