

## Family-witnessed resuscitation – experience and attitude of German intensive care nurses

### **Authors:**

***Stefan Köberich***, *Clinical Nurse Specialist*

RN, CCRN, Dipl. Pflegepäd. (FH), MScN

Dept. of Cardiology/Angiology, Dept. of Cardiovascular Surgery, Dept. of Pneumology  
University Medical Center Freiburg,  
Freiburg, Germany

***Arnold Kaltwasser***, *Nurse Educator*

CCRN, certified Nurse Educator

School of Nursing

District Hospital Reutlingen

Reutlingen, Germany

***Oliver Rothaug***, *Critical Care Nurse*

RN, CCRN

Dept. of Anaesthesiology, Emergency and Intensive Care Medicine

University Medical Centre Göttingen,

Göttingen, Germany

***John Albarran***, *Reader in Cardiovascular critical Care Nursing*

RN, DPhil, MSC BSc (Hons)

University of the West of England

Faculty of Health and Life Sciences

Bristol, United Kingdom

### **Address for correspondence:**

Stefan Köberich

University Medical Center Freiburg

Dept. of Cardiology/Angiology

Hugstetter Str. 55

79106 Freiburg

Germany

Phone: +49(0)761/270-3765

E-Mail: stefan.koeberich@uniklinik-freiburg.de

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## **Background**

Family-witnessed resuscitation (FWR) has remained a controversial subject for more than two decades. Since the first published report by Doyle and co-workers (1987) a number of international studies have investigated the effects of observing resuscitation measures on family members (Belanger and Reed, 1997, Meyers et al., 2000, Robinson et al., 1998) on patients (McMahon-Parkes et al., 2009, Eichhorn et al., 2001, Duran et al., 2007) as well as the attitudes towards FWR of nurses, doctors and other health care providers (Mortelmans et al., 2009, Günes and Zaybak, 2009, Walker, 2008, Compton et al., 2006).

Even though it is increasingly documented that family members describe the different ways in which their experience with witnessing resuscitation was helpful and beneficial, globally opinions among healthcare professions seem divided (Demir, 2008, Duran et al., 2007, Grice et al., 2003, Meyers et al., 2000, Yanturali et al., 2005, Zakaria and Siddique, 2008, McClenathan et al., 2002). However, successful implementation of this concept seems to depend on several factors, such as confidence of staff being observed perform Cardiopulmonary Resuscitation (CPR). Conversely, there is a body of evidence suggesting that health care professionals with experience of FWR have a more favourable predisposition towards this practice (Macy et al., 2006, Twibell et al., 2008, Duran et al., 2007). Similarly, knowledge about the beneficial effects of FWR leads to a more approving attitudes (Bassler, 1999, Holzhauser et al., 2007, Norton et al., 2007).

Although international perspectives of critical care nurses towards FWR have been invaluable in offering an overview of trends and attitudes, they often fail to capture the impact of traditions, value systems and national cultural nuances (Badir and Sepit 2007). In Germany, research in this area has been confined to trauma surgeons (Kirchhoff et al., 2007) and Intensive care (n=116) and anaesthesia (n=11) nurses (Köberich, 2007). These two papers however illustrate differences in attitudes and experiences which may relate to methodological research design issues. While the European perspective of adult critical care nurses on FWR has been examined (Fulbrook et al 2005), the representation of German nurses was minimal, and therefore a study investigating their unique perceptions will increase understanding on the level of shared agreement of the subject of this inquiry.

## **Aims of the study**

To explore the attitude and experiences of German intensive care nurses towards FWR. The study investigates the following questions:

- What are the experiences of German intensive care nurses regarding FWR?
- What are the attitudes of German intensive care nurses towards FWR?

## **Sample**

A convenience sample of 394 intensive care nurses, who attended the 26th Reutlinger Fortbildungstage held in Reutlingen, Baden-Wuerttemberg, Germany during September 2008, were invited to participate in this study. This event is a well-established intensive care nursing congress based in the south of Germany.

## **Data collection**

During the congress a questionnaire and a covering letter of invitation were distributed to each delegate. The letter provided an explanation of the aim of the study, the most common terms within questionnaire and assured potential participants that their anonymity would be protected and that all data would be kept confidential.

The questionnaire, developed by Fulbrook and colleagues (Fulbrook et al., 2005,) was translated into German. It contains four sections: the first section collects biographical data, section two employs dichotomous questions to assess experiences with FWR, while the third section asks about the attitudes. This section comprises of 30 items and is further divided into three sub-sections (decision-making, processes and outcomes of FWR). Each statement is scored on a 5-Point-Likert-Scale ranging from 1 (strongly disagree) to 5 (strongly agree). After consultation and approval, a fourth section was added allowing delegates to write about any issue relating to study aims. After translation, the questionnaire was reviewed by two of the investigators (A.K., O.R.) for comprehensibility, accessibility and practicability.

To ensure a good response rate, during the coffee and meal breaks participants were encouraged to volunteer and participate in the survey. Two boxes were made available at the exit of the congress hall for the return of completed questionnaires. Voluntary consent

was assumed by delegates posting the questionnaire into the boxes provided. This study was approved by the ethical committee of the Albert-Ludwig University of Freiburg, Germany.

### **Data analysis**

Data were coded and entered into Statistical package for Social Science (SPSS Version 11.5.1). Descriptive statistics were used for analysing the data. Nominal scaled variables are displayed as numbers and percentages, interval scaled variables as mean values and standard deviations are included if normally distributed, otherwise these are displayed as median and range. Thematic analysis was applied to the qualitative written responses.

### **Results**

Out of a potential sample of 394 delegates a total of 166 returned the questionnaire giving a response rate of 42.1%.

#### *Demographical Data*

Fifty-nine percent of respondents were from the southern federal states of Germany, Baden-Wuerttemberg and Bavaria. A majority of nurses (n=113, 68.1%) were women and the mean age across the sample was 37 years (SD  $\pm$  8.9). Most participants indicated that they were working in interdisciplinary ICUs, had a median work experience of 16 years and were mostly involved in direct patient care (Table 1).

#### *Nurses' experiences*

A total of 70 (42.2%) had experiences of FWR, with 46 (65.7%) indicating that these had been negative. A total of 17 nurses (10.2%) had been approached by relatives to be present with their loved ones during CPR and only one (0.6%) had invited a family member to be at the bedside. Ten respondents (6%) reported having a policy or protocol in their unit (Table 2).

#### *Attitudes to family presence*

##### *Decision-making*

As illustrated in table 3, 112 (67.5%) participants disagreed or strongly disagreed that family members should be given the option to remain with their loved ones. A total of 91 (54.9%) did not want family members to be present, and 111 (66.9%) agreed that decisions on

allowing family members into the resuscitation room should be made in collaboration with medical staff.

A majority (n=116, 69.9%) were concerned that there could be problems relating to breaches of confidentiality during FWR and 104 (62.7%) were anxious that relatives might argue with the resuscitation team because they might misunderstand the need for specific life-saving interventions. Additionally, 110 (66.3%) disagreed that family members should be present during CPR so that they may be involved in decisions about their loved ones. Conversely, 57 (34.3%) nurses supported the notion that family members would be more likely to accept decisions to withdraw treatment if they were present (Table 3).

### *Process*

As seen in Table 4, a total of 132 (79.5%) either agreed or strongly agreed that family members could interfere with the resuscitation process. However only one third (n=55, 33.1%) felt that having family members would cause difficulties for the resuscitation team concentrating on CPR attempts. Three quarters (74.7%) did not consider that FWR should be standard practice and 63.2% believed that watching resuscitation attempts could be too distressing for relatives. A further 122 (73.5%) agreed that there should be a dedicated member of the resuscitation team whose only role is to look after the family. Additionally, half also (n=84, 50.6%) agreed that staffing levels were inadequate to support family members during resuscitation. Only 42 (25.3%) disagreed that bed areas are too small to have family members present during CPR while most (54.9%) agreed. Overall 102 (61.4%) disagreed that FWR was beneficial to patients (Table 4).

### *Outcomes*

Just over half of nurses (n=95, 57.3%) believed that family members could suffer from negative long-term emotional effects associated with FWR (Table 5). There was no difference in attitudes about whether FWR helped the grieving process when CPR was unsuccessful and half of the respondents (53.6%) were unsure being present would prolong emotional readjustment following the loss of loved one. A further 72 (43.3%) disagreed with the premise that FWR was important for family members, because if unsuccessful it allowed them to share the last moments with the patient. Interestingly, 101 (60.8%) believed that

FWR could help relatives to know that everything possible was done for the patient. Conversely a fear that FWR might increase the rate of legal actions or that resuscitation attempts may be unnecessary prolonged was shared by 72 (43.3%) and 90 (54.2%) of the respondents respectively. A modest number (n=66, 39.7%) believed that FWR helped to prevent family members developing wrong ideas of the resuscitation process. A further 62, (37.3%) perceived that FWR would have no effect on the bond between nurses and relatives, however 47 (28.3%) disagreed with this view and a similar number were unsure (Table 5).

### **Qualitative responses**

Responses to an invitation to share experiences or provide comments on issues relating to the study generated additional insights which are represented around four broad areas.

#### ◆ Individualised decision making

The data suggest that intensive care nurses recognised that decisions by family on whether to attend the resuscitation of a loved should be made on an individual basis and regularly reviewed. The following illustrate this:

*“It has to remain an individual decision and should not be standardised” (Nurse 35).*

*“The presence of family members should be decided depending on the situation and must be reconsidered constantly” (Nurse 43).*

Equally it was acknowledged that such decisions should be ideally taken in advance and in consultation with patient preferences:

*“Anyway, I can not imagine the presence of relatives during CPR without having talked to them about it in advance.” (Nurse 87)*

*“One should clarify with the patient and the relatives in advance what the will is when it comes to a CPR situation” (Nurse 151).*

#### ◆ Supporting family members

In terms of practicalities, participants suggested that FWR could be implemented into practice if key environmental, staff and spatial conditions were met. Nurses were specific in emphasising that the presence of family members during CPR must only take place when there is adequate support to escort and meet the relatives’ physical and emotional needs:

*“Presence of relatives (...) only with psychological supervision” (Nurse 47)*

*“By all means, a support of the relatives is important” (Nurse 56)*

*“If a relative is present, a person (whether a physician or a nurse) has to be accompany this person in this moment” (Nurse 98)*

For many however, the reality of their practice was that basic conditions for supporting family members in the clinical area were absent. Many nurses reported having low staffing levels, *“cramped rooms”* (Nurse 45) with limited space between each bed area.

*“Since our resuscitation team consists of two nurses and one doctor, there will not be always enough time to support the relatives” (Nurse 15)*

*“The support [of the relatives] is essential but due to staff reductions it is not possible, there is no vacant staff member” (Nurse 62)*

*“No nurse was left to look after the family e.g. his wife stood there stunned and later on screaming” (Nurse 60).*

◆ Physical and violent threats

Nurses also expressed fear that witnessing CPR could be too distressing for relatives and result in some uncomfortable and stressful scenarios for the resuscitation team. These attitudes were supported by personal experiences of nursing staff who described how on occasions family members who reacted badly became physically and verbally abusive and violent towards the resuscitation team.

*“Our resuscitation team was attacked physically twice by relatives” (Nurse 68)*

*“In my experience a lot of relatives respond with anger and aggression when they are present during CPR” (Nurse 79)*

Another nurse described the following situation:

*“The resuscitation process lasted for more than 3 hours, because the brother of the patient threatened the nurses and doctors verbally and called the whole family to the hospital. There was yelling and screaming; relatives walked in and out, so that one was hardly able to concentrate on the essentials. Even during the cardiac massage we were disturbed by the brother of the patient because he buckled over him. He*

*threatened us with murder and other things in case his brother wouldn't survive"*  
(Nurse 127)

◆ Involvement of families

On other occasions, family members became distressed and either fainted, vomited, screamed or disturbed other patients. Despite this, the data yielded accounts in which the presence of family members led to a positive experience for those involved. For example, three nurses described unique incidents where having parents present was helpful in managing the resuscitation process and in positively guiding decisions to terminate resuscitation.

*"He [the son] terminated the CPR also because he knew about the unfavourable prognosis which we didn't know. In this case the consultation of a relative was very helpful" (Nurse 45)*

*"CPR of a one year old child... Parents were present. After one hour the parents demanded for discontinuing the resuscitation – good experience" (Nurse 139)*

*"CPR of a mentally and physically disabled child – it was good that the mother was present und decided to terminate the CPR" (Nurse 163)*

## **Discussion**

This survey, which adopted a previously developed tool (Fulbrook et al., 2005), is the first to report the attitudes and experiences of adult German intensive care nurses towards FWR. However, unlike this earlier work, we also collected qualitative data to help enhance both the depth and comprehensiveness of the participants' experiences.

In regards to experiences of FWR, 42% of nurses stated they had been in situation when family members were present during resuscitation attempts of a loved one. This is similar to the 44% reported in an explorative internet-based study (Köberich, 2007) with German critical intensive care and anaesthesia nurses and to the results of other European studies. For example, 47% of European critical care nurses (Fulbrook et al., 2005) and 44% of cardiac nurses (Axelsson et al., 2008) reported experiences of family members witnessing the resuscitation of loved one, but higher than the 33% reported in Turkey (Badir and Sepit,



2007). It would therefore seem that FWR is not an infrequent occurrence in many European critical care settings.

With respect to self-reported experiences of relative's being present during the resuscitation of a loved one, only 20% reported this to have been positive (Table 2). This finding is slightly higher than previous data involving 58 German intensive and anaesthesia nurses with experience of family members present during CPR where only 11 (19%) had favourable experiences (Köberich, 2007). These figures are comparable to data from a survey of European cardiac nurses (Axelsson et al., 2008) where 23% of respondents experiences' of FWR were positive, but much lower when examined against 30% of Turkish critical care nurses (Badir and Sepit, 2007), and with the encounters of 53% of European critical care nurses (Fulbrook et al., 2005). Outside of Europe, Helmer et al. (2000) reported that 521 (64%) members from the Emergency Nurses Association indicated that their experience of FWR had been beneficial. Interestingly Kirchhoff and colleagues (2007) identified that 136 (81%) German trauma surgeons indicated having at least one positive experiences of FWR which contrasts with the responses of critical care nurses in the same country. One of the methodological difficulties with the above studies is a failure to disclose what constituted a positive, beneficial or negative experience. Consequently, the judgement of respondents in this study could have been swayed by a variety of organisational factors. For instance, many nurses recognised the importance of having a member of the nursing team who should be available to meet the family's needs, however participants often described shortages of experienced nurses which made it impossible for staff to support family members. This lack of human resources may adversely prejudice attitudes towards FWR.

In terms of decision making, nurses in this study rarely invited, or gave family members the option to be present to be at their loved one's bedside (see table 2). This might be due to the depth of concerns and presumed adverse effects relating to FWR as stated by 67.5% of nurses who were against the conceptual premise of FWR. Our participants' low level of enthusiasm for implementing, FWR maybe explained by absence of unit protocols or policies (Table 2). Absence of a protocol to support clinical staff during FWR may lead to an increased uncertainty how to behave and refusal to adopt this practice (Madden and Condon, 2007). Presumably lack of unit protocol or practice guideline may also explain why

nurses in this study, and arguably in others, were reluctant to offer invitation or make unilateral decisions over allowing family members to enter the resuscitation room and observe life-saving measures being performed on their loved-ones (see table 3). Cultural values within German healthcare system are largely paternalistic and this may likewise have affected the attitudes of respondents (Rehbock, 2005). Indeed, study participants felt their performance would suffer by being observed by family members regardless of the kind of activity being carried out on patients. This has been noted in the national practice of restricting visiting hours policy in many ICUs (Kuhlmann, 2004, Abt-Zegelin et al., 2005) and arguably this explain why family members may become demanding and mistrusting of healthcare. However, the anxieties reported with regard to being observed performing resuscitation are not unique and need to be given serious attention as they maybe influential on whether FWR is implemented within a clinical environment. One Canadian study that explored critical care nurses' experiences of FWR, suggested that a source of resistance among staff related to being observed perform CPR. Concerns over legal liability and fears that relatives may misconstrue the coping behaviours of staff were also core themes which could act as barriers in accepting the practice of FWR (McClement et al., 2009). Uneasiness regarding the potential increase in the rates of legal actions against the staff that might result from FWR was highlighted by 43%, and while this has been advanced as reason to refuse families the opportunity to be at the bedside (Grice et al., 2003, Mitchell and Lynch, 1997, Pafford, 2002, Redley and Hood, 1996) as yet there are no reports of a relative filing lawsuit against the resuscitation team.

Recent studies have addressed the potential for prolonging resuscitation measures and disrupting staff performance while family members are present. Dudley and co-workers (2009) investigated the time from hospital arrival to computerised tomography (CT) and resuscitation procedures among paediatric patients with and without parental presence. This prospective trial concluded that the presence of parents did not prolong time to CT or resuscitation completion when compared to situations when family members were absent. In contrast, Fernandez et al. (2009) compared second and third year medical student's performance during a simulated cardiac arrest with three different witness scenarios (no witness, quiet unobtrusive witness, and witness displaying overt grief). Time to deliver the first defibrillatory shock was longer (2.57mins; 1.77mins unobtrusive witness; 1.67mins no

witness) and total shocks delivered were lower in the presence of overt reaction witness when compared to other 'witness scenarios'. The authors conclude that the presence of family members may have a significant impact on staff performance regarding the time until first defibrillation, or numbers of shocks delivered. But these results were evident when compared to "no witness" and "over reaction witness" scenarios. There were no differences observed in scenarios with "no witness" or "quite witness". It is also important to emphasise that inexperienced clinicians may respond to a cardiac arrest differently and be more self-conscious than more seasoned practitioners.

Another source of apprehension as expressed by 70% related to breaches of confidentiality resulting from family members overhearing the patient's health being openly discussed. These concerns over violations of patients confidentiality has been well documented elsewhere (Badir and Sepit, 2007, Fulbrook et al., 2005). Recent work however, challenges this view and suggests that resuscitated and non-resuscitated patients claim to have no secrets from their families and understand that confidential issues about their health may need to be discussed in the presence of their families which in turn may assist them to participate or understand the decisions taken (Albarran et al., 2009, McMahon-Parkes et al., 2009).

With regard to processes, a majority of nurses feared that relatives would find the resuscitation procedures too distressing, and suffer with long-term emotional effects; there was also a view that either being present or sharing the last moments with a loved one was not beneficial to families (see table 4), however the basis for these objections is questionable. Robinson et al. (1998) for example conducted a randomized-controlled trial and demonstrated that the presence of family members during CPR was not associated with any long term psychological effects. Eichhorn et al. (2001) and more recently, McMahanon-Parkes et al. (2009) reported that patients identified that family members who were present could uniquely provide them with emotional support, comfort, maintain family bonds and act as brokers in translating medical information to their loved one. In a case control study design, involving resuscitated and non-resuscitated patients (n=61), 54% of participants believed that their family member would benefit from FWR and could understand that the team did everything to save them and help minimise any misconceptions about the overall

management (Albarran et al., 2009). Additionally, other data suggest that family members who take the opportunity to be present are unrepentant of their decision, if required would attend again, are unobtrusive, direct their attention on their loved one and do not suffer added difficulties with emotional adjustment or bereavement (Belanger and Reed, 1997, Holzhauser et al., 2006, Meyers, 2000). These studies also concluded that while resuscitation procedures evoked feelings of fear and distress among family members, their presence helped them accept the death when the outcome had been unsuccessful and to cope better during the grieving stages.

### **Limitation of the study**

The limitations of this study include the under representativeness of the sample as only delegates attending the Reutlinger Fortbildungstage, located in country's southern states were eligible to participate. It could reasonably be assumed that only those with interest in the topic participated and further skewing sample composition. The questionnaire did not provide opportunities for participants to elaborate on specific features of their experiences, written responses may therefore only represent those with the strongest convictions.

### **Implications and conclusion**

The data suggest that German intensive care nurses have a guarded attitude towards the concept of FWR. Their reservations are based in part on their experiences and perceptions about processes and outcomes of this practice, anxieties about being observed perform CPR and fears of legal prosecution. However, the reported attitudes and experiences in this study are not unique to Germany and as noted elsewhere, may be influenced by cultural values and societal traditions. Addressing these often reported anxieties and fears of critical care nurses requires a national campaign that embraces multiple educational strategies in order to demystify and reassure individuals regarding their conceptions of FWR. This may include appraising and increasing awareness of the existing research, simulation training techniques can also be designed to assist practitioners to overcome their fears and increase confidence with being observed and to learn how respond to challenging situations. The introduction of national guidelines or position statements on FWR is one way forward, but these need to be widely available and embedded as part of all cardiopulmonary resuscitation training programme curricula. Further research is need which explores the experiences of critical

care nurses and which examines both the key barriers to and successful approaches to the implementation of this practice in intensive care settings.

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**Table 1** : Demographic characteristics of study participants

|  | n (%)<br>(Sample n= 166)       |
|--|--------------------------------|
| Sex                                    |                                |
| Women                                  | 113 (68.1)                     |
| Men                                    | 52 (31.3)                      |
| n.s.                                   | 1 (0.6)                        |
| Age (years)                            | 37.0 ( $\pm$ 8.9) <sup>a</sup> |
| State                                  |                                |
| Baden-Wurtemberg                       | 81 (48.8)                      |
| Bavaria                                | 17 (10.2)                      |
| Northrhein-Westfalia                   | 14 (8.4)                       |
| Hesse                                  | 13 (7.8)                       |
| Lower Saxony                           | 10 (6.0)                       |
| Others                                 | 31 (18.7)                      |
| Area of practice                       |                                |
| Interdisciplinary ICU                  | 90 (54.2)                      |
| Medical ICU                            | 32 (19.3)                      |
| Surgical ICU                           | 18 (10.8)                      |
| Anaesthesia                            | 5 (3.0)                        |
| Emergency Department                   | 1 (0.6)                        |
| Others                                 | 14 (8.4)                       |
| Practice role                          |                                |
| Practice                               | 150 (90.4)                     |
| Management                             | 6 (3.6)                        |
| Education                              | 2 (1.2)                        |
| n.s.                                   | 6 (3.6)                        |
| Experience in nursing (years)          | 16 (1-37) <sup>b</sup>         |
| Experience in area of practice (years) | 10 (1-37) <sup>b</sup>         |

<sup>a</sup> Mean ( $\pm$  SD) <sup>b</sup> Median (Range)

Table 1: Baseline characteristics

Table 2: Nurses experience of Family Witnessed Resuscitation

|   | Yes<br>n (%) | No<br>n (%) |
|---|--------------|-------------|
| Have you experienced a situation in which family members were present during CPR?         | 70 (42.2)    | 96 (57.8)   |
| Has a family member ever asked you if they could be present during CPR?                   | 17 (10.2)    | 149 (89.8)  |
| Have you ever invited a family member to be present during CPR                            | 1 (0.6)      | 165 (99.4%) |
| Does your unit/ward have a protocol or policy document on family presence during CPR      | 10 (6.0)     | 156 (94.0)  |
| Have you had one or more positive experiences of family members being present during CPR? | 14 (20.0)*   | 56 (80.0)*  |
| Have you had one or more negative experiences of family members being present during CPR? | 46 (65.7)*   | 24 (34.3)*  |

(Legend: \* Applies to 70 participants with experience of FWR)

Table 3: Decision-making regarding the presence of family members during CPR (n=166)

|   | Strongly disagree<br>n (%) | Disagree<br>n (%) | Do not know<br>n (%) | Agree<br>n (%) | Strongly agree<br>n (%) |
|---|----------------------------|-------------------|----------------------|----------------|-------------------------|
| Family members should always be offered the opportunity to be with the patient during CPR. It should always be their decision                                 | 34 (20.5)                  | 78 (47.0)         | 25 (15.1)            | 26 (15.7)      | 3 (1.8)                 |
| Doctors want relatives to be present during CPR   | 53 (31.9)                  | 71 (42.8)         | 34 (20.5)            | 7 (4.2)        | 1 (0.6)                 |
| Nurses <b>do not</b> want relatives to be present during CPR  | 7 (4.2)                    | 40 (24.1)         | 28 (16.9)            | 65 (39.2)      | 26 (15.7)               |
| Nurses should have the responsibility for deciding if family members should be present during CPR   | 35 (21.1)                  | 55 (33.1)         | 33 (19.9)            | 34 (20.5)      | 9 (5.4)                 |
| Doctors are responsible for deciding if family members are allowed to be present during CPR   | 19 (11.4)                  | 58 (34.9)         | 29 (17.5)            | 46 (27.7)      | 14 (8.4)                |
| It should be the joint responsibility of all members of the resuscitation team to decide whether (or not) family members are allowed to be present during CPR | 12 (7.2)                   | 22 (13.3)         | 21 (12.7)            | 77 (46.4)      | 34 (20.5)               |
| There may be a problem of confidentiality in discussing details about the patient if family members are present during CPR                                    | 5 (3.0)                    | 27 (16.3)         | 18 (10.8)            | 83 (50.0)      | 33 (19.9)               |
| Because family members do not understand the need for specific intervention they are more likely to argue with the resuscitation team                         | 6 (3.6)                    | 23 (13.9)         | 33 (19.9)            | 74 (44.6)      | 30 (18.1)               |
| Family members should be present during CPR so that they can be involved in decisions   | 34 (20.5)                  | 76 (45.8)         | 23 (13.9)            | 30 (18.1)      | 3 (1.8)                 |
| If present during CPR, family members are more likely to accept decisions to withdraw treatment   | 12 (7.2)                   | 36 (21.7)         | 61 (36.7)            | 46 (27.7)      | 11 (6.6)                |

Table 4: Effect of presence of relatives during CPR on health care providers and family members (n=166)

|  | <b>Strongly disagree<br/>n (%)</b> | <b>Disagree<br/>n (%)</b> | <b>Do not know<br/>n (%)</b> | <b>Agree<br/>n (%)</b> | <b>Strongly agree<br/>n (%)</b> |
|--|------------------------------------|---------------------------|------------------------------|------------------------|---------------------------------|
| Family members are very likely to interfere with the resuscitation process   | 2 (1.2)                            | 13 (7.8)                  | 19 (11.4)                    | 87 (52.4)              | 45 (27.1)                       |
| Family members should not be present during CPR because it is too distressing for them   | 3 (1.8)                            | 24 (14.5)                 | 34 (20.5)                    | 60 (36.1)              | 45 (27.1)                       |
| Nursing and medical staff find it difficult to concentrate when relatives are watching   | 13 (7.8)                           | 66 (39.8)                 | 32 (19.3)                    | 40 (24.1)              | 15 (9.0)                        |
| The performance of the team will be positively affected due to the presence of family members  | 19 (11.4)                          | 74 (44.6)                 | 57 (34.3)                    | 15 (9.0)               | 1 (0.6)                         |
| During CPR the resuscitation team may say things that are upsetting to family members  | 1 (0.6)                            | 18 (10.8)                 | 14 (8.4)                     | 102 (61.4)             | 31 (18.7)                       |
| There are enough nursing staff to provide emotional support and remain with the family member during resuscitation                       | 32 (19.3)                          | 52 (31.3)                 | 20 (12.0)                    | 51 (30.7)              | 11 (6.6)                        |
| Most bed areas are too small to have a family member present during resuscitation  | 6 (3.6)                            | 36 (21.7)                 | 33 (19.9)                    | 66 (39.8)              | 25 (15.1)                       |
| It should not be normal practice for family members to witness the resuscitation of a family member                                      | 2 (1.2)                            | 23 (13.9)                 | 17 (10.2)                    | 78 (47.0)              | 46 (27.7)                       |
| If family members are present during CPR, there should be a member of the resuscitation team whose only role is to look after the family | 7 (4.2)                            | 26 (15.7)                 | 11 (6.6)                     | 64 (38.6)              | 58 (34.9)                       |
| Family presence during CPR is beneficial to the patient  | 48 (28.9)                          | 54 (32.5)                 | 51 (30.7)                    | 10 (6.0)               | 3 (1.8)                         |

Table 5: Outcome on family members and health care providers in case of relatives' presence during CPR (n=166)

|   | <b>Strongly disagree<br/>n (%)</b> | <b>Disagree<br/>n (%)</b> | <b>Do not know<br/>n (%)</b> | <b>Agree<br/>n (%)</b> | <b>Strongly agree<br/>n (%)</b> |
|---|------------------------------------|---------------------------|------------------------------|------------------------|---------------------------------|
| Family presence during CPR prevents family members developing distorted images or wrong ideas of resuscitation process                      | 5 (3.0)                            | 39 (23.5)                 | 56 (33.7)                    | 55 (33.1)              | 11 (6.6)                        |
| Family members will suffer negative long-term emotional effects if they are present during CPR  | 1 (0.6)                            | 16 (9.6)                  | 54 (32.5)                    | 74 (44.6)              | 21 (12.7)                       |
| Rates of legal action against staff will increase because, when present, family members may misunderstand the actions of resuscitation team | 3 (1.8)                            | 29 (17.5)                 | 62 (37.3)                    | 59 (35.5)              | 13 (7.8)                        |
| Family presence during CPR helps family members to know that everything is being done for the patient                                       | 3 (1.8)                            | 18 (10.8)                 | 44 (26.5)                    | 81 (48.8)              | 20 (12.0)                       |
| The resuscitation team are more likely to prolong the resuscitation attempt if a family member is present                                   | 4 (2.4)                            | 31 (18.7)                 | 41 (24.7)                    | 77 (46.4)              | 13 (7.8)                        |
| Family presence during CPR creates a stronger bond between family and nursing team.   | 10 (6.0)                           | 52 (31.3)                 | 57 (34.3)                    | 43 (25.9)              | 4 (2.4)                         |
| Family presence during CPR is not beneficial to the patient   | 3 (1.8)                            | 19 (11.4)                 | 64 (38.6)                    | 51 (30.7)              | 29 (17.5)                       |
| Family presence during CPR helps the family member with the grieving process, if the patient does not survive                               | 9 (5.4)                            | 37 (22.3)                 | 65 (39.2)                    | 42 (25.3)              | 13 (7.8)                        |
| Family presence during CPR prolongs emotional readjustment at the loss of the family member   | 4 (2.4)                            | 35 (21.1)                 | 89 (53.6)                    | 36 (21.7)              | 2 (1.2)                         |
| Family presence during unsuccessful CPR is important because it enables family members to share the last moments with the patient           | 17 (10.2)                          | 55 (33.1)                 | 35 (21.1)                    | 48 (28.9)              | 11 (6.6)                        |

### **What is known about the topic**

- Family-witnessed resuscitation is becoming a frequent event across many clinical settings
- Critical care nurses' attitudes towards family-witnessed resuscitation are often influenced by traditions, value systems and national cultural nuances but rarely reported
- The views of European cardiac and critical care nurses have been studied, but due to the heterogeneity of these populations the results may be skewed and relevance for individual countries may be questioned

### **What this paper adds**

- This study provides an analysis of the attitude towards and experience with the presence of family members during resuscitation of German intensive care nurses
- The data reveals that German intensive care nurses have an overall guarded attitude towards family-witnessed resuscitation
- German intensive care nurses in particular remain anxious over possible threats of violence and abuse from distressed relatives, aspects which have not been fully explored in the literature
- The availability of human, training and other resources may influence perceptions of staff