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Handling dead bodies in forensic investigations and its temporal psychological effects

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First responders and forensic scientists are frequently subjected to significant psychological stressors as part of their professional responsibilities in establishing the certainty of death and safeguarding human dignity and property. This article draws upon ten years of experiential data from forensic and criminal investigations in Tanzania involving crime scenes, disaster sites, exhumations, and postmortem examinations in mortuaries. The most challenging specimens encountered by forensic practitioners tend to be in advanced stages of decomposition, amputated, burned, mutilated, or presenting as skeletonized, ripped open, or bloated due to drowning. Consequently, this paper delineates the common transient psychological effects observed in investigators following the handling of deceased bodies. Notably, many practitioners report symptoms such as loss of appetite or cessation of meat consumption after engaging with such cases. Furthermore, the study discusses the reality of temporary psychological disturbances including intrusive thoughts, stress, vivid imaginations, and fears experienced by dead body's handlers and investigators in the field. It emphasizes the critical importance of timely psychological counseling and support in mitigating these adverse effects.

Key words: First responders, psychological impact, trauma, mental health support.

INTRODUCTION

The Swahili adage "maiti kitu cha ajabu," loosely translated as "the corpse is a strange thing" encapsulates a cultural recognition of the complex and often unsettling nature of handling deceased bodies; a sentiment with which this study fully concurs. Even health professionals, mortuary personnel, and funeral service providers are acutely aware of the emotional and physical challenges associated with managing dead bodies (Kalis, 2007). Similarly, investigators from police and forensic pathology units confront intricate issues related to the handling of deceased individuals (Substance Abuse and Mental Health Services Administration, 2018). However, in this context, there exists a paucity of systematic research exploring the psychological challenges faced by individuals during and after the process of corpse management within Tanzania. Understanding these challenges is vital for developing effective intervention strategies and support mechanisms. The primary motivation for this study is to identify the psychological triggers, differentiate acute reactions from longer-term effects, and establish appropriate coping mechanisms. The data presented herein have been accumulated incrementally through interviews and observational studies conducted during real-life cases involving body

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handling across various settings in Tanzania; a nation with an estimated population of approximately 61.7 million according to the 2022 census (United Republic of Tanzania, 2022). Tanzania has experienced numerous incidents involving deceased individuals, encompassing cases of natural death, homicide, and natural and human-made disasters; such as environmental calamities, infrastructural collapses, and mass casualty events; that have resulted in substantial loss of life, destruction of infrastructure, environmental degradation, and property damage. In such major incidents, police operations are invariably deployed alongside other stakeholders, including emergency services, to respond rapidly to disasters such as fires, transportation accidents, explosions, hazardous material spills, stadium disasters, floods, aircraft crashes, and earthquakes (Review, n.d.). The author of this article is a disaster response specialist. Over his ten-year career, he has examined 167 cases involving body handling, including 16 exhumations, three natural catastrophe investigations, two shipwreck accidents, nine fire-related incidents, 24 autopsies, 64 road traffic collisions, two aircraft crashes, 42 crime scene investigations, and 5 cases of natural death in residential or hospitality settings. The data analysis and presentation utilize a general model simulation approach, which aims to reflect overarching trends without referencing specific case examples (Maria, 1997). This approach provides insights into the typical psychological and operational responses of responders and investigators to deceased bodies, highlighting how perceptions vary depending on the nature of the corpse and the circumstances leading to death (Tidball-Binz, 2007). Although all are bodies, some evoke more intense reactions—due to their gruesomeness, the memories they trigger, or their perceived normalcy; thus influencing the mental and emotional response of the handling personnel.

METHODOLOGY

This longitudinal study employed a mixed-methods qualitative design (in-depth interviews, systematic observations, and participatory discussions) to explore the psychological and behavioral responses of individuals involved in handling deceased bodies across various contexts. The sample comprised a total of 2,422 participants, including local village and ward executive officers, forensic investigators, mortuary staff, rescue personnel, and other emergency responders. Participants were recruited based on their direct involvement in corpse management during specific incidents such as mass casualties, autopsies, exhumations, and disaster responses.

Sample composition and categorization

Participants were categorized according to their roles and the nature of the incidents they responded to, allowing for subgroup analyses. The roles included first responders (rescue workers, forensic investigators), administrative personnel (local officials), and mortuary staff. The incidents involved in the study included exhumations, autopsies, fire accidents, road traffic crashes, aviation crashes, shipwrecks, crime scene investigations, natural death cases, and other disaster-related events.

Example: Case studies of two intricate death scenes

Ten years of handling dead bodies experience involve many exhumation cases but one notable case in Tanzania was the 2017 forensic exhumation and identification of a murdered pastor in Dar es Salaam, which was a key case study highlighting the importance of an interdisciplinary forensic team. A pastor was reported missing in March 2017, and his body was found buried in a shallow grave in the Mabwepande bush in Dar es Salaam on April 11, 2017. After a two-day search, village officers located the remains. A technical exhumation was conducted on April 12, 2017, to recover the body and transport it to the Muhimbili National Hospital for autopsy examination (Figure 1). On August 10, 2019, a catastrophic petrol tanker explosion occurred in Morogoro, Tanzania, near the Msamvu Bus Station. At approximately 8:30 a.m., a fuel tanker traveling from Dar es Salaam toward Iringa overturned while attempting to avoid a motorcyclist. After the crash, a large crowd of local residents and "boda-boda" (motorcycle taxi) riders gathered to siphon leaking fuel. The explosion was reportedly triggered when a man attempted to retrieve the truck's battery, creating a spark that ignited the fuel fire. In this case more than 70 people died and 120 others were injured (Figure 2).

Data collection methods

Interviews were conducted with diverse groups, including emergency responders, forensic personnel, mortuary staff, and funeral service providers. These open-ended interviews aimed to elicit personal perceptions, emotional states, coping strategies, and attitudes regarding the psychological impact of corpse handling. Responses were recorded via note-taking and audio recordings where consented, enabling the collection of direct quotes. During critical incidents such as disaster scene body recoveries, exhumation and forensic examinations, the researcher engaged in participant observation. Behavioral responses such as dissociative phenomena, anxiety, mood fluctuations, and somatic symptoms like loss of appetite were systematically documented through direct visual assessment and behavioral analysis. Real-time discussions with responders during active disaster phases provided insights into their perceptions and emotional reactions. The researcher posed open-ended questions to explore resilience, emotional regulation, and trauma responses, capturing dynamic socio-emotional responses in the field.

Recording and analysis of responses

Responses and observations were documented in field notes and transcripts. The researcher employed thematic analysis to identify common psychological effects, and quantitative summaries (percentages and frequencies) were derived to facilitate cross-tabulation and subgroup comparisons. Throughout each phase of the study; pre-, during, and post-intervention, the following psychosocial elements were systematically assessed: emotional mood states, dissociative behaviors, social withdrawal or isolation, alterations in appetite, and the presence of fear, nervousness, or stress-related symptoms. Particular attention was given to observable signs of trauma-related affect regulation, such as

Figure 1. Picture **A** shows a decomposed dead body of a pastor in a shallow grave at the crime scene area. Picture **B** shows first responders and forensic investigators lifting the dead body using a plastic sheet. Picture **C** shows the dead body placed inside a body bag. Picture **D** shows village leaders and community members witnessing the forensic exhumation process.

emotional numbing or heightened arousal. Additionally, the study examined behavioral responses related to food preferences and aversions following exposure to the handling of deceased individuals, aiming to understand somatic and autonomic responses associated with acute stress and trauma. This mixed qualitative methodology facilitated an in-depth understanding of the complex psychological, behavioral, and physiological responses among first responders engaged in the management of deceased bodies, capturing the temporal evolution of these responses across the disaster response continuum.

RESULTS

The findings delineate a broad spectrum of psychological and behavioral responses among participants involved in handling deceased bodies across different incident types. The total sample included 2,422 individuals, with specific incident-related subgroup sizes detailed in Table 1. The study revealed that handling deceased bodies elicited a range of psychological effects among participants. A significant number experienced mood disturbances, including irritability and depression, totaling 619 individuals. Stress and anxiety symptoms were reported by 327 participants, while 331 individuals experienced intrusive thoughts and fears. Altered eating behaviors, such as aversion to meat and fish, were noted in 45 participants, and 18 reported a loss of appetite. Dissociative symptoms were observed in 22 individuals, as were signs of social withdrawal and emotional seclusion. Overall, these findings highlight the profound psychological impact of corpse management on responders

Prevalence of psychological effects

Overall, participants reported various psychological effects, categorized into seven thematic groups.

Cross-tabulation insights

Preliminary analyses suggest that certain types of

Figure 2. (A) depicts a section of the disaster area's interior boundary, where the petrol tank is located amidst the corpses of victims still engulfed in flames, while (B) illustrates the outer boundary, which is scattered with additional bodies and various pieces of physical evidence.

Table.1: Showing events involved handling dead bodies and the noted incidents psychological effects.

Noted temporal psychological effects	Events Involved Handling Dead Bodies							**Total Incidents**
	exhumation	Plane &Road accidents	autopsy	Shipwreck accidents	Fire accidents	Crime scene	Natural death	
Ignoring eating meat	13	4	9	3	14	2	0	**45**
Ignoring eating fish	4	0	0	11	2	0	0	**17**
Stressful feelings	14	33	21	106	77	59	17	**327**
Imaginations and fears	17	13	21	127	71	62	20	**331**
Lost appetite	4	2	5	1	4	2	0	**18**
Dissociative	2	1	4	6	0	6	3	**22**
Bad mood	56	101	67	142	109	92	52	**619**

Table 2. Indicating incident types and elicited psychological distress.

Type of incident	Specific psychological responses
Exhumation procedures	96 of 138 involved personnel experienced psychological crises
Road traffic and aviation accidents	154 of 284 affected individuals exhibited adverse mental health reactions.
Autopsies	127 of 171 mortuary staff reported symptoms of emotional distress, including intrusive thoughts and somatic complaints.
Rescue operations (drowning victims)	396 of 502 rescuers reported significant trauma-related symptoms including ignoring eating fish
Fire-related corpse recovery	277 of 362 responders exhibited adverse psychological effects including ignoring eating meat
Crime scene investigations	223 of 559 personnel reported psychological burden
Natural death investigations	92 of 406 individuals experienced emotional reactions, underscoring that even non-violent deaths can evoke psychological distress.

investigations, such as exhumations and fires accidents, are associated with higher levels of distress. Moreover, roles such as forensic investigators and rescue personnel tend to report more severe reactions compared to administrative staff, indicating role-specific vulnerabilities. Figure 2 showing the noted specific temporal psychological effects in relation to total incidents of handling dead bodies.

DISCUSSION

Based on the findings, bodies that were drowned in the sea and burn-related fatalities elicited transient psychological effects among first responders and forensic scientists (Tables 1 and 2). This phenomenon may be attributable to the complexity and scale of such incidents, which often involve large aggregations of deceased individuals and necessitate multidisciplinary collaboration among various forensic and emergency response teams. Consequently, the psychological impact on personnel is amplified, affecting multiple individuals simultaneously. Furthermore, the condition of the remains in these scenarios is typically severely compromised by environmental factors. A rescue team member involved in one case reported saying *"the smell, the decomposed tissue, it all felt so visceral, I kept thinking about how helpless they must have been."* This quote reflects the profound emotional reactions to decomposed aquatic corpses, illustrating how environmental and scene-specific factors escalate psychological distress. It has reported also that marine-deposited corpses frequently exhibit extensive soft tissue decomposition characterized by discoloration, bloating, liquefaction, and putrefaction, along with mucous membrane slippage and depletion caused by marine scavengers and organisms such as mollusks and crustaceans (Tidball-Binz, 2007; National Institute of Justice, 2005). The physical state of submerged remains complicates recovery efforts, often prolonging the duration of the retrieval process and contributing to sustained psychological distress among recovery personnel, as they are exposed to distressing visual and olfactory stimuli over extended periods (Sweet, 2010; Kalis, 2007). The findings also indicate in cases involving burn-related fatalities, the physical condition of the bodies - marked by severe dermal damage, desiccation, and exposure to smoke, further exacerbates the psychological burden on investigators (Figure 2; Tables 1 and 2). Large-scale fires like that happened Morogoro in Tanzania can cause extensive thermal destruction (Figure 2), leading to the combustion of soft tissues and, in severe instances, researchers report the exposure and partial destruction of skeletal structures (Almirall et al., 2004; Freas et al., 2008). Such catastrophic scenes are infrequent but tend to have a prolonged psychological imprint on forensic personnel due to the intense and visceral nature of the trauma observed. One investigator involved in Morogoro fire-fatal reported *"after working on the fire victims, I couldn't eat meat or even look at it without feeling sick. The images of burned flesh kept flashing back, making me avoid certain foods."* This illustrates how traumatic exposure to severely burned bodies can influence dietary behaviors, leading to aversions rooted in intrusive memories and emotional responses.

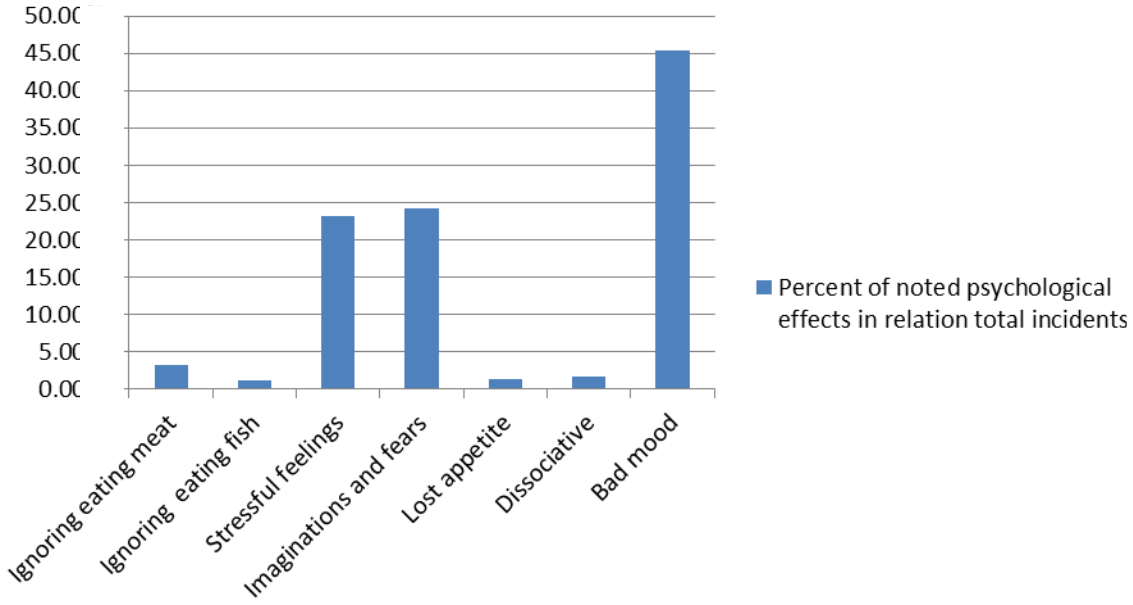
Incidents involving homicide and other violent crimes

found exert profound psychological effects on investigators and associated personnel, owing to the disturbing nature of human atrocities and the necessity of detailed scene analysis. Forensic investigators were often found engaging in cognitive empathy by mentally simulating the circumstances of the crime, which can intensify emotional distress and intrusive memories. In one case autopsy participant quoted saying *"being part of the autopsy team for that homicide case of a young girl was emotionally draining. I kept replaying the scene in my mind, and sometimes I'd wake up in the night thinking about it."* This underscores the emotional fatigue and intrusive thoughts that can develop among forensic personnel involved in violent crime investigations, highlighting the need for psychological support. In most literatures indicate postmortem examination of such human remains is critical for establishing victim identity and elucidating the cause and manner of death, which necessitates meticulous postmortem analysis, including autopsy procedures and comprehensive documentation (Busuttil and Keeling, 2008; Bristow et al., 2011; Adams and Byrd, 2008). As a result, investigators typically allocate extended periods for postmortem examinations and report preparation, further entrenching their exposure to traumatic memories (Leditschke et al., 2011).

It also found that repeated exposure to such distressing scenes can lead to cognitive and emotional overload among forensic personnel, manifesting as acute stress responses, intrusive thoughts, and emotional fatigue. Most researchers specify that this phenomenon is particularly pronounced during investigations involving multiple fatalities within a short timeframe, which can overwhelm individual resilience and precipitate temporary or long-term psychological effects (National Institute of Justice, 2005; Substance Abuse and Mental Health Services Administration, 2018; International Labour Organization, 2020). Consequently, the cumulative psychological burden posed by these traumatic scenes can impair judgment, reduce operational efficiency, and necessitate targeted mental health interventions for forensic professionals. In forensic pathology, the occurrence of autopsies is widely regarded as a fundamental component in the process of problem identification, particularly in elucidating the cause and manner of death (Busuttil and Keeling, 2008). Notably, exhumation procedures often involve a multidisciplinary team comprising forensic archaeologists, forensic pathologists, and law enforcement investigators; specialists who are less frequently engaged in routine forensic case (Adams and Byrd, 2008). The autopsy protocol is typically streamlined to include only essential personnel, predominantly forensic pathologists, anthropologists, detectives, and legal representatives from the decedent's family (International Committee of the Red Cross, 2009). This limited but specialized group plays a critical role in the investigation; however, their intensive engagement with the cadaver can lead to significant psychological stress, as members are often exposed to the biological remains in a profoundly visceral manner. Such exposure can result in adverse psychological sequelae, including intrusive memories and recurrent nightmares related to the traumatic incident, which has been documented as a common psychological consequence among forensic and investigative personnel.

Incidents involving aircraft crashes found share similarities with fire-related incidents but are distinct in their forensic and investigatory complexities. Conversely, road traffic accidents (RTAs) represent a particularly unique category within forensic investigations (Table 1). RTAs involving multiple victims necessitate the deployment of extensive multidisciplinary response teams, including emergency medical services, forensic scientists, and law enforcement personnel, similar to responses required in waterway disasters or large-scale fires that result in mass fatalities (National Institute of Justice, 2005). While many RTAs involve single individuals or small cohorts, their overall social and psychological impact is disproportionately significant when multiple victims are involved. Statistically, road traffic collisions are more prevalent than aviation accidents, underscoring their public health relevance. In the present study, findings indicate that most of participants reported experiencing psychological distress shortly after engaging in body handling procedures. This suggests that a substantial proportion of individuals involved in post-mortem management are susceptible to acute psychological disturbances. Most respondents confirmed experiencing psychological distress lasting at least 24 to 48 h, with the duration and severity of symptoms varying according to individual factors such as self-esteem, resilience, and prior mental health status. These findings underscore the importance of implementing psychological support interventions for forensic personnel and responders engaged in trauma and disaster victim management.

The prevalence of negative psychological responses among victims was notable, with 45.3% exhibiting symptoms of dysphoria, indicating a significant proportion experienced adverse emotional states following the traumatic handling of deceased individuals. The second most common psychological reaction, observed in 24.2% of victims, involved intrusive imagery and pervasive fears, predominantly among individuals engaged in the management of corpses resulting from fire-related fatalities and drowning incidents. This suggests a strong association between traumatic exposure and the development of intrusive memories and anxiety-related responses. Furthermore, 23.9% of victims reported experiencing general stress-related symptoms, such as heightened arousal and emotional distress, across various event types. A smaller subset of the population



Bar graph 1. The specific temporal psychological effects in relation to total incidents of handling dead bodies.

exhibited behavioral changes; specifically, 3.2% reported neglecting the consumption of meat, while 1.6% abstained from eating fish. Notably, 1.3% of individuals experienced a loss of appetite, a somatic manifestation often linked to psychological trauma (Bar graph 1). The aversion to fish was frequently rooted in traumatic recollections, particularly memories of corpses encountered in aquatic environments. Victims recounted recurrent visual imagery where the coloration of fish resembled that of boiled or decomposed flesh, evoking distressing associations. For individuals rescued from drowning, intrusive memories of consuming fish that resembled decomposed remains persisted, leading to temporary anorexia. Similarly, those who handled carcasses of fire victims reported that visual exposure to roasted meat triggered vivid recollections of burned bodies, causing them to avoid meat consumption for extended periods. Additionally, individuals involved in violent crimes, such as street robberies and homicides, reported persistent intrusive memories when exposed to meat at butcher shops. These associations appeared to be conditioned responses linking the visual stimuli of meat to past traumatic events, thereby influencing their dietary behaviors and emotional well-being. This pattern underscores the profound impact of traumatic exposure on somatic and behavioral responses, mediated through complex cognitive and perceptual mechanisms.

Conclusion

In light of the findings obtained, it is imperative for individuals involved in the handling of deceased bodies to receive counseling promptly upon completion of their tasks to mitigate potential psychological repercussions. Proactive measures such as this serve as a safeguard against adverse mental health outcomes. It is crucial to emphasize that prevention is more effective than treatment. Additionally, there should be established protocols mandating a limit on the number of deceased bodies a person can handle per day, except in emergency situations where flexibility may be warranted. Handling cadavers is akin to engaging in hazardous activities, necessitating caution to prevent overexertion and fatigue. Furthermore, there is a pressing need for comprehensive studies to investigate the long-term effects of working with deceased bodies, as this study primarily focused on short-term psychological impacts. Extensive research is essential to identify and address potential issues effectively. This underscores the importance of educating first responders and forensic professionals about the psychological risks associated with their roles, enabling them to proactively address and manage these challenges.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

REFERENCES

Adams BJ, Byrd JE (2008). Recovery, analysis, and identification of

commingled human remains. In Recovery, Analysis, and Identification of Commingled Human Remains. https://doi.org/10.1007/978-1-59745-316-5
Almirall JR, Furton KG (2004). Analysis and Interpretation of Fire Scene Evidence. In Analysis and Interpretation of Fire Scene Evidence. https://doi.org/10.1201/9780203492727
Bristow J, Simms Z, Randolph-Quinney PD (2011). Forensic Anthropology: 2000 to 2010. In CRC Press.
Busuttil A, Keeling J (2008). Paediatric Forensic Medicine and Pathology. Paediatric Forensic Medicine and Pathology. https://doi.org/10.1201/b13186
Freas LE, Warren MW (2008). Review of: Forensic Cremation: Recovery and Analysis. In Journal of Forensic Sciences 53:6. https://doi.org/10.1111/j.1556-4029.2008.00893.x
International Committee of the Red Cross (2009). Missing People, DNA Analysis and Identification of Human Remains. 52p. www.icrc.org/eng/resources/documents/publication/p4010.htm
Kalis M (2007). Management of Dead Bodies after Disasters: A Field Manual for First Responders. Journal of Homeland Security and Emergency Management 3(3). https://doi.org/10.2202/1547-7355.1253
Leditschke J, Collett S, Ellen R (2011). Mortuary operations in the aftermath of the 2009 Victorian bushfires. Forensic Science International 205(1-3):8-14. https://doi.org/10.1016/j.forsciint.2010.11.002
Maria A (1997). Introduction to modeling and simulation. Winter Simulation Conference Proceedings 7-13. https://doi.org/10.1145/268437.268440
National Institute of Justice (2005). Mass Fatality Incidents: A Guide for Human Forensic Identification | National Institute of Justice. https://nij.ojp.gov/library/publications/mass-fatality-incidents-guide-human-forensic-identification Review RB (n.d.). Tanzania (United Republic of) for Disaster Risk Reduction.
Sam G (2012). Chapter 3 – Research Methodology and Research Method. Research Methodology and Research Method 4(2):43-5.
Substance Abuse and Mental Health Services Administration (2018). Disaster Technical Assistance Center Supplemental Research Bulletin First Responders: Behavioral Health Concerns, Emergency Response, and Trauma pp. 1-15. https://www.samhsa.gov/dtac/disaster-behavioral-health-resources/supplemental-research-bulletin
Sweet OCD (2010). INTERPOL DVI best-practice standards-An overview. Forensic Science International 201(1-3):18-21. https://doi.org/10.1016/j.forsciint.2010.02.031
Tidball-Binz M (2007). Managing the dead in catastrophes: Guiding principles and practical recommendations for first responders. International Review of the Red Cross 89(866):421-442. https://doi.org/10.1017/S1816383107001130
United Republic of Tanzania. (2019). Tanzania in Fiures 2018 National Bureau of Statistics Dodoma. United Republic of Tanzania, June.