Disaster Medicine and Public Health Preparedness

www.cambridge.org/dmp

Systematic Review

Cite this article: McCarroll JE, Fisher JE, Cozza SJ, Mash HH, Biggs QM, Flynn BW and Walsh T (2024). Notification, Viewing the Body, and Social and Cultural Considerations After Traumatic Death: A Systematic Literature Review. *Disaster Medicine and Public Health Preparedness*, **18**, e256, 1–10
https://doi.org/10.1017/dmp.2024.125

Received: 15 March 2023
Revised: 20 March 2024
Accepted: 13 May 2024

Keywords:
trauma; death; forensic; notification; body; remains

Corresponding author:
James E. McCarroll;
Email: james.mccarroll.ctr@usuhs.edu

© Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. and Uniformed Services University of the Health Sciences, 2024. To the extent this is a work of the US Government, it is not subject to copyright protection within the United States. Published by Cambridge University Press on behalf of Society for Disaster Medicine and Public Health, Inc.

CAMBRIDGE UNIVERSITY PRESS

Notification, Viewing the Body, and Social and Cultural Considerations After Traumatic Death: A Systematic Literature Review

James E. McCarroll[1,2], Joscelyn E. Fisher[1,2], Stephen J. Cozza[1], Holly H. Mash[1,2], Quinn M. Biggs[1,2], Brian W. Flynn[1,2] and Tasanee Walsh[1,2]

[1]Department of Psychiatry, Center for the Study of Traumatic Stress, Uniformed Services University of the Health Sciences, Bethesda, MD, USA and [2]Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc., Bethesda, MD, USA.

Abstract

We conducted a systematic review of the medical, nursing, forensic, and social science literature describing events and processes associated with what happens after a traumatic death in the socio-cultural context of largely Western and high-income societies. These include death notification, why survivors choose to view or not view the body, forensic practices affecting viewing the body, alternatives to viewing, and social and cultural practices following the death. We also describe how elements of these processes may act to increase or lessen some of the negative cognitive and emotional consequences for both survivors and providers. The information presented is applicable to those who may be faced with traumatic deaths, including those who work in medicine, nursing, and law enforcement, as well as first responders, forensic investigators, funeral directors, and the families of the deceased.

The purpose of this review is to assist the broad range of health care, first responders, legal, and funerary professionals who may be involved in the management of human remains[†] after traumatic death. This information is presented as events and processes that can occur in the socio-cultural context of largely Western and high-income societies. Traumatic death can include those resulting from road accidents, disaster, terrorism, war, civil disorders, homicide, and suicide. As part of their professional role, many personnel have responsibilities that require them to interact with and help the families of the deceased manage a range of potentially challenging situations. These can include death notification, identification of the deceased, autopsy, decisions about viewing the body, and additional support of family members' loss-related responses, such as grieving, mourning, and remembering. These events and processes are likely to have an emotional impact on survivors. There are also the obligations of society to care for the remains of the deceased and to attend to the family of the deceased. These include the care of the remains by the responsible authorities and respecting the cultural practices of families. However, these social obligations include a broad range of responsibilities that some professionals seldom understand and may have little experience with. This review describes this range of responsibilities and the challenges that professionals are likely to face in conducting such activities. It also highlights areas that require careful attention as described in the relevant literature and as experienced by the authors.

Methods

A systematic literature review was conducted to identify existing scientific research about the impact of circumstances pertaining to the notification of traumatic death, the viewing of the body, and the outcomes of viewing or not viewing on survivors and professionals. References were obtained through searches of PubMed, Power Search, and Google Scholar, and from references cited in the collected literature. Search terms applied singly and in combination were: death, human remains, bodies, viewing, notification, trauma, disasters, terrorism, forensics, identification, autopsy, children, unexpected, violent, and premature death, emergency department, grief, and bereavement.

Articles were included that reported the process and outcome of notification of traumatic, violent, unexpected, or sudden death, methods of forensic identification, the viewing or not viewing of the body including alternatives to viewing and the relationship of viewing or not viewing to grief, bereavement, and funerals and memorials. All selected articles were in English.

[†]The terms "body" and "remains" are used interchangeably in this paper, depending on the context.

Articles were excluded if they were not specifically related to our search criteria or if they duplicated information from more comprehensively written and better-resourced articles.

A total of 1067 articles were identified in our search of the literature databases. A total of 984 were removed from further examination as they were not related to the topics of interest. The 83 remaining articles were evaluated using the inclusion and exclusion criteria. A total of 50 articles were removed because they did not specifically meet the inclusion and exclusion criteria or because the information was duplicated in another article. When an article contained duplicate information, the latest publication was selected. The final manuscript included 33 peer-reviewed articles (1987-2022) (Table 1). The article selection process is presented in Figure 1, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses flowchart (PRISMA).

Using these 33 publications, the authors categorized areas of particular interest to professionals, including death notification, assisting families with decisions about viewing the body and barriers to viewing, actions that survivors can take when remains are not recoverable, forensic challenges in the identification of remains, effects of the COVID-19 pandemic on families' ability to have access to the remains of their family member, cultural and religious practices concerning the care of remains, and suggestions for research.

Results

Death Notifications

Notification of in-hospital death

If a death occurs in a hospital, notification of the family is usually an obligation of the hospital.[1] Hospitals may or may not have a protocol for notification procedures and staff may not be adequately trained. When there is a protocol and staff have practiced and used it, the notifier's performance in the process will typically go more smoothly, although survivors' reactions may differ.

Provider and staff actions for in-hospital death notification

Clinical practice guidelines are necessary for notification in a hospital following sudden and unexpected death including responding to the emotional and practical needs of the bereaved.[2] In addition to the skill and sensitivity of the notifier, the notification process requires the support of the staff including doctors and nurses, social workers, religious support providers, and the availability of a private space, which may be used by survivors to process the information, reflect on their situation and meditate or pray.[3,4] In addition to providing information during the notification, nonverbal actions of the notifier can affect the survivors' experience of events. These actions may include the notifier's attitude and behavior such as posture, gestures, and facial expressions.[5]

Helpful and unhelpful actions by death notifiers

Helpful and unhelpful nursing actions by an emergency department (ED) in Hong Kong were described based upon interviews of family members conducted 50 days to 10 months after the death of their family member.[6] Actions perceived as helpful were receiving written information about what to do following the death, being given the opportunity to view the body in the ED, and respecting individual customs and religious practices. Actions perceived as least helpful were discouraging viewing the body, offering sedation, and providing comfort measures such as a cup of water and tissue paper.

Notification of traumatic death outside the hospital

The notification processes and outcomes of 52 surviving Italian men and women who were notified of a death that occurred under unexpected and violent circumstances were reported. Only about half of the participants stated that they received clear and comprehensive information about the events that led to the death. Most survivors sought or received formal or informal support, but some received none.[7] In addition, following notification, families described being confronted by police, legal, medical, and mortuary authorities who sometimes enacted unfamiliar and complex procedures such as identification of the deceased and death investigations, which added to the families' level of distress.

Multiple notifications of remains recovery

Immediate and extended family members (454) of persons who died in the 9/11 terrorist attack in New York City were asked to respond to a questionnaire about their experiences regarding the number of notifications they received (none, once, twice, or more). Those who received two or more notifications of the identification of fragments of their loved one's remains had more severe grief and posttraumatic symptoms. In cases where the potential exists for multiple notifications, forensic procedures should be considered in relation to the potential consequences of providing a continual stream of distressing information to families.[16]

Viewing Remains

Factors affecting the decision to view

Decisions about viewing the body can involve complex issues that are often faced by bereaved family members. The choices are typically complicated by such factors as the cause of death, severity of injuries, disfigurement, lack of preparation for the viewing, and the presence or absence of supporting persons.[7] Those who conduct the notification are often challenged by responding to survivors' questions about whether or when it would be appropriate to view the body. Opportunities to view the body may be encouraged, discouraged, or forbidden by the authorities who have custody. Evidence of whether survivors should be encouraged to view the body after a traumatic death is mixed, as is addressed in the following paragraphs.

Benefits of viewing. Possible benefits of viewing the body are (1) confirming the reality of death, (2) seeing that the condition of the body is less distressing than in fantasies, (3) giving the viewer the chance to say goodbye, and (4) having an image of death that may be helpful in grief work.[8,13] There can be differences in the value and meaning of early viewing, such as in a hospital or a forensic facility, and later viewing, such as in a funeral home. Early viewing allows survivors to confirm the reality of the death, to be with their loved one after the transition from life, to know the circumstances of the death, and to begin to get over the shock. Viewing in a funeral home allows for final goodbyes and the final separation from the physical body.[9]

Drawbacks of viewing. Viewing the deceased is a personal experience for the viewer. Some reactions that have been expressed are that viewers were discomfited that the body did not appear as expected. Some were disturbed by the coldness of the body, distress related to disfigurement, such as in a case in which a relative had died in a fire and the body was unrecognizable, and the family member was unprepared for the viewing.[13]

Barriers to viewing. Families are sometimes advised not to see the body of the deceased after a traumatic death.[19,20] This advice can be prompted by well-meaning authorities who do not want to

https://doi.org/10.1017/dmp.2024.125 Published online by Cambridge University Press

Table 1. Matrix of included studies

First author/year	Title	Aims	Study design/ methods	findings
Blau, 2021	Human identification: a review of methods employed within an Australian coronial death investigation system	To evaluate the identification methods used in medico- legal death investigations.	Review of five years of cases for the method and time of the identification.	Visual was the most common method (91%) of forensic identification. Other methods took longer and depended on other factors such as the body's state of preservation.
Cathcart, 1988	Seeing the body after death	To show that seeing the dead body and keeping photographs can help with grieving.	Summary of studies where seeing the dead body may have helped grieving.	Examples where seeing the body of the deceased may help with grieving are perinatal and violent death. The use of photographs can be helpful. Also noted were stress on the staff and the need for training on dealing with death.
Chapple, 2010	Viewing the body after bereavement due to a traumatic death: qualitative study in the UK	To report whether those who were bereaved by traumatic death should be encouraged to view the body.	Qualitative study of 80 people on whether and how they chose to see the body.	Decisions included fear of how the body might look, wanting to remember the person as they were, to see that the deceased was being cared for, and feeling an obligation to see the body.
Coe, 2020	Meaningful deaths: Home health workers' mediation of deaths at home	To show how home health workers can contribute to a more meaninful death.	Qualitative study using interviews of 62 home health workers.	Home health workers can facilitate a good death through their knowledge of the process of death, spirituality, and supporting family members.
Collins, 1989	Sudden death counseling protocol	To provide a protocol for critical care nurses as they work with familiies after a death in an ICU.	Description of a step-by step method to help nurses based on the author's experiences.	A team approach can help doctors and nurses assist survivors in dealing with their grief through providing emotional support from the time of death and during follow-up.
Corpuz, 2021	Beyond death and the afterlife: the complicated process of grief in the time of COVID-19	To implore clergy to assist family members with grief and coping during isolation from dying relative.	Brief review of how the COVID-19 pandemic has complicated situations for families around the death of a loved one.	Clergy can encourage processes of grieving when families have been prevented from from being with their loved one. Examples are the use of social media and personal activities such as gardening, art, writing, walking, and music.
Cozza, 2020	Human remains identification, grief, and posttraumtic stress in bereaved family members 14 years after the September 11, 2001, terrorist attacks	To examine how the number of death notifications received and continuing questions after the death affected grief and posttraumatic symptoms.	Measures of the number of death notifications of fragmented remains on grief and posttraumatic symptoms.	Two or more notification were associated with higher grief severity compared to no notifications. Receipt of any notification was associated with posttraumtic symptoms.
de Boer, 2020	Disaster victm identification operations with fragmented, burnt, or comingled remains: experience-based recommendations	To provide information and guidance to those tasked with the identification of fragmented remains of disaster victims and issues arising with families.	Review of issues to be addressed during disaster preplanning and at the outset of an operation.	Challenges include having incident-specific strategies, having experienced specialists at the scene, review of DNA sampling, and effects of comingling remains and contamination.
De Leo, 2022	Receiving notification of unexpected and violent death: A qualitative study of Italian survivors	To explore the experiences of persons who received a death notification from a professional figure.	Online questionnaires of the processes of death notification including the setting, the professional figure involved, and verbal and non-verbal aspects of the communication.	Four themes and 11 subthemes were identified. The four themes were: how the communication took place, reactions to the news, support, and coping strategies.
de Mönnick, 2019	Photo viewing after traumatic death: Finding the missing piece	To provide a discussion for professionals on whether viewing of photos of a body after traumatic death can fulfill the needs of bereaved relatives.	Description of unfulfilled needs of the bereaved and how photo viewing may help to meet these needs.	Bereavement needs are respect, survival, cognitive, emotional, ritualistic, and existential. How photo viewing can help satisfy these needs is discussed.
Diolaiuti, 2021	Impact and consequences COVID-19 pandemic on complicated grief and persistent complex breavement disorder	To discuss risk factors and protective resources against the onset of grief disorders due to the loss of mourning processes due to COVID–19.	Literature review of COVID-19 restrictions and coping, bereavment disorders, risk factors for bereavement disorders, and intervention and prevention strategies.	Risk factors for bereavement disorders associated with the pandemic include vulnerability (e.g., maladaptive personal schema, social restrictions, anticipatory grief). Interventions include social support, spirituality, and psychotherapy that targets the present experience and story.

(*Continued*)

https://doi.org/10.1017/dmp.2024.125 Published online by Cambridge University Press

Table 1. (*Continued*)

First author/year	Title	Aims	Study design/ methods	findings
Dix, 1998	Access to the dead: the role of relatives in the aftermath of disaster	To describe the effects that restrictions to access to remains due to traumatic death can have on survivors .	Pesonal essay on the effects of refusal by authorities to allow access to the dead by families and the importance of seeing a dead relative.	The intention to protect families from an unpleasant reality resulted in families feeling a loss of control. Photographs and postmortem reports can play an important role in helping families deal with a sudden traumatic death.
Eisma, 2022	COVID-19, natural and unnatural bereavement: comprehensive comparisons of loss circumstances and grief severity	To compare loss circumstances, characteristics, and grief levels among people bereaved due to COVID-19 and natural and unnatural causes of death.	Online questionnaire of participants recruited from a national mental health care organization. They completed self-tests for bereavement and mental health disorders.	COVID-19 deaths were more often parental than children, were often expected, and characterized by inability to say goodbye. COVID-19 deaths yielded higher levels of grief than natural deaths.
Engen, 1987	Remembering odors and their names	To describe the characteristics of odor memory and its role in recreating past episodes in a person's life.	Author describes the properties of odor perception and odor memory.	Odor perception has the ability to recreate significant episodes in a person's life. Its strength varies with the special involvement of the odor in the person's life. Odor long-term recognition shows and almost flat forgetting curve
Gonzales, 2008	Home-based viewing (El Valorio) after death: A cost-effective alternative for some families	To show how home-based viewing after death can benefit indigent and low-imcome families.	Case presentations of how a hospice assisted families with the home viewing of a deceased child.	Home viewing allowed indigent people the ability to gather with family and friends and mourn and say goodbye.
Gruneir, 2007	Where people die. A multi-level approach to under- standing influences on the site of death in America	To understand variation in site of death in America and the factors associated with where people die.	Literature review of studies linking death certificates with county and state data on characteristics of the decedent.	Site of death is a function of access and preference. Opportunities for home death are more often found in families that are White, have greater access to resources and social support and die of cancer.
Harper, 2010	The social agency of dead bodies	To examine viewing practices of the recently dead between the moments of death and final disposal.	Ethnographic data collected in funeral homes in the U. S. and funeral directors in England.	Dead bodies can be ascribed different meanings. The body can also be part of death rituals in which they are related to the living in a variety of ways such as through the objects they leave behind.
Harrington, 2011	Family members' experiences with viewing in the wake of sudden death	To explore the perspectives and experiences of the suddenly bereaved with viewing experiences, bereavement, and interactions with professionals.	Interviews of 16 persons who had lost a relative due to a sudden death on viewing opportunities following notification through burial.	There are significant differences between early viewing and later (funeral) viewing. Early viewing confirms the reality of death; later viewing allows for final goodbyes. Professional interactions need to display respect and compassion to the deceased and to the bereaved.
Howarth, 2000	Dismantling the boundaries between life and death	To consider how survivors might use strategies to continue relationships with the dead.	Review paper exploring conceptual boundaries between the living and the dead.	Strategies described are: talking about the dead, remembering anniversaries, self-help groups, constructing biographies, and comemorating a death. Other means are material and spiritual legacies.
Janzen, 2004	From death notification through the funeral: Bereaved parents' experiences and their advice to professionals	To identify interventions that were helpful to grieving parents after the sudden death of a child.	Interviews of 20 parents who had experienced the death of a child.	Five themes were reported: to reconstruct the death scene, feeling a loss of control, to say goodbye, to find meaning in the death, and to carry forward a new relation with their deceased child in their lives.
Klein, 2003	Good grief: a medical challenge	To provide information for trauma clinicians about normal and pathological grief in order to help the bereaved.	Review of topics on bereavement that clinicians need to be familiar with to help grieving families.	Topics discussed related to bereavement are normal reactions to bereavement, children, cultural issues, and adjustment following bereavement.
Kristensen, 2018	Optimizing visits to the site of death for bereaved families after disasters and terrorist events	To describe how to optimize visits to the site of death after disaster or terrorist events for bereaved families.	Description of topics for conducting visits of bereaved persons to the site of death of their relatives.	Topics to consider are who should be in charge, who should be invited, how to prepare, what can be done, and the need for support personnel.

(*Continued*)

https://doi.org/10.1017/dmp.2024.125 Published online by Cambridge University Press

Table 1. (*Continued*)

First author/year	Title	Aims	Study design/ methods	findings
Kristensen, 2012	Visiting ther site of death: experienes of the bereaved after the 2004 Southeast Asian tsunami	To describe the outcomes for 113 persons who visitied the site of death.	Interview and self-report questionnaires of bereaved adults who had lost one or more family members in the 2004 tsunami.	The most important outcome was gaining an increased understanding of what occurred and a feeling of closeness to the deceased.
Li, 2002	Helpfulness of nursing actions to suddenly bereaved family members in an accident and emergency setting in Hong Kong	To gain knowledge about the the help families received from nurses in an emergency department after the sudden death of a family member.	Qualitative descriptive study of 76 persons through structured telephone interviews.	The most helpful nursing practices were receiving written information to help their adjustment, to view the deceased, and respecting individual customs and religious practices.
Lowe, 2020	Memorialization during COVID-19: implications for the bereaved, service providers and policy makers	To capture key changes to memorialization practices resulting from social distancing due to the COVID-19 pandemic.	Review of academic literature and media reports to capture attitudes and practices related to memorialization.	Changes that have occurred are related to body handling practices, funerals, cremations, and burials. Preferences for practices have shifted toward personalization and securalization.
Masaki, 2013	Seeing-off of dead bodies at death discharges in Japan	To determine differences in nurses' and bereaved families' opinions and thoughts of the seeing-off ceremony.	Semi-structured interviews with 17 nurses and 6 bereaved families to assess nurses' thoughts about conducted seeing-off ceremonies.	Nurses expressed their courtesy and sense of appreciation during the ceremony. The families felt thankful, but doubtful about the ritual. Satisfaction was affected by the relationship between the families and the staff before the patient's death.
Mowll, 2016	The transformative meanings of viewing or not viewing the body after sudden death	To understand the experiences of bereaved relatives on the viewing or not viewing a body after sudden death.	Semi-structured interviews with 64 relatives of deceased persons who died a violent or natural sudden death.	Results were grouped in three themes: whether to see the body, experiences in viewing, and reports of feelings by those who did not view the body.
Mowll, 2022	I dressed her up in her best dress: The experiences of the dead body for bereaved relatives in the context of palliative care	To explore family members' experience of the body of their deceased relative.	Semi-structured interviews of 58 family members of a relative who had received care at a community or inpatient palliative care facility.	There were five themes of practices that impacted the participants: duality of the body as a person/the person as a body, the death at home or away, time with and leaving the dead, not knowing what to do, and preparing and removing the dead.
Ombres, 2017	Death notification: Someone needs to call the family	To investigate current death notification practices in order to develop a standardized process for making death notification phone calls.	Literature review and interviews with 67 medical faculty and residents, and widows.	80% of residents felt inadequately trained for death notification. 25% reported that calls went badly. There was no consistent approach to rehearsing or making the call.
Pearce, 2021	'A silent epidemic of grief': a survey of bereavement care provision in the UK and Ireland during the COVID–19 pandemic	To investigate the views and experiences of practitioners in the UK and Ireland on changes in bereavement care during the COVID-19 pandemic.	Online survey of 805 persons working in care settings: hospice, community, and hospitals.	Changes were reported in identifying bereaved people, telephone usage, video and other forms of remote support, managing complex grief, and access to specialist services.
Reny, 2020	A body of evidence: Barriers to family viewing after death by gun violence	To investigate how trauma nurses perceive bereavement and the potential barriers to family viewing after death by gun violence.	Online survey of 212 nurses (86% female) who rated the importance of 14 viewing barriers.	Viewings routinely occurred (68%), but only 15% of facilities had a written viewing policy. Only 34% allowed touching. Reasons for not allowing viewing were legal concerns and concerns for the safety of the staff.
Roe, 2012	Practical strategies for death notification in the emergency department	To make recommendations for death notification in the emergency department.	Literature review from nursing, medicine, law enforcement, social work, and psychology.	Recommended strategies for notification were preparation, initiating contact with survivors, delivering the news, responding to survivors' reactions, provision of support, and dealing with the notifier's response.
Whelan, 2013	Viewings of deceased persons in a hospital mortuary: Critical reflection of social work practice	To develop clinical practice guidelines for social workers on viewing bodies of those who died suddenly and unexpectedly.	Literature review of the subject of the mortuary as a location for social work practice.	Authors reviewed literature on the history of mortuaries, viewing bodies of the deceased, managing viewings, assisting families with viewings, and caring for staff.

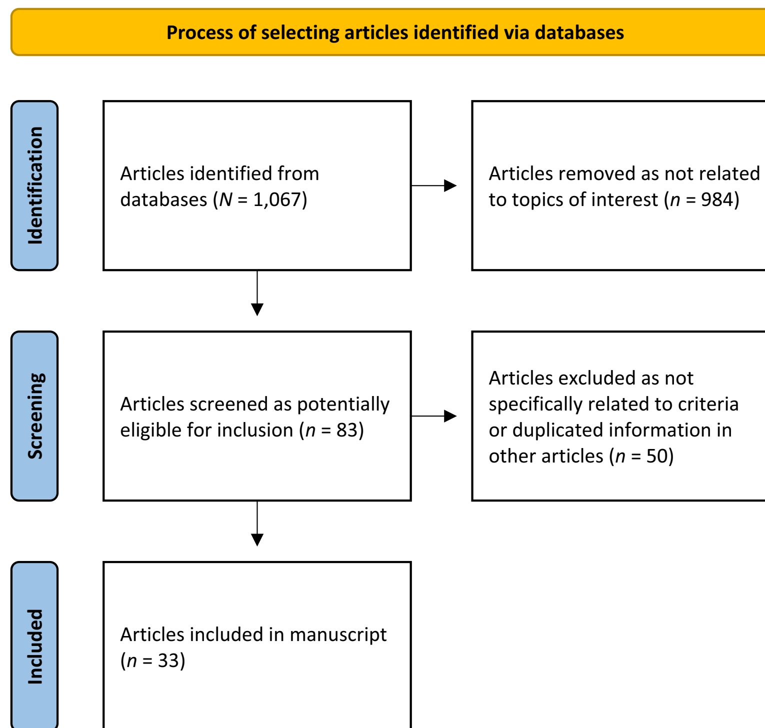

Figure 1 PRISMA article selection flowchart.

further traumatize the survivors. Viewing might also be discouraged by care providers when they are uncomfortable with their own intense emotions as well as the emotions that could be displayed by family members.[9]

Survivors can themselves feel victimized when they are advised against seeing or are not allowed to see the body. Dix reported that after her brother was killed in the Lockerbie air crash over Scotland, no information was given to the families about the state of the bodies.[19] Undertakers were advised by the Scotland authorities to recommend that families not see them. Families were distressed when they were only allowed to see the deceased through a window but were not allowed to touch them or be with them.

Policies that do not permit contact with the body can cause severe distress and anger among family members who want to spend time with the dead.[10,21] Due to the many policies for public health protective measures, such as self-isolation, people are not able to gather to be physically present with the sick or dying, religious rituals cannot be performed, families cannot say goodbye, funerals cannot be held, and mourning rituals cannot be performed. All these restrictions have complicated the process of dying, viewing, burial practices, and grieving.[22] Restrictions could also lead to psychopathologic conditions, such as persistent complex bereavement disorder in vulnerable individuals.[23]

Possible consequences of not viewing. Persons who chose not to view the remains, when viewing was possible, gave a variety of reasons. Among these were that they did not want to see a body that had been disfigured[8] or they wanted to remember the person as they were.[13] Some who chose not to see the body later wondered if they had made the right decision. For some, not viewing seemed to prevent a lack of closure about the death.[13] Among other consequences of not viewing the body include a survivor's continuous mental searching for the deceased, feeling that the reality of the death was not recognized or realized, not satisfying emotional needs of holding or touching the deceased, having no opportunity to say goodbye, and not fulfilling the need to find meaning in the death.[15]

Sensory impact of remains on viewers. There are many possible and often unpredictable sensory experiences associated with viewing the deceased. In addition to the sight of the body, other sensory experiences associated with this exposure include touch and smell. The experiences of touching or holding the body can be components of the viewing process. The coldness of the body, unexpected odors, or an altered appearance from life can serve to confirm the reality of the death but can also add complexity to the experience. Notably, the viewing can produce a long-lasting sensory experience and be the subject of recurrent intrusive images.[10]

Smell differs significantly from other sensory modalities in that the perception of odors has the unique ability to trigger memories of episodes significantly associated with smell in a person's life. The strength of the association with these memories depends on the significance of the experience in the person's life. However, and sometimes fortunately, smell memories are based on recognition and not on memory. In other words, smells are recognized, but cannot be generated by the mind through imagination or command.[11] The sudden and unanticipated strong emotions associated with smell may be upsetting and disorienting. There are few ways to prepare for the emotions evoked by smells. However, professionals who prepare survivors for the viewing should describe the state of the remains and what they may expect to see, smell, and may feel during the viewing.

Viewing the body in a forensic setting. A relative is sometimes called by forensic authorities to visually identify the body for a medico-legal death investigation.[12] Exposure to a body in a mortuary may be especially traumatic, as it may not have been prepared for viewing. Thus, it is important for the forensic authorities to have training in preparing the remains for the family to view for the identification process. Authorities must be educated about the

https://doi.org/10.1017/dmp.2024.125 Published online by Cambridge University Press

importance of sensitivity in communicating facts about the death, how the body will be handled, and any legal procedures that could delay release of the body.[2]

A qualitative analysis was conducted based on interviews of 80 people who were bereaved due to suicide, homicide, or other forms of traumatic death. Interviews were conducted to learn why and how survivors decided to view or not to view the body and the emotional reactions of those who chose to view the body. Forty-nine participants (61%) chose to view the body. Of those who viewed the body, 35 (71%) reported that it was the right thing to do, which included feeling an obligation to do so, 9 (18%) had mixed feelings, 3 (6%) did not comment on their feelings, and 2 (4%) regretted it. Eight (10%) declined to view the body, and 11 (14%) were not given the opportunity. Three (4%) who had found the dead after a suicide chose to see the body again and reported that they were glad they did so. The authors' conclusion was that it should not be assumed that people will be harmed by seeing the body.[13] Clearly, decision-making about viewing the deceased is complex and needs to reflect an understanding of circumstances and the individual needs and capacities of individual family members.

Alternatives to viewing remains

Viewing photographs of the remains. An alternate option to viewing remains in a forensic setting includes allowing the family to review the case file, which may include photographs, diagrams, or a virtual 3-dimensional reconstruction of the remains.[14] Photographs can help family members decide whether they wish to be physically present to view the remains. Viewing photographs also gives the bereaved time to ask questions of the authority who has charge of the remains.[8,15] Photographs can also prevent unnecessary exposure of family members from overwhelming sensory overload, such as is likely to occur in large scale disasters if families are required to file by rows and rows of remains to identify their loved one.

When intact remains cannot be recovered. When remains are commingled, decomposed, burned, or fragmented, or intact remains cannot be recovered, there can be severe challenges for identification. When the identification process is likely to be lengthy, such as over a period of weeks or longer, families are prevented from having access to the remains for viewing or final disposition. Families may wish to be kept informed as each fragment is identified or to be informed at the end of the process, with the option to change their mind over time.

In mass fatality events, family members may gather for long periods of time awaiting word of their loved one's remains. In many cases of such gatherings, family support centers are set up to assist the families and the authorities. In these settings, families can have protection from the often-intrusive media, receive verified information, experience shared interactions or privacy, and have ready access to religious and behavioral health support and medical assistance.

Visiting the site of death. When remains cannot be recovered, including as a result of disasters or terrorism, one alternative is to go to the site of death. Relatives who were bereaved by the deaths of family members due to a tsunami in Southeast Asia in 2004 visited the site of death. Following the visit, they reported that they gained an increased understanding of what had occurred and experienced a feeling of closeness to the deceased.[17] After a visit to the site of a terrorist attack in Norway, relatives of the deceased reported that the visit had helped them process their loss.[18]

Effects of the COVID-19 pandemic on handling bodies. Recently (2019-2022), the COVID-19 pandemic severely disrupted policies and procedures for handling the bodies of those who had died from or were suspected to have died from COVID-19.[24] Social distancing in communities affected by the pandemic had a significant impact on the families of people who have died in hospitals. Often, the person in a hospital suffering from COVID-19 died alone or without family present. Social distancing prevented families from being allowed to view the bodies of their deceased loved ones.[25] Grief responses of persons whose relatives died of COVID-19 or from natural death or unnatural death were compared within the 6 months after the death. The inability to say goodbye to the decedent was associated with higher levels of grief during the bereavement period compared to those whose relatives died from natural causes.[26]

Viewing the body of a deceased child. Parents who suffered the death of a child were asked to describe helpful actions of professionals related to viewing the body.[27] It was helpful when nurses prepared the parents for seeing the body and parents were provided adequate time and privacy. Access to the body gave the parents the opportunity to say goodbye, to hold the deceased child, and dress and position the body, if they so desired.

Should children view the body? The decision about whether a child should view the dead body of a loved one is complex and should be informed by multiple factors such as their developmental age, which includes the child's emotional and cognitive capacity to comprehend the experience. Parents should have the primary role in helping their child decide whether to see the body. In addition to the child's own thoughts, feelings, and motivations, many of the same considerations apply as for adults such as the condition of the body and the viewing environment. For children who view the body, there should be a parent or another caring adult present who can calmly explain what the child should expect and support a child during a viewing. Ultimately, the decision should rest on whether viewing the body is likely to help a child understand the reality of the death and potentially be reassuring rather than overly distressing or confusing.[8]

Cultural and religious practices

Culture and religion affect post-mortem practices for having access to and for viewing the body. How and when bodies are viewed and cared for are factors that are strongly influenced by culture. For example, the percentage of people who died at home compared to those who died in a hospital increased from 16 to 30.5% during the period between 1989-2016.[28] Home deaths are associated with socioeconomic status (SES) and race. A review of the research on describing the site of death found that home deaths were more likely among individuals who are white, married, and have a higher SES.[29]

In Japan, following an in-hospital death, a seeing-off ceremony may be conducted after the body has been transferred to the mortuary. Seeing-off is a ceremony derived from Buddhism and traditional Japanese culture, and is conducted by the family, nurses, and doctors. The ceremony can consist of prayer, burning incense, and expressing appreciation for the life of the deceased. This ceremony is considered the last care provided and is intended as a gesture of courtesy and respect for the life of the deceased.[30]

In the U.S., customs derived from Spanish-speaking countries may keep the body of the deceased at home for a wake or a viewing. This ritual gives families and friends the time to gather, pray, say goodbye, reunite or strengthen bonds, and celebrate the life of the deceased. Other meaningful contacts between the body and survivors include caring for the loved one for the last time, including washing and dressing the body according to cultural traditions of the family.[31]

https://doi.org/10.1017/dmp.2024.125 Published online by Cambridge University Press

While not a subject of this review, cultural practices vary considerably worldwide. For example, in many non-Western and low-and-middle income cultures, religious practices can affect how a body is treated after death. These practices, such as rapid interment, autopsy, embalming, caring for the body (e.g., by wrapping and washing it), and how long and where a body can remain unburied or not cremated, can also influence how and whether the survivor interacts with the body.

Aftermath of viewing

Viewing the body as a beginning of grief and mourning. There are emotional connections between the living and the deceased, and the dead can be incorporated into the lives of the living.[32,33] Viewing the body often constitutes the beginning of grieving and accepting the death. Following a death, and particularly an untimely death, survivors can create a story about the deceased, which may help them to cope with the loss. This process begins with notification, but continues through the obligations of the living to attend to the affairs of the deceased. The language used by the survivors in referring to the deceased, such as saying the name of the deceased or using a personal pronoun, can be a sign that there is still a social bond with the bereaved and that the body has a social identity. Viewing the body with loved ones helps bring people together to reunite and re-establish ties and strengthen community bonds. Other meaningful contacts between the body and survivors include caring for the loved one for the last time, including actions such as washing and dressing the body according to cultural traditions of the family. Talking to the deceased can serve as a relief for the viewer.[31] Families that mourn together in the presence of the dead value the intimacy of having time with the dead.[21]

Discussion

This review describes the events and processes that typically occur following a traumatic death in the socio-cultural context of largely Western and high-income societies. These steps, in somewhat chronological order, are: death notification, identification of the body, viewing or not viewing the body, and the post-mortem period, that includes funerals and memorials and grief and mourning. Much of this review has emphasized the importance of considering the viewing of the body by survivors, usually family members. As we have described, often there is no protocol for viewing in a hospital or other setting such as a forensic facility or a morgue or mortuary. Where such a protocol for viewing does not exist, guidelines are essential for all personnel who may come in contact with survivors. Those responsible for the body may not have had training in how to discuss with family members whether and under what conditions to view the body, or how to support the family during the viewing and afterward. These activities, or the lack thereof, may have short-term consequences for families, such as their effects on grief, and those that are long-lasting in terms of mourning and memories.

While not applicable to all cases and situations, the literature reviewed here largely supports the benefits of viewing of the deceased, given that not viewing has consequences that cannot be undone. Among the main positive aspects are confirming the reality of the death and saying goodbye. Additionally, viewing also appears to further confirm how the person died, which may allow the survivors to be closer to the deceased as they think about their last moments of life. Not viewing may leave a gap in understanding the life history of the deceased and some have reported that it is difficult for them to stop looking for the dead.

Those who are present at the death, or shortly thereafter, have their own reactions to the deceased based on their personal and cultural background. As noted, the Japanese seeing-off ceremony is meant to show respect for the life of the deceased. Another culturally related practice is keeping the remains in the house where the deceased lived as a means of prolonging the goodbyes and permitting visitors the opportunity to share feelings and emotions in a special place and time.

Throughout this review, we have presented information that we hope is useful to service providers, managers, and leaders involved in the process of death notification, emphasizing the human connections between the bereaved, family members, and other loved ones, and those whose job it is to complete the necessary medical, legal, and societal obligations to care for the remains. Health care providers who have treated the deceased or attended the death have their own feelings and emotions about death notification and advising families about viewing. These are complex issues that require training and practice in considering the needs of families. Professionals must be able to provide accurate information, while considering a family's needs for privacy, courtesy, time, support, and additional resources. An important theme that was identified by this literature review is that medical professionals should not make assumptions about how family members would best benefit regarding viewing their loved one's remains or that viewing is always harmful to their welfare. Professionals need to be educated how their own discomfort can unduly influence their interactions with families or with other staff. It is also noted that professionals sometimes need the support of those with whom they work.

Limitations

There are many other aspects regarding the circumstances of exposures to human remains that are beyond the scope of this paper. We focused specifically on the issues and literature that are of most practical value to service providers and managers. Among the additional topics that could be explored are: ethical issues, bereavement, strategies for managers of service providers, notification and viewing of remains in non-traumatic death, and religious literature on death. Our literature search yielded mostly papers from Western countries and were published in English. Thus, we were not able to explore literature in other languages.

Research Needs

There are several topics associated with individual experiences and reactions to traumatic death. Some include: (a) Demographic and cultural characteristics of survivors, such as age, race/ethnicity, gender, and SES. (b) How cultural considerations contribute to decisions about the handling and fate of remains and the effects of such decisions on survivors' reactions and well-being. (c) How differences in experiences and reactions to viewing of bodies differ by cause of death. (d) How exposure to bodies affects children depending on their age, maturity, and the support or lack of support from family and friends.

Research should also consider the experiences of those who are episodically exposed to traumatic death: bystanders, volunteers, emergency workers, and law enforcement personnel. For many, seeing the body is not optional as it can be an occupational responsibility. In rural areas, the distinction between personal and professional roles may blur given that it is not uncommon for rural emergency personnel to handle the remains of those whom

https://doi.org/10.1017/dmp.2024.125 Published online by Cambridge University Press

they know and to whom they may be related, thus complicating the experience. In addition, given the increases in school shootings in the US and increasing levels of community violence, it is important to understand the needs of children in response to this type of traumatic death.

Conclusions

Complex challenges for survivors occur when a death is untimely, unexpected, premature, and due to a traumatic event. Challenges for practitioners and institutions present themselves when there is a lack of knowledge or disagreement about the practices and policies to be followed, such as when and how to conduct the death notification, and whether and how to allow families to view the body or carry out personal and religious rituals.

Given the findings of this review, we recommend the following: First, that clinicians and service providers should be trained and practiced on death notification. Death notifiers must be emotionally able to provide accurate information in a sensitive manner while interacting with survivors. They should be able to advise them of issues involved in the decision to view the body while remaining neutral about the survivor's decision. Second, when forensic procedures are anticipated, survivors should be made aware of the reasons for the procedures, what is likely to be done, how long it may take, and what information will be shared with them. Third, when survivors elect to and are permitted to see the body, every effort should be made by those responsible for the body to assure that the survivors are: (a) prepared for what they will see and may experience; (b) given a private location and time in which to reflect on the challenges that they face; (c) provided answers to all questions by authorities who have knowledge of the circumstances of the death; (d) permitted to perform rituals according to their faith and culture, within reason and with an appreciation of the limitations of where the body is viewed and (e) given a follow-up call with a staff professional such as a nurse or social worker after they leave the facility in order to answer any remaining questions and provide support and resources, if desired.

It is important to realize that post-death events such as death notification, identification, forensic procedures, investigation information-gathering, and viewing, can be interactive and should not require excluding families from these events. When families are excluded, they can experience negative consequences. Care of survivors should be a priority throughout the process, from death notification through post-viewing and post-funeral, by continuing follow-up by authorities and personnel of helping agencies.

Competing interest. The authors declared no potential conflict of interest with respect to the research, authorship, and/or publication of this paper.

Disclaimers. The opinions and assertions expressed herein are those of the authors and do not reflect the official policy or position of the Uniformed Services University of the Health Sciences or the Department of Defense.

The contents of this publication are the sole responsibility of the authors and do not necessarily reflect the views, opinions, or policies of The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. Mention of trade names, commercial products, or organizations does not imply endorsement by the U.S. Government.

This project was conducted under the Uniformed Services University of the Health Sciences award number HU00012020073 from the Henry M. Jackson Foundation for the Advancement of Military Medicine.

References

1. **Ombres R**, **Montemorano L**, **Becker D.** Death notification: Someone needs to call the family. *J Palliat Med.* 2017; **20**(6):672–675.
2. **Whelan J**, **Gent H.** Viewings of deceased persons in a hospital mortuary: Critical reflection of social work practice. *Aust Soc Work.* 2013; **66**(1): 130–144.
3. **Collins S.** Sudden death counseling protocol. *Dimens Crit Care Nur.* 1989; **8**(6):375–385.
4. **Roe E.** Practical strategies for death notification in the emergency department. *J Emerg Nurs.* 2012; **38**(2):130–134.
5. **Klein S**, **Alexander DA**. Good grief: a medical challenge. *Trauma.* 2003; **5**: 261–271.
6. **Li SP**, **Chan CWH**, **Lee DTF**. Helpfulness of nursing actions to suddenly bereaved family members in an accident and emergency setting in Hong Kong. *J Adv Nurs.* 2007; **40**(2):170–180.
7. **De Leo D**, **Guarino A**, **Congregalli B**, et al. Receiving notification of unexpected and violent death: a qualitative study of Italian survivors. *Int J Environ Res Public Health.* 2022; **19**(17):10709.
8. **Cathcart, F.** Seeing the body after death. *BMJ.* 1988; **297**:997–998.
9. **Harrington C**, **Sprowl B.** Family members' experiences with viewing in the wake of sudden death. *Omega (Westport).* 2011; **64**(1):65–82.
10. **Mowll J**, **Lobb EA**, **Wearing M.** The transformative meanings of viewing or not viewing the body after sudden death. *Death Stud.* 2016; **40**(1):46–53.
11. **Engen T.** Remembering odors and their names. *Am Sci.* 1987; September-October:497–503.
12. **Blau S**, **Graham J**, **Smythe L**, et al. Human identification: a review of methods employed within an Australian coronial death investigation system. *Int J Legal Med.* 2021; **135**(1):375–385.
13. **Chapple A**, **Ziebland S.** Viewing the body after bereavement due to a traumatic death: qualitative study in the UK. *BMJ.* 2010; **340**:c2032.
14. **de Boer HH**, **Roberts J**, **Delabarde T**, et al. Disaster victim identification operations with fragmented, burnt, or commingled remains: Experience-based recommendations. *Forensic Sci Res.* 2020; **5**(3):191–201.
15. **de Mönnink HJ**.Photo viewing after traumatic death: Finding the missing piece. *Traumatology.* 2019; **25**(4):226–234.
16. **Cozza SJ**, **Fisher JE**, **Hefner KR**, et al. Human remains identification, grief, and posttraumatic stress in bereaved family members 14 Years after the September 11, 2001, terrorist attacks. *J Trauma Stress.* 2020; **33**(6): 1137–1143.
17. **Kristensen P**, **Weisaeth L**, **Heir T.** Visiting the site of death: experiences of the bereaved after the 2004 Southeast Asian Tsunami. *Death Stud.* 2012; **36**(5):462–476.
18. **Kristensen P**, **Dyregrov A**, **Weisaeth L**, et al. Optimizing visits to the site of death for nereaved families after disasters and terrorist events. *Disaster Med Public Health Prep.* 2018; **12**(4):523–527.
19. **Dix P.** Access to the dead: the role of relatives in the aftermath of disaster. *Lancet.* 1998; **352**:1061–1062.
20. **Reny D**, **Root S**, **Chreiman K**, et al. A body of evidence: barriers to family viewing after death by gun violence. *J Surg Res.* 2020; **247**:556–562.
21. **Mowll J**, **Bindley K**, **Lobb EA**, et al. I dressed her up in her best dress: the experiences of the dead body for bereaved relatives in the context of palliative care. *SSM Qual Res Health.* 2022; **2**:100058.
22. **Corpuz JCG**. Beyond death and the afterlife: the complicated process of grief in the time of COVID-19. *J Public Health (Oxf).* 2021; **43**(2): e281–e282.
23. **Diolaiuti F**, **Marazziti D**, **Beatino MF**, et al. Impact and consequences of COVID-19 pandemic on complicated grief and persistent complex bereavement disorder. *Psychiatry Res.* 2021; **300**:113916.
24. **Lowe J**, **Rumbold B**, **Aoun SM**. Memorialisation during COVID-19: implications for the bereaved, service providers and policy makers. *Palliat Care Soc Pract.* 2020; **14**:1–9.
25. **Pearce C**, **Honey JR**, **Lovick R**, et al. 'A silent epidemic of grief': a survey of bereavement care provision in the UK and Ireland during the COVID-19 pandemic. *BMJ Open.* 2021; **11**(3):e046872.

https://doi.org/10.1017/dmp.2024.125 Published online by Cambridge University Press

26. **Eisma MC**, **Tamminga A.** COVID-19, natural, and unnatural bereavement: comprehensive comparisons of loss circumstances and grief severity. *Eur J Psychotraumatol.* 2022; **13**(1):2062998.
27. **Janzen L**, **Cadell S**, **Westhues A.** From death notification through the funeral: bereaved parents' advice to professionals. *Omega.* 2004; **48**(2): 149–164.
28. **Coe C.** Meaningful deaths: home health workers' mediation of deaths at home. *Med Anthropol.* 2020; **39**(1):96–108.
29. **Gruneir A**, **Mor V**, **Weitzen S**, et al. Where people die. A muiltilevel approach to understanding influences on site of death in America. *Medl Care Res and Rev.* 2007; **64**(4):351–378.
30. **Masaki S**, **Asai A.** Seeing-off of dead bodies at death discharges in Japan. *Med Humanit.* 2013; **39**(2):131–136.
31. **Gonzales F**, **Hereira M.** Home-based viewing (El Velorio) after death: a cost-effective alternative for some families. *Am J Hosp Palliat Med.* 2008; **26**(5):419–420.
32. **Harper S.** The social agency of dead bodies. *Mortality.* 2010; **15**(4):308–322.
33. **Howarth G.** Dismantling the boundaries between life and death. *Mortality.* 2000; **5**(2):127–138.
34. **Page MJ**, **McKenzie JE**, **Bossuyt PM**, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ.* 2021; **372**:n71. doi: 10.1136/bmj.n71

https://doi.org/10.1017/dmp.2024.125 Published online by Cambridge University Press