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Resuscitation Team Perceptions of Family Presence During CPR

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Abstract
The literature supports family presence during cardiopulmonary resuscitation (CPR) and its many perceived benefits for patients and their families. It also suggests that, overall, health care professionals are supportive of this practice. There have not been any published studies to date that have looked at the perception of family presence from the multidisciplinary resuscitation or code team's perspective. The purpose of this study was to describe the multidisciplinary care provider's understanding and perceived barriers of family presence during CPR in an academic medical center. This study is a quantitative, exploratory, descriptive study that utilized survey methodology. The sample included all members of an urban academic medical center's resuscitation response team. The study findings reveal that, overall, code team members feel that family members should be allowed to remain at the bedside during CPR but that challenges exist including education deficits and mixed feelings that may result from family presence; the study participants caring for neonates and children were more favorable to family presence during CPR than their adult counterparts. Barriers remain related to family presence during resuscitation. Education is needed for all members of the health care team to facilitate collaborative changes in resuscitation practices. Education should include information regarding institutional policies, methods for incorporating family members into the code process, and interventions to support the psychosocial needs of family members.
Key words: CPR, family presence, resuscitation

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TO SOME, IT MAY SEEM counterintuitive to allow family members of deathly ill patients to observe while health care providers attempt to save their loved ones' life, but there is a wealth of evidence that supports this practice. This evidence not just outlines benefits to patients and their families, but also for the staff, and team members who are managing the resuscitation. Barriers persist, and these warrant more research.

REVIEW OF THE LITERATURE

Over the last 25 years, hospital environments and practices have moved toward improving incorporation of family members into the care of the patient. Family presence during cardiopulmonary resuscitation (CPR) remains challenging. Some authors suggest that inviting family presence during CPR is a nurse-driven practice change (Biban, Soffiati, & Santuz, 2009; MacLean et al., 2003; Mian, Warchal, Whitney, Fitzmaurice, & Tancredi, 2007). Others highlight the need for multidisciplinary support from all members of the resuscitation team to generate true practice change through continued education, behavioral changes, and policy development (Ellison, 2003; Jarvis, 1998; Kingsnorth et al., 2010; Kumar, 2008). The American Association of Critical-Care Nurses (2004), the Emergency Nurses Association (2005), and the American Heart Association (2005) stand firmly in support of family presence during CPR, and evidence suggests that the majority of family members want the option to be present during the resuscitation of their loved ones (Leung & Chow, 2012). Many health care professionals have mixed feelings about this practice (Bassler, 1999; Doolin, Quinn, Bryant, Lyons, & Kleinpell, 2011; Meyers et al., 2000). There is substantial variation in the practice of offering family presence (Howlett, Alexander, & Tsuchiya, 2010).

Variations in allowing family presence often stem from health care professionals' perceptions of the benefits and barriers of this practice. In Knott and Kee's (2005) qualitative study, the perceived benefits to family presence were facilitating the family's decision regarding the resuscitative efforts and helping provide closure for the family. Oman and Duran (2010) found that family members did not interfere with the care of the patient, nor was team communication negatively affected. Benefits such as the ability to say goodbye to the loved one, the ability to preserve the patient's dignity, and giving family members a sense of control were described by Fulbrook, Latour, and Albarran, (2007), Jarvis (1998), McClement, Fallis, and Pereira (2009), Mangurten et al. (2005), and Pasquale, Pasquale, Baga, Eid, and Leske (2010). Perceived barriers to family presence include increased legal ramifications or malpractice, disruption of resuscitation efforts, and an increased stress of staff or inability of staff to choose if the situation was appropriate for family members to be present (Ganz & Yoffe, 2012; Nykiel et al., 2011). In addition, emergency department (ED) staff at a Level I trauma center described how family presence caused personalization of the patient and therefore staff members felt it was more difficult to perform resuscitation (Davidson, Buenavista, Hobbs, & Kracht, 2011). Clift (2006) and Thacker and Long (2010) explored the need for providing advocacy and support for spiritual and emotional needs as well as decision making for end-of-life choices.

Several studies documented the disparities in attitude toward family presence among members of the multidisciplinary team of health care professionals (Egging et al., 2011; McClenathan, Torrington, & Uyehara, 2002; Mian et al., 2007). Meyers et al. (2000) discovered that differences in attitudes can exist within specialties. Sacchetti, Carraccio, Leva, Harris, and Lichenstein (2000) did not find differences in the views of nurses and physicians. Studies show that when more invasive procedures were performed, there was a decrease in the acceptance of family presence (Fulbrook et al., 2007; Ganz & Yoffe, 2012). Leung and Chow (2012) reported that the majority of the hospital personnel surveyed were opposed to the

presence of family members during resuscitation and this was related to the kinds of barriers they perceived.

Variation in health care professionals' attitudes in support of or opposition to family presence during CPR may be attributed to their individual experience and exposure to the practice. These findings were supported by research from Mian et al. (2007), Sacchetti et al. (2000), and Beckman et al. (2002), and, more recently, Feagan and Fisher (2011). Sacchetti et al. (2000) indicate that greater exposure to family presence influenced attitudes in a positive way for all health care providers. Mitchell and Lynch (1997) demonstrated that health care professionals who are less experienced in resuscitation are the most opposed to family presence, a finding supported by Fulbrook et al. (2007), Mitchell and Lynch (1997), Twibell et al. (2008), Bassler (1999), and Ellison (2003). Ellison (2003) and Twibell et al. (2008) report a significant positive relationship between education and certification and positive nurses' attitude toward family presence.

The more experience that staff has with family presence, the more likely they are to support it in their practice (Basol, Ohman, Simones, & Skillings, 2009; Ellison, 2003; MacLean et al., 2003). Bassler (1999) and Ellison (2003) found that nurses in the ED are more likely to endorse family presence than critical care, telemetry, or medical-surgical nurses. This may be due to the fact that they are more experienced in resuscitation efforts.

Most recently, Jabre et al. (2013) reported that relatives who observed CPR experienced less symptoms related to posttraumatic stress disorder, anxiety, and depression than those who did not. They also reported that when family members witnessed CPR, it did not affect resuscitation characteristics, patient survival, or the level of emotional stress in the medical teams or medicolegal claims.

In summary, the literature supports family presence during CPR and its many perceived benefits for patients and their families. The question remains whether attitudes in support of family presence relate to all members of a resuscitation response team in all areas of practice or whether there is variation within each specialty area. There have not been any studies to date that have looked at the perception of family presence from the multidisciplinary resuscitation or code team's perspective.

PURPOSE OF THE STUDY

The purpose of this study was to describe the multidisciplinary care provider's understanding and perceived barriers of family presence during CPR in an academic medical center. Because the term "resuscitation" can encompass many different activities, the study team defined it as "artificial cardiac and respiratory support for a person who has no pulse or respirations" (Tomlinson, Golden, Mallory, & Comer 2010, p. 49).

METHODS

Design, Sample, and Setting

Survey methodology was used in this exploratory descriptive study. All members of the code resuscitation teams for adult and pediatrics (also known as "code blue" for adults and "code white" for pediatrics from Robert Wood Johnson University Hospital [RWJUH] and Bristol-Myers Squibb Children's Hospital) were invited to participate in the voluntary survey. Robert Wood Johnson University Hospital is a Magnet-recognized 600+-bed urban academic medical center, with designations as a Level I trauma center, Level II pediatric trauma center, and comprehensive stroke center located in central New Jersey. The code blue/code white team consists of one or more of each of the following: chaplain, clinical care technician (CCT)/pediatric care technician (PCT), registered nurse (RN), advanced practice nurse (APN), physician, pharmacist, patient equipment staff, safety and security officer, ECG technician, and certified respiratory therapist (CRRT). Team members were asked to complete an online survey titled "RWJUH Family Presence During Cardiopulomary Resuscitation (CPR) Survey" within a

30-day period during August 2012. The study was approved by the appropriate institutional review board and carried out in accordance with the ethical standards set forth in the Helsinki Declaration of 1975.

Measures/Procedures

The subjects were invited to complete the RWJUH Family Presence During Cardiopulmonary Resuscitation (CPR) Survey by e-mail, flyers, and verbal request of the members of the research team. There were approximately 3,000 employees who were eligible and invited to participate in the study. The tool was modified with permission by the research team from previous work done by Nykiel et al. (2011). The modifications to the tool were completed by members of the code blue/code white response team who have had extensive experience in resuscitation across the life span. The modifications were done to better capture the participation of entire team, not simply the physician and nursing staff. The tool was administered electronically.

The tool has 22 questions and was categorized into three parts (see Figure 1). The first part of the tool is the demographic section. The second part of the tool utilized a Likert scale to determine what attributes of family presence were supported. The third part of the tool consisted of questions that pertained to barriers and benefits related to family presence as well as a specific knowledge assessment question regarding the hospital policy.

Methods of Analysis

Data analysis was performed with SPSS software, Version 21. Descriptive statistics, means, medians, frequencies, and percentages were used to show the distribution of patient demographics. Nonparametric methods were used to address issues of small group sizes and research design. Kruskal–Wallis' test was used for multiple group comparisons on Likert items; the chi-square test was used for all other analyses. Cramer's ϕ coefficient was used as a measure of effect size.

RESULTS

Demographics

Three thousand employees were invited to participate and 588 responded, which yielded a 20% return rate. The distribution by job classification and specialty is described in Supplemental Digital Content Tables 1 (available at: http://links.lww.com/AENJ/A16) and 2 (available at: http://links.lww.com/AENJ/A17), respectively.

The survey results, overall, suggest that team members have generally positive attitudes and beliefs related to family presence (see Supplemental Digital Content Table 3, available at: http://links.lww.com/AENJ/A18). For example, the majority of respondents (between 57% and 68%) agreed that family presence during CPR is appropriate across all patient age groups, including infants/newborns, children, adolescents, young adults, adults, and the elderly.

With respect to providing psychosocial/emotional support to family members during CPR, respondents generally agreed (mean score of 4 on a scale of 1–5) that providing such support is a component of their job/practice (see Supplemental Digital Content Table 4, available at: http://links.lww.com/AENJ/A19). Respondents, on average, reported slight agreement ($M = 3.6$) that they are comfortable providing this support to family members (see Supplemental Digital Content Table 5, available at: http://links.lww.com/AENJ/A20). Respondents also reported slight agreement ($M = 3.4$) that appropriate psychosocial/emotional care is provided to family members during CPR (see Supplemental Digital Content Table 6, available at: http://links.lww.com/AENJ/A21).

Respondents reported slight agreement ($M = 3.6$) that family members should have the option to be present at the patient's bedside during situations that require CPR (see Supplemental Digital Content Table 7, available at: http//links.lww.com/AENJ/A22). Overall, they did not believe family presence had hampered their job performance ($M = 2.5$). Most respondents believed that family presence

Age in years: _____ 18–25 _____ 26–30 _____ 31–40 _____ 41–50 _____ > 50 Sex: Male_____ Female_____
Job classification: _____ APN _____ CCT/PCT_____ CRRT_____ Chaplain
_____ EKG Technician _____ MD _____ Patient Equipment _____ Pharmacist _____RN _____Security
Specialty: (Choose only one, only complete if you are an RN, MD): _____ Adolescents _____ Adult Emergency Department_____ Adult Intensive Care _____Adult Medical Surgical _____ Adult Oncology _____ Adult Perioperative____NICU _____ Pediatrics _____ Pediatric Intensive Care _____ Pediatric Emergency Department_____ Pediatric Oncology _____ Perinatal _____ Pediatric Perioperative _____ Outpatient _____
If you are an RN or an APN are you nationally certified in your area of specialty: _____yes_____ no
Do you hold any of the following: (Check all that apply): ____ Advanced Cardiac Life Support ____ Advanced Trauma Life Support _____ Basic Life Support ____ Neonatal Resuscitation Program ____ Pediatric Advanced Life Support
_____ Trauma Nurse Core Curriculum
What is your highest level of education: _____ High School/GED _____ Associates degree _____ Bachelor's degree _____ Graduate _____ MD/DO _____ PhD _____ other: _____
Years of health care experience: _____ <2 years _____ 3–5 years ____ 6–10 years _____ 11–15 years ____ 16–20 years_____ > 20 years
Shift you primarily work: _____ Days _____ Evening _____ Nights ____ Rotating
I believe that family presence during CPR is appropriate if the patient is in the following age group(s) (choose all that apply): _____ infant/newborn (< 1 year) _____ child (1–12 years) _____ adolescent (13–18 years) _____young adult (26–64 years) _____ adult (26–64 years) _____ elderly (> 65 years)
Have you participated in a treatment situation in which a family member was present during the performance of CPR?_____ yes ____ no
Do you believe that family presence benefits to yourself, the code team members, family members or the patient?_____ no ____ yes (if yes please check all that you think apply) ____ decreased family distress ____ closure ____ comfort for the patient ____ increased dignity _____ more professional behavior of the code team _____ patient advocacy ____ family acceptance of the outcome _____ family centered care _____ facilitates the grieving process _____patient/family satisfaction_____ other: _____
Do you have any personal barriers that you feel prevent family presence? _____ no _____ yes (if yes please check what you think the barriers are, check all that apply): _____ fear of physical harm _____ too emotional for me _____ family safety_____ distraction/interruption of care _____ family emotional distress _____ feelings of clinical inadequacy of self _____ performance anxiety _____ feelings of clinical inadequacy of the code team member(s) ____ family's reluctance to accept the decision to stop CPR _____ other: _____
Do you believe there are barriers at RWJUH that prevent family presence during CPR? _____ no ____ yes (if yes please check what you think the barriers are, check all that apply): _____ lack of space ____ legal issues _____ interruption of care _____ increased stress of staff _____ lack of education_____ objections of the staff _____lack of identified support person other: _____
_____
Do you know if there is an existing RWJUH policy to guide family members being present during cardiopulmonary resuscitation? _____ Yes _____No

	Strongly Disagree				Strongly Agree
Providing psychosocial and/or emotional support to family members during CPR is part of my job/practice.	1	2	3	4	5
I feel comfortable providing psychosocial/emotional support to family members during CPR.	1	2	3	4	5
I feel appropriate psychosocial/emotional care is provided for family members of patients undergoing CPR.	1	2	3	4	5
I believe family members should have the option to be present at the patient's bedside during situations that require CPR.	1	2	3	4	5
My job performance has been hampered by family presence during CPR.	1	2	3	4	5
If my family member was ill or injured I would want the option to be present during CPR.	1	2	3	4	5
If I was critically ill or injured I would want the option to have my family present during CPR.	1	2	3	4	5

Figure 1. Robert Wood Johnson University Hospital Family Presence During Cardiopulmonary Resuscitation (CPR) Survey. APN = advanced practice nurse; CCT/PCT = clinical care technician/pediatric care technician; CRRT = certified respiratory therapist; NICU = neonatal intensive care unit; RN = registered nurse. From "Evidencebased practice and family presence: Paving the path for bedside nurse scientists" by L. Nykiel, R. Denicke, R. Schneider, K. Jett, S. Denicke, K. Kunish, . . . J. A. Williams, 2011, *Journal of Emergency Nursing, 37,* pp. 9.16. Adapted with permission.

has important benefits, particularly to families (72%), patients (59%), and themselves (50.9%). However, less than half (41%) believed that family presence benefits code team members (see Supplemental Digital Content Table 8, available at http://links.lww.com/AENJ/A23).

In general, most respondents (83%) did not feel they had any personal barriers that would prevent family presence. Slightly more than half of respondents (54%) did not believe that there were barriers at RWJUH that would prevent family presence. Of those who did report barriers at RWJUH, some of the most commonly reported barriers were lack of space and lack of designated staff assigned to families.

When data were examined by job classification and area of specialization, significant group differences emerged. On items related to providing psychosocial/emotional support to family members during CPR, including the belief that providing this support is part of their job and their comfort with providing psychosocial/emotional support, the scores of APNs, chaplains, RNs, MDs, and CCT/PCTs indicated agreement (mean score of 3 or higher) whereas the scores of CRRTs, pharmacists, safety and security officer, and patient equipment staff indicated disagreement (mean score of less than 3).

With regard to whether family members should have the option to be present at the patient's bedside during CPR, APNs had the strongest agreement ($M = 4.5$), followed by chaplains ($M = 4.1$), MDs ($M = 3.7$), RNs ($M = 3.6$), CCT/PCTs ($M = 3.4$), and CRRTs ($M = 3.3$). Pharmacists were neutral ($M = 3$) and patient equipment staff ($M = 2$) and safety and security officers ($M = 2$) expressed disagreement. Significant differences for this item were also noted by area of specialization, with pediatrics having the strongest agreement ($M = 4.3$), followed by adult ($M = 3.6$), other/not applicable ($M = 3.6$), and neonatal intensive care unit (NICU)/perinatal ($M = 3.4$).

Significant differences by specialization were also found with respect to the perceived benefits of family presence. Pediatric team members perceived benefits to themselves (65.2%), followed by NICU/perinatal (51.6%), adult (49.8%), and other/not applicable (42%). A similar pattern was observed in benefits to family members, patients, and code team members.

The survey results revealed across all groups that the majority of team members (80%) were not aware of an existing family presence policy at RWJUH (see Supplemental Digital Content Table 9, available at http://links.lww.com/AENJ/A24).

DISCUSSION

The purpose of this study was to describe the understanding and perceived barriers of family presence during CPR in an academic medical center. The analysis of the data shows that barriers persist. The study revealed that the majority of respondents had positive attitudes and beliefs about family presence during CPR, with some differences among the specialty areas. It also revealed that the majority of respondents were not aware of an existing policy at RWJUH on family presence during CPR. Incorporation of family members into this complicated component of care may require ongoing identification of provider reluctance, establishment of educational priorities, and roles and responsibilities related to family-centered care.

Although the majority of respondents believed that family members should be allowed to remain during CPR, the study may have exposed an underlying challenge regarding educational deficits and the mixed feelings that may result from family presence. The need for family psychosocial support was recognized as part of the role of most providers, but the adequacy of that support was found to be lacking. This reveals an opportunity for education and role modeling with regard to culturally appropriate family support during resuscitation.

Acceptance of family presence was tepidly agreed upon by providers and support staff, with APNs having the strongest opinion on

this issue. Family-centered care during resuscitation as a nurse-embraced issue could be driven by the APN group as a role model in an expanding care model. This study may have exposed underlying challenges regarding not only education but also the management of individual responses to the experience of having loved ones present at the bedside during resuscitation. The mixed feelings that were identified should be dealt with by interventions and plans derived from the outcomes of the research. This has the potential to be crucial for those who experience emotional distress and distraction due to family presence because these variables may affect the quality of the resuscitation, although many of the respondents did not feel that this would be the case.

For the age-specific categories, those providers who practice with infants and children were likely to consider family presence to be appropriate whereas the respondents from the adult and elderly specialty areas were in less favor of family presence.

The statistically significant results for the caregivers of infants and children may represent an immersion of family-centered practice not unexpected within these specialties. The respondents from this area involve family members in all aspects of care. There may be an opportunity for mentoring the more adult-focused specialties to operationalize family inclusion. This provides an opportunity for educating the multidisciplinary care providers by utilizing the practice model at RWJUH that has the family at the core.

Education was identified as a major need by all levels of study participants, particularly related to the existence and content of the hospitals Family Presence during CPR policy (80% did not know that the policy existed). The responses from participants in various specialties did relate different degrees of experience and involvement with family members during resuscitation. This information should be applied in this institution to develop education that uses the expertise of participants to champion the challenge to offer inclusion of family members in all resuscitative experiences if they wish to take part.

Recognition of the perceived barriers by different categories of caregivers in addition to the mixed feelings that were demonstrated by various patient care specialties offers an exceptional opportunity for comprehensive education, fact finding, and optimal quality improvement within this institution.

Implications

The findings from this study reveal that code team members believe that family members should be allowed to remain at the bedside during CPR, but challenges exist including education deficits and ambivalent feelings that may result from family presence. Education is needed for all members of the health care team to facilitate collaborative changes in resuscitation practices. Education should include content of institutional policies, methods for incorporating family members into the code process, and interventions to support the psychosocial needs of family members. The facilitator of this education must be knowledgeable about resuscitative measures and family support practices. It would also be beneficial to cultivate an environment where all members of the health care team are expected to facilitate family presence during codes.

Findings from this study also raise the question of whether the identified barriers are actual or perceived. Of the participants who reported institutional barriers, 47.7% identified interruption of care as a barrier; however, subjects who had participated in a code where family members were present did not feel that their job performance was hampered by family presence. Staff objection is another identified barrier that perhaps indicates the perception, but not necessarily the reality, that subjects' colleagues do not support family presence, especially in view of the findings that most subjects reported support of family presence. Sharing results from this study with the participants may alter that perception.

Further research is needed to examine factors that will successfully facilitate family presence during resuscitation. This could include identifying ways in which the personal and institutional barriers to family presence described in this study can be overcome. It would also be valuable to measure the effect of barrier reduction on health care providers' perception of family presence.

Limitations

The main limitations of this study include a nonprobability sampling method and small group sizes. The study used a convenience sample and had only a 20% response rate from eligible participants. This study was also restricted to one institution, which limits generalization of the results. Because of these limitations, the results presented here should be interpreted with caution. Finally, it is important to remember that all reported findings are correlational rather than causal. The patient equipment and safety and security staff had fewer than five respondents, so as a separate group, the data could not be analyzed.

CONCLUSION

Although there is significant national interest in the effects of patient- and family-centered care and partnering with families in health care, this research exemplifies the much-needed education of staff to support families as partners in care in the most critical of times. Clearly, on the basis of this research, staff members support the notion of family presence during resuscitation, yet concerns remain with the potential of disruption of care and the effects of family presence on their job performance. Although traditional education techniques seem to partially address staff's concerns and level of comfort with family presence during resuscitation, new and innovative educational techniques need to be developed.

Involving family members who have been present during the resuscitation of their loved one and sharing those experiences through storytelling might dispel some of the myths surrounding family presence and help staff feel more comfortable with family presence during resuscitation. The literature clearly supports the benefits to family members of their presence during CPR. This research exemplifies the significant variations in views of different members of the health care team's understanding and perceived barriers of the family presence. The health care environment is changing to one of patient- and family-centered care. Direct care nurses can be the catalysts to lead the change to truly incorporate family-centered care during resuscitation.

REFERENCES

American Association of Critical-Care Nurses. (2004). *Family presence during CPR and invasive procedures*. Retrieved March 1, 2013, from http://www.aacn.org/wd/practice/docs/family_presence_during_CPR_11-2004.pdf

American Heart Association. (2005). Part 2: Ethical issues. *Circulation*, *112*, IV6–IV11.

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*(5), 237–247.

Bassler, P. (1999). The impact of education on nurses' beliefs regarding family presence in a resuscitation room. *Journal for Nurses in Staff Development*, *15*(3), 126–131.

Beckman, A. W., Sloan, B. K., Moore, G. P., Cordell, W. H., Brizendine, E. J., & Boie, E. T. the P5 (Parental Presence during Painful Pediatric Procedures) Research Group. (2002). Should parents be present during emergency department procedures on children and who should make that decision? A survey of emergency physicians and nurse attitudes. *Academic Emergency Medicine*, *9*(2), 154–158.

Biban, P., Soffiati, M., & Santuz, P. (2009). Neonatal resuscitation in the ward: The role of nurses. *Early Human Development*, *85*, S11–S13.

Clift, L. (2006). Relatives in the resuscitation room: A review of benefits and risks. *Paediatric Nursing*, *18*(5), 14–18.

Davidson, J. E., Buenavista, R., Hobbs, K., & Kracht, K. (2011). Identifying factors inhibiting or enhancing family presence during resuscitation in the emergency department. *Advanced Emergency Nursing Journal*, *33*(4), 336–343.

Doolin, C. T., Quinn, L. D., Bryant, L. G., Lyons, A. A., & Kleinpell, K. A. (2011). Family presence during cardiopulmonary resuscitation: Using evidence based knowledge to guide the advanced practice nurse in developing formal policy and practice guidelines.

Journal of the American Academy of Nurse Practitioners, *23*, 8–14.

Egging, D., Crowley, M., Arruda, T., Proehl, J., Walker-Cillo, G., Papa, A., . . . Walsh, J. (2011). Emergency nursing resource: Family presence during invasive procedures and resuscitation in the emergency department. *Journal of Emergency Nursing*, *37*, 469–473.

Ellison, S. (2003). Nurses' attitudes toward family presence during resuscitative efforts and invasive procedures. *Journal of Emergency Nursing*, *29*, 515–521.

Emergency Nurses Association. (2010). Position statement: Family presence during invasive procedures resuscitation in the emergency department. Retrieved March 1, 2013, from http://www.ena.org/SiteCollectionDocuments/Position%20Statements/FamilyPresence.pdf

Feagan, L. M., & Fisher, N. J. (2011). The impact of education on provider's attitudes toward family-witnessed resuscitation. *Journal of Emergency Nursing*, *37*, 231–239.

Fulbrook, P., Latour, J., & Albarran, J. (2007). Paediatric critical care nurses' attitudes and experiences of parental presence during cardiopulmonary resuscitation: A European study. *International Journal of Nursing Studies*, *44*, 1238–1249.

Ganz, F., & Yoffe, F. (2012). Intensive care nurses' perspectives of family-centered care and their attitudes toward family presence during resuscitation. *Journal of Cardiovascular Nursing*, *27*(3), 220–227.

Howlett, M. S., Alexander, G. A., & Tsuchiya, B. (2010). Health care providers' attitudes regarding family presence during resuscitation of adults: An integrated review of the literature. *Clinical Nurse Specialist*, *24*(3), 161–174.

Jabre, P., Belpomme, V., Azoulay, E., Jacob, L., Bertrand, L., Lapostolle, F., . . . Adnet, F. (2013). Family presence during cardiopulmonary resuscitation. *The New England Journal of Medicine*, *368*, 1008–1018.

Jarvis, A. (1998). Parental presence during resuscitation: Attitudes of staff on a paediatric intensive care unit. *Intensive and Critical Care Nursing*, *4*, 3–7.

Kingsnorth, J., O'Connell, K., Guzzetta, C. E., Edens, J. C, Atabaki, S., Mecherikunnel, A., . . . Brown, K. (2010). Family presence during trauma activation and medical resuscitations in a pediatric emergency department: An evidence-based practice project. *Journal of Emergency Nursing*, *36*(2), 115–121.

Knott, A., & Kee, C. C. (2005). Nurses' beliefs about family presence during resuscitation. *Applied Nursing Research*, *18*(4), 192–198.

Kumar, D. W. (2008). Open your doors to family presence during codes. *Nursing Critical Care*, *3*(5), 51–52.

Leung, N. Y., & Chow, S. (2012). Attitudes of healthcare staff and patients' family members towards family presence during resuscitation in adult critical care units. *Journal of Clinical Nursing*, *21*, 2083–2093.

Mangurten, J. A., Scott, S. H., Guzzetta, C. E., Sperry, J. S., Vinson, L. A., Hicks, B. A., . . . Scott, S. M. (2005). Family presence: Making room. *American Journal of Nursing*, *105*(5), 40–48.

MacLean, S. L., Guzzetta, C. E., White, C., Fontaine, D., Eichhorn, D. J., Myers, T. A., . . . Desy, P. (2003). Family presence during cardiopulmonary resuscitation and invasive procedures: Practices of critical care and emergency nurses. *Journal of Emergency Nursing*, *29*(3), 208–221.

McClement, S., Fallis, W., & Pereira, A. (2009). Family presence during resuscitation: Canadian critical care nurses' perspectives. *Journal of Nursing Scholarship*, *41*(3), 233–240.

McClenathan, B., Torrington, K., & Uyehara, C. (2002). Family member presence during cardiopulmonary resuscitation: A survey of US and international critical care professionals. *Chest*, *122*(6), 2204–2211.

Meyers, T. A, Eichhorn, D. J., Guzzetta, C. E., Clark, A. P., Klein, J. D., 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*(2), 32–43.

Mian, P., Warchal, S., Whitney, S., Fitzmaurice, J., & Tancredi, D. (2007). Impact of a multifaceted intervention on nurses' and physicians' attitudes and behaviors toward family presence during resuscitation. *Critical Care Nurse*, *27*(1), 52–61.

Mitchell, M., & Lynch, M. (1997). Should relatives be allowed in the resuscitation room? *Journal of Accident and Emergency Medicine*, *14*, 366–369.

Nykiel, L., Denicke, R., Schneider, R., Jett, K., Denicke, S., Kunish, K., . . . Williams, J. A. (2011). Evidence-based practice and family presence: Paving the path for bedside nurse scientists. *Journal of Emergency Nursing*, *37*, 9–16.

Oman, K. S., & Duran, C. R. (2010). Health care provider's evaluations of family presence during resuscitation. *Journal of Emergency Nursing*, *36*(6), 524–533.

Pasquale, M. A., Pasquale, M. D., Baga, L., Eid, S., & Leske, J. (2010). Family presence during trauma resuscitation: Ready for primetime? *The Journal of Trauma*, *69*(5), 1092–1100.

Sacchetti, A., Carraccio, C., Leva, E., Harris, R., & Lichenstein, R. (2000). Acceptance of family member presence during pediatric resuscitations in the emergency department: Effects of personal experience. *Pediatric Emergency Care*, *16*(2), 85–87.

Thacker, K., & Long, J. (2010). Family presence in final moments: A precious gift. *Journal of Critical Nursing*, *27*(1), 38–42.

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.

Twibell, R. S., Siela, D., Riwitis, C., Wheatley, J., Riegle, T., Bousman, D., . . . Neal, A. (2008). Nurses' perceptions of their self-confidence and the benefits and risks of family presence during resuscitation. *American Journal of Critical Care*, *17*(2), 101–111.