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Family Presence During Resuscitation: Nurses' Perceptions of Their Self-Confidence

by

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requirements for the degree of

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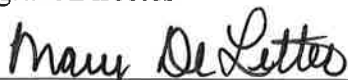
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I express my deepest and most sincere gratitude to my family. The completion of my work and this program would not have been possible without your patience and your unconditional love and support.

Dedication

This project is dedicated to and inspired by my late mother, Claudia Duffy, who passed in 2009. Completing this project in the Emergency Department at The University of Louisville Hospital, the very place where you passed away, has been impactful and so meaningful. It's my hope that one day families will be with their loved ones during these times of acute crisis.

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Abstract

Family presence during resuscitation (FPDR) remains a controversial topic among healthcare providers. Nurses' lack of self-confidence has repeatedly been identified as one of the barriers as to why families are not being offered the option to be present during resuscitation of their loved ones. The purpose of this quality improvement project is (1) to explore whether nurses' self-confidence perception when experiencing FPDR is greater after an educational intervention; and (2) to further explore nurses' perceived benefits and risks related to FPDR. This prospective project gained a baseline knowledge of the perception of self-confidence, benefits, and risks in regard to FPDR of emergency department nurses at University of Louisville Hospital. Nurses completed the Family Presence Risk Benefit Scale (FPR-BS) and the Family Presence Self-confidence Scale (FPS-CS) pre and post educational intervention. Paired t-tests revealed a statistically significant increase in post-test mean scores on both the FPS-CS (pre-test $M=3.7$ ($SD=.75$), post-test $M=4.0$ ($SD=.73$), $t(34) = -3.202$, ($p = .003$) and the FPR-BS (pre-test $M=3.3$ ($SD=.52$) post-test $M=3.5$ ($SD=.73$), $t(34) = -2.118$, ($p = .042$), indicating that the mean scores were higher on both scales after the educational intervention. The educational intervention positively impacted the nurses as nurse participants perceived greater self-confidence with FPDR and believed there were more benefits and fewer risks to family presence than initially perceived prior to the educational intervention.

Keywords: family presence during resuscitation (FPDR); cardiopulmonary resuscitation; attitude; belief; nurses' perspective; self-confidence; impact and effect(s).

Family Presence during Resuscitation: Nurses' Perceptions of Their Self-Confidence

In-hospital cardiac arrest occurs in over 290,000 adults each year in the United States (Andersen et al., 2019). Traditionally, if family members are present at the patient's bedside during cardiac arrest, they are asked to leave the room while resuscitative care is being performed. Family presence during resuscitation (FPDR) refers to giving a patient's family member(s) the option to be present during the resuscitation of a loved one. FPDR is a shift from the practice norm in efforts to promote family-centered care during an acute crisis (Tudor et al., 2014).

Family-centered care involves families in all aspects of health care delivery and is intended to be provided throughout the life continuum. It allows families to participate in decision-making and allows them to be present with the patient during their care. In many instances, family members of critically ill and/or injured patients have insisted on being present during resuscitation. Meeting the emotional needs of the patient and family members and allowing them to be present, if they choose, during resuscitative efforts encompasses family-centered healthcare (Tomlinson et al., 2010).

The appropriateness of FPDR and witnessing life-saving and resuscitative efforts for their loved ones is a controversial topic among health care providers (Mortelmans et al., 2010). Many nurses have expressed reservations about offering family members the option to be present during patient resuscitation, due to the concern for traumatic and emotional disturbances among families witnessing the resuscitation. Other common barriers include: concern for legal ramifications, insufficient working space in the resuscitation room, interference from family members, and staff stress regarding their performance while families are present (Al-Mutair et al., 2011). These perceptions have eroded nurse's self-confidence when making the decision

about whether or not to allow FPDR. One study shows that a lack of education contributes to the reluctance for nurses to endorse this well-described, evidence-based practice (Tomlinson et al., 2010).

In 2010, only 5% of hospitals in the U.S. had FPDR policies. The lack of a policy thrusts nurses into making a decision of offering or denying FPDR without proper practice guidelines (Howlett et al., 2010). One descriptive correlational study showed that the majority of nurses support a policy on FPDR (Basol et al., 2009). Even with the support of a policy on FPDR, the low number of hospitals that have policies demonstrates that this issue remains controversial and unresolved.

Families want to be present and involved in the care of their loved ones. FPDR can help remove doubts of the family members regarding the care their loved one is receiving during such a crisis and can allow families the opportunity to see first-hand the diligent lifesaving interventions and efforts made by the resuscitation team. Offering family members the option to be present gives them an opportunity to support their family member through this acute crisis and may help facilitate the grieving process (Tomlinson et al., 2010). Anxiety was found to be lower in those family members who were present during resuscitation as opposed to those who were not; additionally, of those family members who were not present during resuscitation, anxiety was lower for those who were at least offered the option to be present (Leske et al., 2017).

The most published concerns among health care providers are the fear of families interfering with the resuscitation process and adverse psychological effects for the family. These risks continue to be cited as obstacles to supporting and implementing FPDR, even though they are unsubstantiated in the literature (Flanders & Strasen, 2014). Even with these fears, one study

revealed that as much as 82% of the healthcare staff supported FPDR (Tomlinson et al., 2010). In order to get more families to the bedside during this time, nurses have to feel confident in offering this option. Education for nurses is one avenue that could change nurses' current perceptions of FPDR to improve willingness to offer the option for families to be present. In one systematic review, findings from 13 of the 16 studies showed that FPDR education improves self-confidence of nurses and healthcare team members for implementing FPDR (Powers, 2017).

Review of Literature

A search of PubMed, MEDLINE, OVID, and Google Scholar was performed using the following keyword combinations: *family presence during resuscitation (FPDR)*, *cardiopulmonary resuscitation*, *attitude*, *belief*, *nurses' perspective*, *self-confidence*, *impact and effect(s)*. The search was limited to studies published from 1998 to 2017 and included only English language articles. The evidence that supported this project includes ten sources: three, well-designed controlled trials without randomization, two randomized, controlled trial studies, two systematic reviews of descriptive and qualitative studies, one well-designed case control and cohort studies, one single descriptive or qualitative study, and one systematic review or meta-analysis of all relevant, randomized, controlled trials or evidence-based clinical practice guidelines based on systematic reviews of randomized control trials.

The Melnyk Levels of Evidence (Melnyk & Fineout-Overholt, 2015) rating scale was used to evaluate the strength and quality of the studies included. See Appendix A and refer to Tables 2 and 3 for a synthesis of the evidence that was used for this project.

Many of the research studies strongly indicate that it is beneficial for the families to be present or to be offered the option to be present during resuscitation. The overall majority of families believe that FPDR is a beneficial experience for the participating family members

regardless of their age, gender, education, or relationship to the patient and that FPDR is viewed as a right, an obligation, and a natural event (Meyers et al., 2010). Data generated by Soleimanpour et al. (2017) revealed the highest percentage of family members wanting to be present during resuscitation. Of the family members that participated in the Soleimanpour et al. (2017) study, 80% wanted to be present and 72% believed that if they were present during resuscitative efforts, it would help them cope during this stressful time. Basol et al. (2009) revealed that 54% of family members wanted to be present and also felt as though it was their right to be offered the option. The family members stated they believed that they would be providing patient support, would be helpful in making decisions, and it would allow them the opportunity to see efforts being made first-hand.

Nurses are very concerned that FPDR will be too traumatic for the families to witness and this has been one of the main reasons that families are not being offered the option to be present (Tudor et al., 2014). A 1-year assessment of FPDR addressed the issue that grief caused by the loss of a family member can induce pathological responses: depression, anxiety, PTSD, and complicated grief (Jabre et al., 2014). However, these factors can be influenced by whether or not the family is offered the opportunity for FPDR (Robinson et al., 1998). This 1-year assessment determined that family members who were not offered FPDR had significantly more PTSD-related symptoms than the family members who were offered FPDR; similar results were obtained in relation to symptoms of depression and complicated grief (Robinson et al., 1998). These results provide evidence that adverse bereavement may be reduced with FPDR. Allowing the family members to be near the patient during resuscitation has positive outcomes on their grief process (Jabre et al., 2014).

Nurses have also voiced their concerns that having FPDR will be stressful for themselves. Jabre et al. (2013) found that FPDR was not as stressful for the nursing staff as initially perceived to be; the health care team's stress and ability to perform was not affected by FPDR and that bereavement-related post-traumatic stress disorder (PTSD) symptoms were less frequent when the nursing staff allowed family members to be present during resuscitation.

Most healthcare providers have positive attitudes toward and support for FPDR (Meyers et al., 2010) and most health care team members believe that family should be allowed to remain at the bedside during resuscitation (Zavotsky et al., 2014). Nurses want to give families the option to be present during resuscitation, but need education to improve self-confidence for smooth implementation. Moreover, one systematic review revealed that 13 of the 16 studies suggested that educational interventions can improve the perception of FPDR and self-confidence for offering FPDR, increase comfort and support, and provide an overall positive effect on clinical implementation of FPDR (Powers, 2017).

Theoretical Framework

Albert Bandura's Social Cognitive Theory (1986) guided this project. Much of human motivation and behavior is regulated by outcomes expected for given courses of actions, and those actions that produce positive outcomes will more likely be adopted. Behavior, influenced by expected, positive consequences, will be motivated by the outcomes that give humans satisfaction and a sense of self-worth (Bandura, 1997). Applying this theory in this project, nurses will be more likely to offer family the option to be present during resuscitation of a family member if nurses they have positive experiences of FPDR. By improving their self-confidence and increasing their knowledge of the risks and benefits of this option, the planned educational intervention will provide them the knowledge and skills to offer families the option to be present,

and potentially increased positive experiences as a result. With more positive experience comes greater self-confidence in offering FPDR, a stronger belief in their ability to succeed, greater motivation to adopt this procedure into their emergency nursing practice, and more frequent provision of this option to family.

Setting and Organizational Assessment

This project was implemented in the Emergency Department (ED) at University of Louisville Hospital (ULH). ULH has been a presence in the Louisville area for nearly 200 years and is the only adult Level One Trauma Center in regional Kentuckiana area. The ED sees more than 60,000 patients per year and is comprised of a rapid assessment triage area, 31 treatment rooms, 4 trauma bays, and a triage area for Emergency Medical Services (ULH, 2020).

As the region's only American College of Surgeons (ACS) Verified Level I Trauma Center for adults, the institution is staffed with an experienced and dedicated team of professionals who are available 24 hours a day, seven days a week. This staff delivers care to the most severely injured patients as well as those seeking immediate care for acute health crises or exacerbation of chronic health issues. Permission for this project has been granted by the Directory of Emergency Services (see Appendix B).

The project relied on the participation of the nurses in the ED at ULH. Their involvement determined if the educational intervention is effective in boosting their self-confidence in offering FPDR and assessed the need for the long-term aim of a hospital-wide policy. The support of several ED nurses and charge nurses who expressed interest in FPDR in the ED at ULH was enlisted. They offered to communicate the importance of nurse participation in this project and to remind nurses to complete the surveys. Participation was monitored weekly by logging into REDCap (Harris, P.A. et al., 2009), the service used to distribute the surveys and

questionnaire, and reminders that were communicated to the ED nurses to complete the surveys. Completeness and accuracy of surveys and questionnaires through REDCap was monitored to ensure data were being correctly entered and recorded.

Barriers to change which potentially interfered with the success of this project were the lack of interest and the lack of participation from the ED nurses. The post- test survey is crucial in order to gain data collection on whether the intervention is successful. Without significant post-survey completion, information from the 1st survey would be irrelevant because scores from the pre and post survey will both be needed for comparison. Additionally, participation of the ED nurses is completely voluntary and there is no incentive for them to dedicate their time to this project other than to improve their emergency nursing practice and the quality of patient care. These barriers were addressed by relaying the importance of this project to ED nurses through evidence-based personal communication with ED staff while indicating what type of positive changes it could potentially bring to the ED.

There are several key stakeholders on which this project's success depended. These individuals include the ED nurses and charge nurses, ED physicians, ED managers, the ED director, and the patient and patients' family members who could potentially benefit from FPDR. Without the continued support from the stakeholders, this project would not be sustainable and families and patients will not reap the benefits of FPDR.

Purpose

The purpose of this evidence-based quality improvement project is to determine if ULH ED nurses feel greater self-confidence with FPDR after an educational intervention, which provided the evidence on the benefits of FPDR found in the literature. This project will explore the following PICO question: for nurses in the ED setting at a level one trauma center

(Population), does the educational intervention (Intervention) on family presence during resuscitation (FPDR) improve the nurse's self-confidence (Outcome) using a pre- and post-validated self-confidence scale (Comparison). In addition to a self-confidence evaluation, this project also seeks to evaluate information on nurses' perceived risks and benefits as well as barriers to FPDR.

This project aims to increase ED nurses' self-confidence in the implementation of FPDR through an educational intervention, resulting in more families being offered the option to be present during the resuscitation of a loved one. A long-term aim is the creation of the Family Presence Taskforce comprised of nurses for sustainability leading to the creation of a hospital-wide policy for FPDR at ULH.

Intervention

The educational intervention was a PowerPoint presentation that was available for ED nurse participants to view online. Slides included topics such as concerns from nurses for offering FPDR, evidence from both family members and nurses who were present during resuscitation, and other important considerations. The information from these slides was gathered from evidence-based research and from organizations that support FPDR. Suggestions for implementing FPDR include designated support staff, family assessment, and provider decision.

The objectives for the educational intervention were as follows: provide evidence-based research on the positive effects of FPDR for both the nurses and the families, share the nursing and healthcare professional organizations that support FPDR, provide information on strategies for offering and implementing FPDR that have worked for other organizations, and call attention to the need for FPDR in the ED at ULH.

This quality improvement project was submitted to and approved by the ULH Institutional Review Board (IRB) for review as a quality improvement project, and, because of the nature of this project, was deemed not to require IRB review (Reference #699900) on January 15th, 2020. The project was also submitted for and approved by the ULH Nursing Education and Research Department as well as by the Director of the ULH ED.

Participants

The participants were registered nurses (RNs) employed at ULH in the ED. To be included in this project, participants held a current Kentucky RN license, were at least eighteen years of age, and worked in the ED at ULH. All nursing staff who met these criteria were included regardless of gender, ethnicity, number of months or years worked as a nurse, or number of months or years worked in the ED. At initiation of this project, there were 73 nurses in the ED who meet these criteria.

This single site project was conducted using a convenience sample of ULH ED nurses. Participants were recruited by verbal communication, emails, and flyers that were placed on the staff bulletin boards and in the ED breakroom. Participation was completely voluntary. Participants were asked to complete the online survey, demographic and opinion questionnaire prior to the educational intervention, and a second survey after the educational intervention.

The online survey instructions included risks and benefits of participating in this project as well as the purpose of this project. Participants were asked to provide their email address for the purpose of linking pre-test and post-test data. The participants were informed that their confidentiality would be maintained through the storage of data on REDCap and de-identification of the data for analysis.

Data Collection

The overall process for implementing the intervention and measuring self-confidence as well as the risks and benefits included several steps. The 1st step asked the participants to complete the pre-intervention online survey, which consisted of a demographic questionnaire with opinion questions as well as two instruments to measure nurse participants' self-confidence and perceptions of the risks and benefits of FPDR. Risks and benefits were measured by using the Family Presence Risk-Benefit Scale (FPR-BS) and self-confidence was measured using the Family Presence Self-Confidence Scale (FPS-CS). Demographic questions included topics such as gender, ethnicity, and number of years working as a nurse. An announcement introducing the project and the link to the initial surveys was provided to participants one week prior to the January 28th staff meeting. The 2nd step included the educational intervention as described above, which was explained in more detail during the January staff meeting. The nurse participants were informed that the FPDR presentation would last approximately 10 minutes and would be made available to view online for the following four weeks. During the 3rd step, the gatekeepers reminded the ED nurses to complete the post-test survey after they viewed the online educational intervention during the four week time period following the January staff meeting. Two ED Shift Coordinators, who are direct liaisons between management and the ED staff and who are there six days a week during day, mid, and evening shifts, were the gatekeepers for this project. No specific training was necessary for their role in this project. These Unit Shift Coordinators were shown the online survey and the educational intervention so that they were familiar with the project topic. Their role was to remind nurses to view the educational intervention and complete the surveys before the deadlines.

Data were de-identified and manually entered directly into SPSS from REDCap, and statistical output was stored on an encrypted and password-protected laptop. The University of Louisville Health Information Portability and Accountability Act policies and procedures were followed. These measures ensured that confidentiality of nurse participants was maintained throughout the entirety of this project.

The total estimated time per ED nurse for the completion of pre-test survey and demographic questionnaire, the educational intervention, and post-test survey is approximately 35 minutes. There were currently 73 ED nurses employed at ULH at the time the two surveys and the online educational intervention were made available. The following equation summarizes the estimated time cost associated with participant time: $(35 \text{ minutes} \times 73 \text{ participants}) = 2,555$ minutes or 42.6 hours.

Measurement

The Family Presence Risk-Benefit Scale (FPR-BS) and The Family Presence Self-Confidence Scale (FPS-CS), two scales previously validated by Twibell et al. (2008), were administered to ED nurses to evaluate their self-confidence and to assess risks and benefits of offering FPDR (see Appendix C). The survey was given prior to the educational intervention to assess their initial FPDR self-confidence perception, and the same survey was given after the educational intervention to assess if the education gave nurses greater self-confidence in offering FPDR. A demographic and opinion questionnaire with open ended questions (see Appendix D) developed by the instrument author were included with the initial pre-test survey that measured age, gender, years of experience, etc. This questionnaire also gave nurses the opportunity to voice their personal beliefs regarding FPDR in an open-ended question and answer section that included questions asking nurse participants why they would or would not invite a family

member to be present during resuscitation, as well as any personal experiences they had with FPDR.

The instruments used for this project were specifically chosen because they have been previously validated by Twibell et al. (2008) and critiqued by expert nurses. Written permission was obtained from the instrument author for use of the scales and demographic questionnaire. To measure nurses' perception of the risks and benefits of family presence, the FPR-BS was used. This scale included 22 items with responses using a 5-point Likert scale and options ranging from strongly disagree (1) to strongly agree (5). Higher scores on this scale indicate nurses perceive more benefits than risks with FPDR. Items on this scale were reverse coded when appropriate. The Cronbach α reliability of the FPR-BS is .96 (Twibell et al., 2008).

To measure nurses' self-confidence for FPDR, the FPS-CS was used. This scale included 17 items with responses using a 5-point Likert scale with options ranging from not at all confident (1) to very confident (5). Higher scores on this scale indicate greater self-confidence with FPDR. Scores on the instruments are reported as a mean of the responses. Both instruments have been deemed valid based on scientific literature and both instruments have been reported reliable. The Cronbach α of the FPS-CS is .95 (Twibell et al., 2008).

Four items were deleted from the author's original FPR-BS because of low item-total correlations and inconsistent loading on the single factor (Twibell et al., 2008). Two of the questions were omitted from the author's original demographic questionnaire to fit the needs of this project. These include questions: (a) What type of unit do you work on most of the time and (b) Current nursing role (LPN or RN). These questions were omitted because this project was implemented only in the ED and there are no LPN's in the ED at ULH. One question was added to the demographic questionnaire as suggested from the instrument author: "What experience

have you had with CPR and family presence?" (K. Twibell, personal communication, October 18th, 2019). Two questions specific to this project were added to gain further knowledge regarding a FPDR policy at ULH: (d) Does ULH have a hospital-wide policy on FPDR and (e) Would a policy on FPDR help guide you in making the decision on FPDR?

Primary outcome variables relied on results from descriptive statistics from the two instruments used to evaluate nurses' perception of self-confidence and risks and benefits of FPDR prior to and after the educational intervention. Descriptive statistics were used to evaluate the percent of change between the baseline mean scores for the instruments and the mean scores of the instruments following the educational intervention. The desire of ED nurses to offer FPDR was measured by questions in the survey and by open-ended responses from the opinion questionnaire.

Statistical analysis was performed using IBM® SPSS Statistics (IBM Corp., Armonk, NY). Each instrument is scored the same: items from the two scales were summed, and the mean of the total ratings were calculated for all scale items, resulting in scores from 1 to 5. A Paired t-test was used to compare mean scores pre- and post- educational intervention on nurses' perceived self-confidence in offering FPDR using the FPS-CS. A separate paired t-test was used to compare mean scores pre- and post-educational intervention on nurses' perception of risks and benefits using the FPR-BS. Relationships between perceived risks, perceived benefits, and self-confidence instrument scores and demographic variables were examined by computing Pearson r correlations. Cronbach's α reliability was used to assess whether items are consistently measuring the same underlying ideas (Twibell et al., 2008).

Results

There were 73 nurses in the ED at ULH at the time this project was initiated. A total of 51 nurses participated in the study, and 16 of those nurses did not complete the post-test survey, leaving 35 nurses who completed both pre-test and post-test for a response rate of 48%. Only the data from the 35 nurses who completed both the pre-test and the post-test were used.

Over half (63%) of the nurses were between the ages of 25 and 39 (63%), 83% were female, 91% were Caucasian, and 74% possessed a baccalaureate degree, and most participants (60%) had between 1-5 years of experience (Table 1). Over 50% of the nurses have never invited a family member to be present during a resuscitation attempt, 31% have invited a family member to be part of a resuscitation at least once but less than 5 times, and 17% have invited family members more than 5 times. There currently is not a policy on FPDR at ULH; when participants were asked if ULH had a policy, 6% of nurse participants believed there was a FPDR policy in place, 20% did not believe there was a policy, and 74% were unsure. When asked if a policy on FPDR would help guide in decision-making on family presence, 77% said a FPDR policy to provide guidance when making a decision would be helpful (see Table 1).

The results revealed a statistically significant increase in post-test mean scores on both the FPS-CS and the FPR-BS, meaning that the mean scores were higher on both scales after the educational intervention. The pre-test mean score on the FPS-CS was 3.7 ($SD=.75$), the post-test mean score was 4.0 ($SD=.73$), and was statistically significant $t(34) = -3.202$, ($p = .003$). The Pearson r correlation was moderately strong ($r = .666$) and significant ($p = .000$). This result indicates that the nurses' perception of their self-confidence was higher after the educational intervention. The Cronbach's α reliability of the scale was .96. The pre-test mean score on the FPR-BS was 3.3 ($SD=.52$), the post-test mean score was 3.5 ($SD=.73$), and was statistically

significant $t(34) = -2.118$, ($p = .042$). The Pearson r correlation was moderately strong ($r = .520$) and significant ($p = .01$). This result indicates that nurses perceived more benefits to FPDR than risks after the educational intervention. The Cronbach's α reliability of the scale was .95.

Discussion

Interpretation

The data indicate that the educational intervention positively impacted the nurses as nurse participants perceived greater self-confidence with FPDR and believed there were more benefits and fewer risks to family presence than initially perceived prior to the educational intervention. More than 50% of the nurse participants have never invited a family member to be present during a resuscitation attempt, but the data indicated that they perceive greater confidence in making that invitation after the educational intervention. Applying Bandura's Social Cognitive Theory to these results, if nurses expect positive outcomes when asking family to be present during a resuscitation, they will be more likely to actually ask family to be present. The educational intervention improved nurse participant's self-confidence in offering FPDR, thus they believe more strongly in their ability to succeed and will be more willing to offer the option of being present.

The majority of the nurses were unsure if a policy existed and also thought a policy would help guide them in making the decision on FPDR in the future. Based on this author's experience working in this ED with the nurse participants and with the data gained from this project, nurses who have completed the intervention more confidently invite family member to be present during resuscitation, and perhaps will do so even more when there is a policy to reference for guidance and decision-making.

Limitations

There were limitations that interfered with this project. There were several nurses that completed the pre-test survey, but weren't able to complete the educational intervention and/or the post-test survey because they no longer worked in the ED at ULH. The pandemic also affected this project and caused staff to adjust their personal and professional schedules to accommodate the changes that were happening in the healthcare field as the pandemic spread. As a result, some of the focus was taken away from this project. Despite the pandemic, however, results were still significant and indicate the intervention made a difference.

The findings from this project apply to the nurses that took these surveys in the ED and thus cannot be generalized more broadly beyond this ED. There are many other health care professionals in the ED such as attending physicians, residents, respiratory therapists, techs, and phlebotomists that were not included in this project. Including these populations in the intervention may improve self-confidence, increase the perceptions and lower the risks of FPDR. The ED professional community (nurses, physicians, respiratory therapists, etc.) may thus be more willing to invite family into a resuscitation event. Another limitation lies in the small sample size; future projects should include a larger and more diverse group of participants.

Conclusion

The creation of the Family Presence Taskforce by ULH will need to be implemented for the sustainability of this project. This taskforce is needed to drive change of practice and implementation of FPDR and to continue the long-term aim of a hospital-wide policy on FPDR.

In 2009, the Emergency Nurses Association (ENA) developed clinical guidelines for family presence as an option during resuscitation that meets the family's psychological needs in

a time of crisis (ENA, 2012). The 2018 ENA Position Statement Committee released the following position statement for resuscitative decisions in the emergency care setting:

(1) Emergency nurses respect patient's autonomy, dignity, and right to self-determination in resuscitative decisions, (2) Emergency nurses collaborate with other healthcare professionals regarding resuscitative decisions and interventions, (3) Emergency nurses advocate for advance care planning, educate patients and their families on planning options, and verify documentation of code status in the healthcare record, (4) Emergency nurses support a patient and family-centered care approach to healthcare decisions, (5) Emergency nurses support FPDR if the family desires to be present, and (6) Emergency nurses participate in the development, implementation, and evaluation of resuscitative decision policies and protocols.

Based on this evidence-based, professional organization statement, and because ULH is a level one trauma center with the opportunity for multiple resuscitations in 24-hour period, a ULH FPDR policy would provide patients and their staff the standard of care set forth by the ENA, which would provide patients with the best possible care during a serious health crisis.

The data from this project has directly impacted the willingness to bring FPDR to ULH's ED. Management asked this author to write a response to the question: Describe how your organization currently promotes the practice of family at the bedside in the ED as defined in the ENA family presence Clinical Practice Guideline (CPG). The response included information from this quality improvement project and was used for submission for the ENA Lantern award. "The ENA Lantern Award recognizes emergency departments that demonstrate exceptional and innovative performance in leadership, practice, education, advocacy, and research" (ENA, 2020). Management has also directed this author to write clinical guidelines on FPDR and to assist with

the implementation of this process. After the clinical guidelines are written and approved, the next steps are to create the Family Presence Taskforce that will aid in the implementation of FPDR.

This quality improvement project will be assessed for submission to a scholarly nursing journal that disseminates the results of quality improvement projects (e.g. *Journal of Doctoral Nursing Practice* and *Journal of Emergency Nursing*).

References

- Al-Mutair, A., Plummer, V., & Copnell, B. (2011). Family presence during resuscitation: A descriptive study of nurses' attitudes from two Saudi hospitals. *British Association of Critical Care Nurses, 17*, 90-98.
- Andersen, L. W., Holmberg, M. J., Berg, K. M., Donnino, M. W., & Granfeldt, A. (2019). In-hospital cardiac arrest: A Review. *JAMA, 321*(12), 1200–1210.
<https://doi.org/10.1001/jama.2019.1696>
- Bandura, A., & National Inst of Mental Health (1986). *Prentice-Hall series in social learning theory. Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc.
- Bandura, A. (1999). Social cognitive theory: An agentic perspective. *Asian Journal of Social Psychology, 2*(1), 21-41.
- Basol, R., Ohman, K., Simones, J., & Skillings, K. (2009). Using research to determine support for a policy on family presence during resuscitation. *Dimensions in Critical Care Nursing, 28*, 237–247.
- Emergency Nurses Association (2012). Clinical Practice Guideline: Family presence during invasive procedures and resuscitation. https://www.ena.org/docs/default-source/resource-library/practice-resources/cpg/familypresencecpg3eaabb7cf0414584ac2291feba3be481.pdf?sfvrsn=9c167fc6_12
- Emergency Nurses Association (2018, September 1). Position statement: Resuscitative decisions in the emergency care setting. <https://www.ena.org/docs/default-source/resource-library/practice-resources/position-statements/resuscitativemedicaldecisions>

Emergency Nurses Association (2020, July 23). ENA lantern award.

<https://www.ena.org/about/awards-recognition/lantern>

Flanders, S. & Strasen, J. (2014). Review of evidence about family presence during resuscitation.

Critical Care Nursing Clinics of North America, 26, 533-550.

Harris, P.A., Taylor, R., Payne, J., Gonzalez, J., & Conde, J.G. (2009). Research electronic data capture (REDCap). A metadata-driven methodology and workflow process for providing translational research informatics support. *Journal of Biomed Informatics*, 42, 377-382.

Howlett, S., Alexander, A., & Tsuchiya, B. (2010). Health care providers' attitude regarding family presence during resuscitation of adults: An integrated review of literature. *Clinical Nurse Specialists*, 24, 161-174.

Jabre, P., Belpomme, V., Azoulay, E., Line J., Bertrand, L., Lapostolle, F., Tazarourte, F., Bouilleau, G., Pinaud, V., Broche, C., Normand, D., Baubet, T., Ricard-Hibon, A., Istria, J., Beltramini, A., Alheritiere, A., Assez, N., Nace, L., Vivien, B...Turi, L. (2013.) Family presence during cardiopulmonary resuscitation. *New England Journal of Medicine*, 368, 1008-1016.

Jabre, P., Belpomme, V., Azoulay, E., Line J., Bertrand, L., Lapostolle, F., Tazarourte, F., Bouilleau, G., Pinaud, V., Broche, C., Normand, D., Baubet, T., Ricard-Hibon, A., Istria, J., Beltramini, A., Alheritiere, A., Assez, N., Nace, L., Vivien, B...Turi, L. (2014). Offering the opportunity for family to be present during cardiopulmonary resuscitation: 1-year assessment. *Intensive Care Medicine*, 40, 981-987.

Leske, J., McAndrew, N., Brasel, K., & Feetham, S. (2017). Family presence during resuscitation after trauma. *Journal of Trauma Nursing*, 24, 85-96.

Melnyk, B.M. & Fineout-Overholt, E. (Eds.) (2015). Rating system for the hierarchy of

- evidence for intervention/treatment questions. In *Evidence-based practice in nursing & healthcare: A guide to best practice (3rd ed.)*(p. 11). Wolters Kluwer Health.
- Meyers, T., Eichhorn, D., Guzzetta, C., Clark, A., Klein, J., Taliaferro, E., & Calvin, A. (2000). Family presence during invasive procedures and resuscitation: The experience of family members, nurses, and physicians. *American Journal of Nursing, 100*, 32-43.
- Mortelmans L., Van Broeckhoven V., Van Boxstael S., De Cauwer H., Vaefaille L., Van Hellemond P., Van Colen S., & Cas, W. (2010). Patients' and relatives' view on witnessed resuscitation in the emergency department: A prospective study. *European Journal of Emergency Medicine, 17*, 203-207.
- Powers, K. & Candela, L. (2016). Family presence during resuscitation: Impact of online learning on nurses' perception and self-confidence. resuscitation. *American Journal of Critical Care Nursing, 25*(4).
- Powers, K. (2017). Educational interventions to improve support for family presence during resuscitation. *Dimensions of Critical Care Nursing, 37*, 210-216.
- Robinson, S., Campbell-Hewson, G., & Prevost, T. (1998). Effect of witnessed resuscitation on bereaved relatives. *The Lancet, 35*(2), 9143.
- Soleimanpour, H., Tabrizi, J.S., Jafari Rouhi, A., Golzari, S.E., Mahnoodpour, A., Mehdizadeh Esfanjani, R., & Soleimanpour, M. (2017). Psychological effects on patient's relatives regarding their presence during resuscitation. *Journal of Cardiovascular and Thoracic Research, 9*, 113-117.
- Tomlinson, K. R., Golden, I. J., Mallory, J. L., & Comer, L. (2010). Family presence during adult resuscitation: A survey of emergency department registered nurses and staff attitudes. *Advanced Emergency Nursing Journal, 32*(1), 46–58.

Tudor, K., Berger, J., Polivka, B., Chlebowy, R., & Thomas, B. (2014). Nurses' perception of family presence during resuscitation. *American Journal of Critical Care Nurses*, 23, 88-96.

Twibell R.S., Craig S, Siela D, Simmonds S, & Thomas C. (2015). Being there: Inpatients' perceptions of family presence during resuscitation and invasive cardiac procedures. *American Journal of Critical Care*, 24, 108-115.

University of Louisville Hospital (2020, July 23). About us.

<https://uoflhospital.org/about-uofl-hospital>

Zavotsky K.E., McCoy J., Bell G., Hausman K., Joiner J., Macoux K.K., Magarelli K, Mahoney, K., Maldonado, L., Milloria, A., Tamburri, L.M., & Tortajada, D. (2014). Resuscitation team perceptions of family presence during CPR. *Advanced Emergency Nursing Journal*, 36, 325-334.

Appendix A

Melnik Levels of Evidence

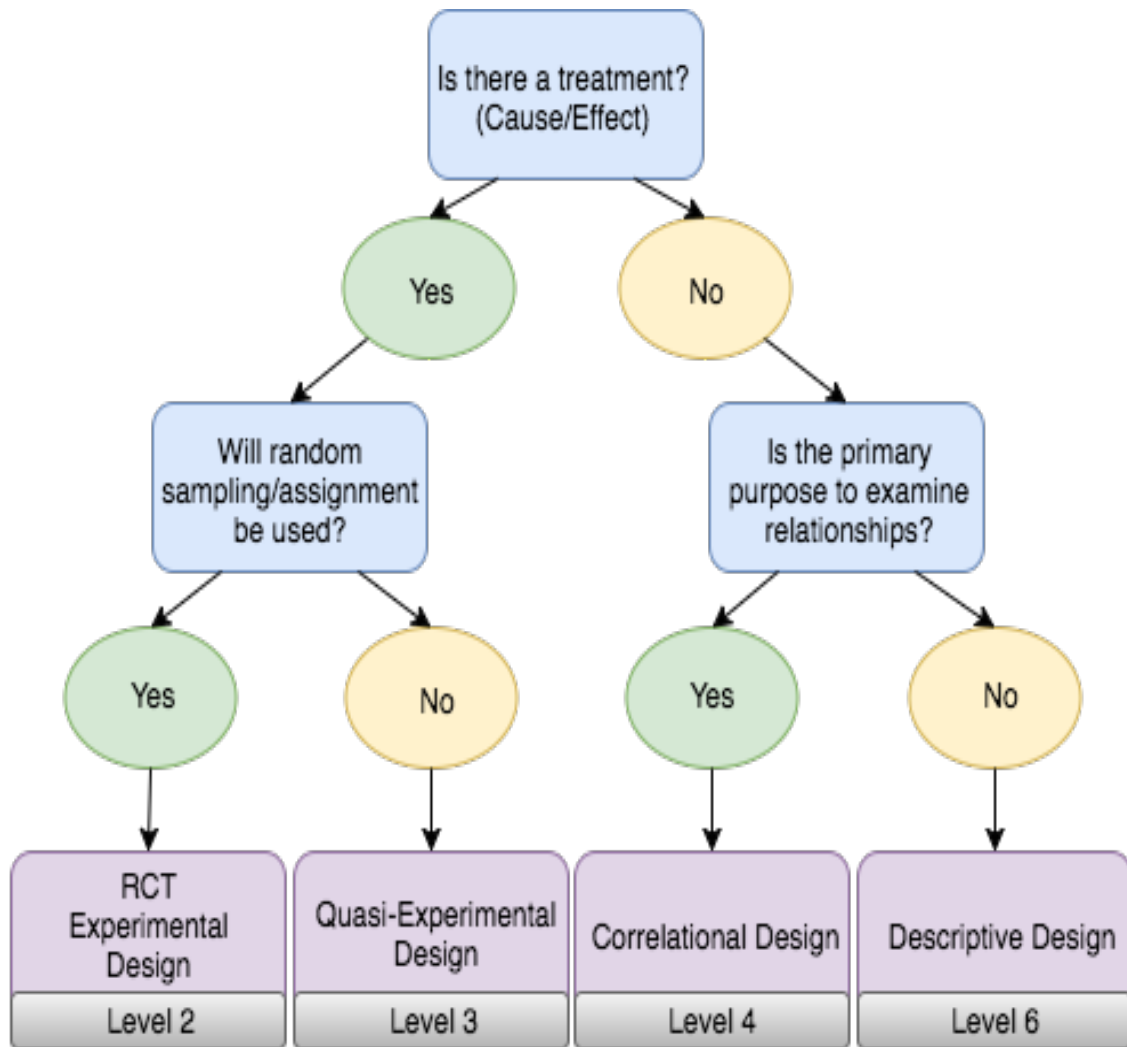


Figure A1- Adapted from Melnyk & Fineout-Overholt, 2015, p. 11.

Appendix B

Letters of Approval

Erin Riebel <Erining@ulh.org>

Tue, Nov 5, 2019, 5:58 AM

to me ▾

Hi! I'm so sorry for the late response! I read your email and spoke with frank. I think this project will be fine :)
You can use either office to keep the lock box.
Let me know if you need anything from me
Thanks!

Erin Riebel BSN, RN, CEN
Director, Emergency Services, SANE, Emergency Psychiatric Services

UofL Hospital
530 S. Jackson Street
Louisville, KY 40202

O: 502-681-1379
C: 502-599-5388
E: erining@ulh.or

Letter of approval from the Director of Emergency Services

From: "Twibel, Kathryn" <rtwibel@bsu.edu>
Subject: Re: Family Presence During Resuscitation
Date: October 18, 2019 at 2:31:00 PM EDT
To: "Molchen, Jessica Layne" <jessica.molchen@louisville.edu>

Jessica,

I am excited to hear about your project, and I am pleased that you are considering the use of our FPDR scales in your work. You have permission to use the tools Family Presence Risk-Benefit Scale and the Family Presence Self-confidence Scale in your DNP project.

Attached is the complete version of the tool we used. Some of the items are reverse scored, as noted. The Risk-Benefit Scale consists of items 1-26. As reported in the published article, three risk-benefit items (on the first page of the tool) were deleted due to the way they functioned on the factor analysis. The items came out of our qualitative work and we believed they were important, but they did not work consistently with the other items. Items 27-43 compose the self-confidence scale.

The items from 44 to the end were other items we did not report on in the AJCC article. Feel free to use them as you wish. One suggestion I would make is to ask the respondents what experience they have had with CPR and family presence. That is one item I wish we would have included.

Thank you for your willingness to cite our work. It would be ideal if you could name the original tools in any of your publications and cite the 2008 AJCC publication.

I wish you well in your endeavor. I will be anxious to read your published work! If I can be of any further assistance, please feel free to email any time. I have a colleague who wants to attend U of L for her DNP!

Renee

~~Renee Twibel~~, PhD, RN, CNE

Letter of approval from the author of the instruments and demographic questionnaire

Mandi Walker

November 5, 2019 at 9:32 AM

Re: DNP Project: Family Presence During Resuscitation

[Details](#)

To: Duffy, Jessica Layne, Cc: Erin Riebel

 New contact info found in this email: Mandi Walker mandiwa@ulh.org[add...](#) 

Hi Jessica,

We will need your full IRB proposal for review by the Research Council. We can do this concurrently with your IRB submission, and approve pending IRB approval. Once you have your proposal finalized, please send it to me to process for review by the committee. Thanks!

Mandi

Mandi D. Walker DNP, RN-BC, CCRN-K, NEA-BC
Director of Professional Practice
UofL Hospital and Brown Cancer Center
(502) 217-5258

Letter of tentative approval from ULH Nursing Education and Research Department

Appendix C

Instruments (Survey)

Nurses' Perceptions of Family-Witnessed Resuscitation

Across the nation, health care professionals, patients and families are debating the issue of having family members present when a loved one is being resuscitated. As an RN at University of Louisville Hospital, your opinions about this matter are of interest to us. Completing this questionnaire is **voluntary**. **Please do not put your name on the survey.**

Definition: Family-witnessed resuscitation means one or more family members are present in the room while a loved one is being resuscitated in an effort to sustain life.

Please circle the number that best represents your opinion.		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	Family members should be given the option to be present when a loved one is being resuscitated.	1	2	3	4	5
2.	Family members will panic if they witness a resuscitation effort. (reverse)	1	2	3	4	5
3.	Family members will have difficulty adjusting to the long term emotional impact of watching a resuscitation effort. (reverse)	1	2	3	4	5
4.	The resuscitation team may develop a close relationship with family members who witness the efforts, as compared to family members who do not witness the efforts.	1	2	3	4	5
5.	If my loved one were being resuscitated, I would want to be present in the room.	1	2	3	4	5
6.	Patients do not want family members present during a resuscitation attempt. (reverse)	1	2	3	4	5
7.	Family members who witness unsuccessful resuscitation efforts will have a better grieving process.	1	2	3	4	5
8.	Family members will become disruptive if they witness resuscitation efforts. (reverse)	1	2	3	4	5
9.	Family members who witness a resuscitation effort are more likely to sue. (reverse)	1	2	3	4	5
10.	The resuscitation team will not function as well if family members are present in the room. (reverse)	1	2	3	4	5
11.	Family members on the unit where I work prefer to be present in the room during resuscitation efforts.	1	2	3	4	5

12.	The presence of family members during resuscitation efforts is beneficial to patients.	1	2	3	4	5
Please circle the number that best represents the extent to which you agree or disagree with the following statements: The presence of family members during resuscitation efforts.....		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
13.	is beneficial to families.	1	2	3	4	5
14.	is beneficial to nurses.	1	2	3	4	5
15.	is beneficial to physicians.	1	2	3	4	5
16.	should be a component of family-centered care.	1	2	3	4	5
17.	will have a positive effect on patient ratings of satisfaction with hospital care.	1	2	3	4	5
18.	will have a positive effect on family ratings of satisfaction with hospital care.	1	2	3	4	5
19.	will have a positive effect on nurse ratings of satisfaction in providing optimal patient and family care.	1	2	3	4	5
20.	will have a positive effect on physician ratings of satisfaction in providing optimal patient and family care.	1	2	3	4	5
21.	is a right that all patients should have.	1	2	3	4	5
22.	is a right that all family members should have.	1	2	3	4	5
Please read each numbered item below and circle the number to indicate how confident you are that you could perform the listed behavior during a resuscitation effort with family members present.						
		Not at all Confident	Not Very Confident	Some what Confident	Quite Confident	Very Confident
1.	I could communicate about the resuscitation effort to family members who are present.	1	2	3	4	5
2.	I could administer drug therapies during resuscitation efforts with family members present.	1	2	3	4	5
3.	I could perform electrical therapies during resuscitation efforts with family members present.	1	2	3	4	5
4.	I could deliver chest compressions during resuscitation efforts with family members present.	1	2	3	4	5
5.	I could communicate effectively with other health team members during resuscitation efforts with family members present.	1	2	3	4	5

6.	I could maintain dignity of the patient during resuscitation efforts with family members present.	1	2	3	4	5
7.	I could identify family members who display appropriate coping behaviors to be present during resuscitation efforts.	1	2	3	4	5
8.	I could prepare family members to enter the area of resuscitation of their family member.	1	2	3	4	5
	Please read each numbered item below and circle the number that indicates how confident you are that you could perform the listed behavior during a resuscitation effort with family members present.	Not at all Confident	Not Very Confident	Some what Confident	Quite Confident	Very Confident
9.	I could enlist support from attending physicians for family presence during resuscitation efforts.	1	2	3	4	5
10.	I could escort family members into the room during resuscitation of their family member.	1	2	3	4	5
11.	I could announce family member's presence to resuscitation team during resuscitation efforts of their family member.	1	2	3	4	5
12.	I could provide comfort measures to family members witnessing resuscitation efforts of their family member.	1	2	3	4	5
13.	I could identify spiritual and emotional needs of family members witnessing resuscitation efforts of their family member.	1	2	3	4	5
14.	I could encourage family members to talk to their family member during resuscitation efforts.	1	2	3	4	5
15.	I could delegate tasks to other nurses in order to support family members during resuscitation efforts of their family member.	1	2	3	4	5
16.	I could debrief family after resuscitation of their family member.	1	2	3	4	5
17.	I could coordinate bereavement follow-up with family members after resuscitation efforts of their family member, if required.	1	2	3	4	5

Appendix D

Demographic and Opinion Questionnaire

Please select the answer that is true of you.

1. If you were a patient who was being resuscitated, would you want your family members to be present in the room?

Yes
 No

2. Have you ever been present in the room during the resuscitation of one of your family members?

Yes
 No

3. How many times have you invited a family member to be present during a resuscitation attempt?

Never
 Less than five times
 More than five times

4. On what unit were you working the last time that you invited a family member to be present during a resuscitation attempt?

Emergency Department
 Critical Care Unit
 Non-Critical Care Inpatient Unit
 Not Applicable
 Other _____

5. Who should make the decision about family presence during resuscitation efforts? Choose all that apply.

Patient (beforehand)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Nurse	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Physician	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Family	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Other	_____	

6. Who is the BEST one to make the decision about family presence during resuscitation efforts? Choose one.

- Patient (beforehand)
- Family
- Nurse
- Physician

7. Should the decision about family presence be a part of an advanced directive authorized by the patient?

- Yes
- No

8. Does ULH have a hospital-wide policy on family presence during resuscitation (FPDR)?

- Yes
- No
- Unsure

9. Would a policy on FPDR help guide you in making the decision on FPDR?

- Yes
- No

**Please select the option that best describes YOUR:
(Recall that you may omit any item that you wish)**

10. Years of experience in nursing

- Less than 1 year
- 1 – 5 years
- 6 – 10 years
- 11 – 20 years
- More than 20 years

11. Highest nursing degree completed

- Associate Degree in Nursing
- Baccalaureate Degree in Nursing
- Master's Degree in Nursing
- Doctoral Degree in Nursing

12. Gender

- Male
- Female

13. Age

- 18-24 years
- 25-39 years
- 40-55 years
- Over 56 years

14. Do you hold a specialty nursing certification?

- Yes (please list _____)
- No

15. Do you hold membership in a professional nursing organization?

- Yes
- No

16. Ethnicity

- African-American
- Asian
- Caucasian
- Hispanic
- Native American – Eskimo
- Pacific-Islander
- Other

17. What do you believe is your area of clinical expertise? _____

18. The main reason I **would not** invite a family member into a code is

19. The main reason I **would** invite a family member into a code is:

20. What experience have you had with CPR and family presence?

21. In the space below or on additional pages, please share with us any other opinions, stories or perspectives about family-witnessed resuscitation.

Table 1*Participants' Characteristics*

Characteristic ^a	No.	%
Age		
19-24 years	7	20
25-39 years	22	63
40-55 years	3	9
56 years and Older	3	9
Gender		
Male	6	17
Female	29	83
Ethnicity		
Caucasian	32	91
Pacific Islander	1	3
Native American-Eskimo	1	3
Other	1	3
Level of Education		
Associate Degree in Nursing	8	23
Baccalaureate Degree in Nursing	26	74
Master's Degree in Nursing	1	3
Years of Experience		
Less than 1 year	2	6
1-5 years	21	60
6-10 years	8	23
11-20 years	3	9
More than 20 years	1	3
Number of times invited family to be present during resuscitation		
Never	18	51
Less than 5 times	11	31
More than 5 times	6	17
Does ULH have a policy on FPDR? ^b		
No	7	20
Yes	2	6
Unsure	26	74
Would a policy help guide you in making a decision on FPDR? ^b		
No	8	23
Yes	27	77

^a Because of rounding, not all percentages equal 100.

^b Added by DNP Student

Table 2*Evidence of Hierarchy*

Level of Evidence		Article #1	Article #2	Article #3	Article #4	Article #5	Article #6	Article #7	Article #8	Article #9
I	Evidence from a systematic review or meta-analysis of all relevant, randomized, controlled trials or evidence-based clinical practice guidelines based on systematic reviews of RCTs						X			
II	Evidence obtained from at least one properly designed, randomized, controlled trial				X					X
III	Evidence obtained from well-designed controlled trials without randomization	X		X		X				
IV	Evidence obtained from well-designed case control and cohort studies							X		
V	Evidence from systematic reviews of descriptive and qualitative studies		X			X				
VI	Evidence from a single descriptive or qualitative study								X	
VII	Evidence from opinion of authorities and/or reports of expert committees									

Adapted from Melnyk & Fineout-Overholt, 2015

Table 3*Evidence Synthesis*

Author(s), Year	Research Purpose	Design/ Method	Sample Size/Setting	Measures/ Tools	Findings	Level of Evidence
Zavotsky et al., 2014	To describe multidisciplinary care providers' understanding of and perceived barriers to family presence during CPR	Quantitative, exploratory, descriptive study that utilized survey methodology	n = 588 (19.6% response rate) All members of the code resuscitation teams for adult and pediatric from Robert Wood Johnson University Hospital and Bristol-Myers Squibb Children's Hospital	A modified survey tool used previously in research was emailed to all eligible members of code teams with encouragement to participate. It consisted of a three-part, 22-item Likert scale	The survey results, overall, suggest that team members have generally positive attitudes and beliefs related to family presence	III
Meyers et al., 2000	To examine the attitudes, benefits, and problems expressed by families and health care providers involved in FPDR	Descriptive Non-experimental qualitative	Convenience sample of 96 health care providers	Surveys, observations, and interviews were conducted	96% of nurses supported FPDR	V
Jabre et al., 2013	To determine whether offering a relative the choice of observing CPR might reduce the likelihood of PTSD-related symptoms	Prospective, cluster-randomized	n = 408, 239 given option to witness CPR. 266 in the group given opportunity to witness CPR, 304 in group not offered to witness CPR Fifteen prehospital emergency medical service units in France Units were randomly assigned to systematically offer family member opportunity to observe CPR or to follow standard practice	A depression Scale (HADS) measured proportion of relatives with PTSD-related symptoms A psychologist asked relatives to answer a structured questionnaire by telephone.	Relatives who did not witness CPR had symptoms of anxiety and depression more frequently than those who witnessed CPR FPDR did not interfere with medical efforts	III
Jabre et al., 2014	To determine the psychological consequences of observing CPR at 1-year point	Prospective, cluster-randomized	n = 408, 239 given option to witness CPR.	Psychologist (blinded to group) contacted family member by phone, used the Impact of Event Scale, Hospital Anxiety and Depression Scale, and Inventory of Complicated Grief, and structured diagnosis of major depression tool (MINI)	At 1 year, control group (did not witness) had significantly more signs of PTSD than intervention group	II

Soleiman-pour et al. ,2017	To study the psychological effect of FPDR to those who were offered the intervention	Interventional, Quasi-experimental Random assignment into two Groups: Relatives invited to be present at bedside during resuscitation and those not invited (control group)	n = 133 Among them 74 individuals went to intervention and 59 to control group	After 90 days, the subjects were contacted by telephone and asked to complete a questionnaire: Hospital Anxiety and Depression Scale (HADS) and the Impact of Event Scale	80% relatives wanted to be present during CPR 72% of control group members believed if they were present during CPR they would be able to better cope with their stress	III
Powers, 2017	To evaluate the effect of education support for FPDR	Systemic review	16 articles met eligibility criteria	No tools/measurements were used	Study finding demonstrated educational intervention can improve support for FPDR as well as intent to offer it as an option	I
Basol et al., 2009	Determine health care personnel attitudes and beliefs toward family presence during CPR before they wrote a policy	Descriptive correlational study	1,402 employees surveyed; 625 responses	16-item Family Presence and Support: Staff Assessment Survey	If their family member was ill, 53.9% indicated that they wanted the option to be present during resuscitation.	IV
Tudor et al., 2014	Explore the nurses' experience with resuscitation, perceptions of the benefits and risks of having family presence.	Descriptive, with a cross sectional survey design	Convenience sample of 154 nurses	63 item survey that included 2 previous validated scales	38.4% of nurses has previously invited a family member to be present during resuscitation	VI
Robinson et al., 1998	Explore if family want to be present during resuscitation and if witnessing resuscitation had any adverse psychological effects	Randomized control trial	25 families witnessed resuscitation	Families were either given the option to be present during resuscitation or were not given the option and taken to the waiting room Anxiety, depression, and grief questionnaire	There were no reported adverse psychological effects among family members that witnesses resuscitation. Those that decided to witness resuscitation were satisfied with their decision	II