When patients die in the emergency department (ED), emergency physicians (EP) must disclose the bad news to family members. The death is often unexpected and the act of notification can be difficult. Many EPs have not been trained in the skill of communicating death to family members. This article reviews the available literature regarding ED death notification training and proposes future directions for educational interventions to improve physician communication in ED death disclosure. [West J Emerg Med 2013;14(2):181-185.]
patient death on EP well being. Almost 150 academic EPs were surveyed. Common emotional responses to patient death were sadness (60%) and disappointment (38%). Most EPs had experienced physical responses to patient death with the most common being insomnia (37%) and fatigue (14%).

In a similar study of EM residents, significant stress during death notification was reported. Swisher et al\textsuperscript{19} asked residents to rank their stress level during different components of the death notification process. The most stressful issues reported by the physicians were dealing with the grief responses of the family members, including anger and hysteria. It was also stressful for the physician when the cause of death was unknown, a frequent occurrence in ED deaths.\textsuperscript{19} These dilemmas highlight the need for improved death notification training for EPs during their training. It is theorized that if physicians were better prepared to deal with this stressful situation and better equipped to cope with the emotions afterwards, it could lead to improved physician well being.\textsuperscript{5,10,19} In addition to improved education, another method that physicians have traditionally used to cope with stressful clinical situations such as patient death is debriefing. Team debriefing can help reduce stress among the care providers and provide an emotional outlet.\textsuperscript{20,21}

From the surviving family members’ perspective, the need for more skillful death notification is also apparent. Parrish et al\textsuperscript{10} surveyed 66 family members about their experience after a death in the ED. When asked to rate the ED staff based on their satisfaction with the care and emotional support they received in the ED at the time of death, one third rated their experience as average or less than average. When asked to describe their impressions of the ED staff, 17% described the staff as unsympathetic, 22% described them as cold, and 30% stated that they were non-reassuring.\textsuperscript{16}

Death notification training can occur in many different ways. Modalities that have been described in the literature include didactic lectures, small group discussion, small group role-playing, one-on-one standardized patient encounters (“simulated survivors”) and teachable moments in clinical settings.\textsuperscript{22} The use of high-fidelity simulators has been recently described as well.\textsuperscript{23,24} High-fidelity simulators are computerized, interactive, life-sized manikins that can be programmed to provide realistic patient responses and outcomes. These are typically used in clinical simulation activities, but these clinical scenarios can be combined with standardized patient death notification exercises.\textsuperscript{23} Previous work has shown that medical students prefer to learn communication skills through real-time experiences, such as role-playing, standardized patient encounters or use of simulation rather than in a didactic format.\textsuperscript{25}

To date, 6 studies have described death notification education programs specifically designed for EM residents. Schmidt et al\textsuperscript{26} was one of the earliest descriptive studies of death notification education for EM residents. In that study, role-playing was the technique used in 3 different ED–specific scenarios in conjunction with a post-experience debriefing.\textsuperscript{26} This technique has also been described in a medical student setting.\textsuperscript{27}

Pediatric death in the ED can present unique circumstances. In 1998 Hart et al\textsuperscript{27} described an educational module for EM residents that involved 4 case studies of simulated pediatric ED deaths that were presented and discussed with the residents. A panel discussion followed with involvement by real-life parents who had experienced loss of a child in an ED setting.\textsuperscript{28}

Benenson et al\textsuperscript{28} also described an educational program for EM residents that consisted of a didactic session, simulated scenarios and finally a real time, direct evaluation of performance by attending physicians observing residents in actual death-telling encounters. Overall performance evaluations were 55% excellent, 40% satisfactory and 5% unsatisfactory. Residents who were in their senior years of training and female residents were more likely to be rated excellent.\textsuperscript{29}

In 2002 Quest et al\textsuperscript{30} described and evaluated a one-day educational experience given to 16 EM residents. Methods used included a large-group didactic session, a small-group

<table>
<thead>
<tr>
<th>Table. The GRIEV_ING Mnemonic.</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
</tr>
<tr>
<td>R</td>
</tr>
<tr>
<td>I</td>
</tr>
<tr>
<td>E</td>
</tr>
<tr>
<td>V</td>
</tr>
<tr>
<td>_</td>
</tr>
<tr>
<td>Q</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>G</td>
</tr>
</tbody>
</table>
didactic session and 2 standardized patient examinations. Residents reported improvement in comfort levels and high levels of satisfaction regarding the helpfulness of the training, although overall inter-rater agreement was poor. These authors also describe this educational intervention used in a medical student setting.

In a more recent study by Hobgood et al, the authors implemented a 2-hour death notification workshop for 20 EM residents. Their teaching module was based on the mnemonic “GRIEV_ING” (table). The authors employed the following learning modalities: a didactic session, small-group discussion, paired role-playing and a standardized patient encounter. They measured 3 variables: self-confidence, competence, and relationship-communication skills. The results indicated a statistically significant improvement in the confidence and competence of the residents’ death notification skills. No significant difference was seen in their communication skills, which were already rated highly before the intervention. The GRIEV_ING educational intervention has also been studied in the setting of medical student education.

High-fidelity simulators have recently been incorporated into some newer death-telling educational interventions. Park et al recently described a 5-hour course for EM residents at their institution. The course consisted of didactic lectures, role-playing, and high-fidelity simulators, followed by standardized patient encounters. Residents rated the session as extremely useful and thought that patient care would improve after the experience. Interestingly, the residents rated the simulation session as most useful. Another recent study describing teaching breaking bad news to third-year students on a general surgery rotation used a combination of high-fidelity simulators and standardized patients. The students were presented with a high-fidelity simulator case of a patient who dies from multiple gunshot wounds despite resuscitative attempts. The death-telling simulation subsequently occurs using a standardized patient. Students rated the experience highly and demonstrated marked improvement of self-assessed skills over baseline.

In addition to physician education, death notification in the ED can be improved for survivors and physicians alike through protocols. Several studies have demonstrated increased survivor satisfaction after ED protocols were initiated. Adamowski et al surveyed survivors before and after initiating a multidisciplinary protocol for caring for the survivors. Six phases of the death-notification process were included in the protocol: contacting the survivors, arrival of the survivors, notification of death, grief response, viewing the deceased, and the concluding process. Training was provided to all ED social workers, nurses, and physicians to ensure awareness and understanding of the protocol. A departmental resource pamphlet created for survivors was introduced. Pre- and post-implementation survivor satisfaction was assessed. The results demonstrated that post-protocol implementation, survivors spent less time in the ED, felt more adequate information was provided and felt that more supported by ED staff.

The study mentioned above demonstrated that a multidisciplinary team approach resulted in improved care of the survivors. This concept is familiar to palliative care physicians, but is not as familiar to EPs. The benefits of delivering bad news through a team, which may include spiritual support, social work, the patient’s primary physician (not generally feasible in the ED setting) and extended family or friends, are well understood by those working in the palliative medicine field. These concepts should be brought into ED protocols.

Improving ED services provided to bereaved relatives, such as pre-printed information about what to do next, how to deal with the coroner’s office, and contact information about bereavement support groups, can have a lasting effect for staff as well as survivors. Delivering this information is often best done by a social worker as part of the team. These services should be designed to provide emotional support to the survivors, as well as information about the grieving process and a mechanism for follow-up care. This may help reduce the incidence of complicated grief and/or post-traumatic stress disorder in surviving family members.

The studies regarding physician education in death notification reviewed above have various methodologies, as well as their own internal strengths and weaknesses. Most of the studies use self-assessment by the learners themselves as the primary outcome. Very few studies to date of EP death notification educational techniques look at the impact of an educational intervention through other outcome measures, such as measuring survivor satisfaction or physician performance assessment by non-biased evaluators pre- and post-intervention. A future prospective study might include a pre-intervention objective assessment of the learners by an objective evaluator and a post-intervention assessment. Blinding of the observer to pre- or post-intervention would be necessary to eliminate bias. Some of these methods have been used previously, but all have introduced bias because the evaluator knew that the learners had been through an educational intervention and in some cases had been involved in the pre-intervention assessment.

In summary, there does appear to be a benefit to implementing educational programs designed to improve the death-notification skills of EPs as primarily measured by learner self-assessment. The process of educating and training ED physicians and staff in death-notification can benefit families of the deceased by providing a compassionate and supportive environment in which they begin to grieve as well, as physicians through increasing their confidence in performing this difficult and stressful task. The existing literature does not elucidate which of the currently described methods is most effective. Some of the currently described methods, such as those using high-fidelity simulators or...
standardized patients, may not be feasible for many programs/institutions due to high cost.

The family members and loved ones of the deceased essentially become victims in the immediate time after they are notified of the death. They should be thought of as patients and cared for in that way. Although the studies described above have not used that approach or terminology, it may help learners understand that the death-notification activity is equivalent to any other patient-centered training they receive. Death notification, just like any other medical procedure, can be improved by training. Likewise, when performed inappropriately, death notification increases the risk of complications, in the form of pathological grief processes. Developing and implementing improved training methods, as well as improving the methods of assessing the success and effectiveness of such interventions, would benefit survivors as well as physicians, making them more comfortable and confident to care for families in these unfortunate and trying times.

Address for Correspondence: Jan M. Shoenberger, MD, Department of Emergency Medicine, Keck School of Medicine of the University of Southern California, Los Angeles, CA. Email: shoenber@usc.edu.

Conflicts of Interest: By the WestJEM article submission agreement, all authors are required to disclose all affiliations, funding sources and financial or management relationships that could be perceived as potential sources of bias. The authors disclosed none.

REFERENCES


