Volunteerism during humanitarian crises: a practical guide

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Abstract
Volunteerism to provide humanitarian aid occurs in response to disasters, crises, and conflict. Each of those volunteerism triggers engenders personal risk borne by the healthcare volunteer while rendering aid and merit specific evaluation. Factors that impact decision-making with regard to volunteering are personal, structural and crisis specific. Practical approaches to travel and on-scene safety benefit volunteers and should inform planning and preparation for volunteerism-driven travel. These approaches include planning for evacuation and potential rescue. These unique skills and approaches are generally not part of medical education outside of military service. The global medical community, including medical professional organizations, should embrace this opportunity to improve medical education and professional development to support humanitarian aid volunteerism. Disaster, crisis, or conflict-driven healthcare volunteerism highlights the core elements of altruism, dedication, and humanity that permeate clinician's drive to render aid and save lives.

Keywords: Volunteerism, Humanitarian, Disaster, Safety, Crisis, Conflict

Disasters and crises, including military conflict, often trigger the healthcare professional’s inherent desire to render aid and save lives [1]. While many donate money and supplies others wish to render care for victims. Local clinicians understand the realities of care near where they practice. Others will need to travel from nearby countries, or a different continent. Volunteers help in three major locales: (1) unimpacted facilities overwhelmed by victims or refugees, (2) temporary shelters or care camps, and (3) conflict zones (more rare). The recent SARS-CoV-2 pandemic demonstrated altruism in health care as volunteers helped deliver care around the world—even ahead of evidence-based therapeutics. [2] This space, the established acute care facility—is comfortable for clinicians as it reflects their daily practice. Crisis volunteers, especially when there is armed conflict, are unlikely to solely render care within the confines of a hospital. Indeed, care outside of a hospital is quite distinct from most clinician’s usual practice and merits specific preparation to support safety while serving as an asset—and not a liability—during relief efforts. Unfortunately, this aspect of professional practice is rarely addressed during graduate medical education or subsequent training in most disciplines. Given the current landscape of health care needs, providing volunteer-relevant education and training represents an opportunity the global medical community should embrace as lives are at risk.

The most important decision a potential volunteer must make is whether to travel to a crisis location (Fig. 1). One must assess safety threats, potential mitigation strategies, personal risk tolerance, as well as the specific crisis type. [3] Some crises are more time limited (natural disaster) compared with others (pandemic), while military conflicts present a vastly accelerated risk profile. Major personal risks to be considered include being in a location remote from family or usual resources, illness, injury, disability, or death. Thus, a personal risk tolerance assessment is an ideal point of embarkation prior to volunteering. The specific location may influence decision-making...
with regard to safety as well. Geographically adjacent but unimpacted hospitals or refugee camps are less risky than conflict zones. Most volunteers link with a group such as a non-governmental organization, hospital’s team, medical professional organization’s volunteer group; military or police threat mitigation while volunteering is variable. It is uncommon and generally inadvisable to travel solo as a volunteer, especially if one intends to engage in health care. Governmental approval to provide basic or complex care is required and mitigates against medical liability.

Other elements that should inform one’s decision-making include, but are not limited to: prior volunteering experience, specific training for out-of-hospital aid or rescue activity, local language fluency, anticipated team members, communication infrastructure, supply and equipment availability, environmental conditions including temperature and terrain, local intelligence reports and data, personal health and fitness, personal gear or lack thereof, and availability to be absent from one’s usual site of employment [4, 5]. Lack of experience or training may strongly drive post-traumatic stress disorder in surviving volunteers unprepared for the sensory impact of the realities of disaster or conflict aid [6, 7]. In particular, injuries may be quite gruesome, and the inability to rescue everyone—especially children—exacts a vast emotional toll that may be dehumanizing. Local intelligence may flow from official government or traveler sites, especially if the location was a prior vacation destination. Due to the pandemic, some travel sites where individuals can log helpful contacts, professional services, danger spots, as well as a chronicle of their experiences have been shuttered [8]. Terrain and weather conditions remain available via a number of web-based services. The absence of personal equipment should give one pause, and a rapid acquisition of gear with which one is not well acquainted may be quite dangerous. Moreover, conflict zones place volunteers in a vulnerable position; care facilities, even impromptu ones, may be purposefully or inadvertently targeted by military action or violent extremism [9, 10]. The occurrence of such acts spurred the United Nations Security Council 2016 resolution that addressed the protection of civilians—including humanitarian aid volunteers—during armed conflict. Once a clinician has decided to volunteer, vast preparation is required.

Preparation should address gear, documents, communication, electrical power, medical travel insurance, personal medications, travel to the site(s), and planning for evacuation or rescue; Table 1 provides a checklist of items explored below. Bring gear that is durable, waterproof, easily portable, and is designed to not attract attention (avoid designer labels or unique designs) to help avoid being a victim of interpersonal violence. Backpacks optimally provide rear entry and slash-resistance to deter pickpockets. Single shoulder wear of a backpack is much more safe than the more ergonomically correct and comfortable two shoulder carry. Backpacks are common targets for thieves who may grab and pull the pack off of you. A single shoulder carry allows the pack to slide off instead of pulling you to the ground, or into an immobile object. Pants and vests in particular should have a variety of pockets, some of which should zip closed to help retain key items. Waterproof boots with a steel or otherwise non-crushable toe and a puncture-resistant and nonskid sole are essential. Depending on climate and locale, an appropriate packable hat, gloves, sunglasses as well as durable non-fogging safety goggles should be included in your gear list. Avoiding bringing jewelry other than an inexpensive unadorned wedding band or an inexpensive analog watch decreases theft potential as well as personal injury risk.

Pack a tourniquet, headlamp, money belt (or similar device), and personal safety devices like a window breaker/seat belt cutter as part of your routine gear. These devices allow you to be prepared to render aid, navigate when there is no power (and still use both hands), and escape entrapment in a vehicle that has crashed. Spread out money (small denominations preferred) across different locations on your body and have a “give-away” roll of small denominations in a larger roll in an accessible pocket if confronted; your personal safety is of utmost importance. Paper documents should travel with you but should be also stored on a smartphone, and accessible via a cloud-based server. Such documents include: driver’s license, medical license, passport, visa (if required), health insurance, medical travel insurance, emergency contact(s), itinerary, and local contact(s). An RFID-blocking sheath or wallet protects chip-based
cards. Secure a new phone devoid of personal information for volunteering to help derail identity theft.

Communication preparation includes both devices and strategies [11] Cell towers may not be operational, rendering the need for a satellite phone, or a smartphone satellite adapter. Such devices are available for rent instead of purchase. A satellite-linked emergency beacon should remain tethered to you and should be labeled with simple directions using the local language (if you are found unconscious and cannot press the signal button to trigger rescue). Solar collection panels to charge batteries, or a hand-held rotary device to generate power for electronics, are essential as the local power grid may be unstable or entirely absent [12]. A communication plan is not generally part of daily life and requires a change in perspective that reflects the unique risks associated with a non-native locale during a period of instability. Notify home emergency contacts at the start and end of every travel segment (at the airport, departing, landed at destination, cleared customs, etc.). This provides a sequential log of where you were when you were last in contact if contact is no longer achievable. Similarly, notify on-site team members whenever leaving from or returning to a location including the anticipated time it will take to finish the journey (leaving to retrieve laundry, 10 min); WhatsApp is encrypted and works everywhere but China.

| Table 1 Checklist for packing for volunteering during a humanitarian crisis |
|-----------------------------|-----------------------------|
| **Category** | **Item** |
| Documents | Driver’s license |
| | Medical license |
| | Health insurance |
| | Medical travel insurance |
| | Passport including vaccination status documentation (COVID, yellow fever, etc.) |
| | VISA (if needed) |
| | Itinerary and local contact(s) |
| | Emergency contact(s) list |
| | Plane or boat tickets |
| Equipment | Backpack |
| | Money belt (or similar) |
| | Headlamp |
| | Tourniquet |
| | Vehicle window breaker/seat belt cutter |
| | Smartphone (new) |
| | Solar charging or hand-crank device |
| | Rainsuit ± insulation (depending on locale) |
| | Thermal blanket (depending on locale) |
| | Water purification device |
| | Hat, gloves, sunglasses, goggles (depending on locale) |
| | Pants with multiple pockets (some should zip closed) |
| | Vest with multiple pockets (some should zip closed) |
| | Boots (waterproof, non-crushable toe, puncture resistant, nonskid sole) |
| | Personal medications (3X’s the amount required for length of deployment) |
| | Device to secure door locking mechanism (if staying in a hotel) |
| | Local map with 2 routes of egress clearly marked |
| | Emergency locator beacon labelled using the local language |
| | Satellite phone or sat phone cradle for a smartphone |
| | Small denomination local currency including a “give-away” roll |
| | RFID wallet or sleeve for chip-based credit card or license |
| | Internet access device |
| | Prepackaged food (i.e., protein bars, etc.) |
| | Inexpensive watch |
| | Plain jewelry (if any) |
(WeChat is instead required). Failure to check-in at the anticipated time should prompt emergency inquiry and rescue if needed. While solo travel is the norm at home, while volunteering one should never travel alone. A “buddy system” approach increases safety from untoward events such as robbery and kidnapping.

Phone safety is often underappreciated as smartphone use characterizes daily life. Avoid using a phone while walking or riding in a vehicle as it will impede situational awareness. Similarly, earbuds of any variety further degrade one’s ability to monitor the surrounding environment and are to be avoided. Phone use while walking should only occur with one’s back firmly placed against a building so that the other three sectors (270°) remain visible. Do not walk with a phone clapsed in the hand; replace it in your gear so that it is not visible. Obvious displays wealth may invite interpersonal conflict and potential injury.

Injuries or illness may occur while volunteering, and one must be prepared to manage them both locally as well as with medical evacuation [13, 14]. One’s home health insurance may not cover illness or injury abroad, reinforcing the need for specific medical travel insurance. Given that there are a variety of companies that offer such insurance, ensure that the selected travel insurance covers both local care and medical transport for repatriation. Many plans only cover local road traffic accidents, but may not have a door lock. Similarly, tent safety is compromised by both the lack of a door and environmental instability including heat, cold, and unless suitably treated or designed, water; waterproof clothing may be life-saving. Non-urban remote locations bring distinct threats from local wildlife, insects, and plants for which the volunteer should plan, and which may be relevant.

This requires the volunteer to identify reasonable routes ahead of arrival. Responses can span distracting conversation, requests for rerouting to view specific landmarks, to vehicle exit (even at moderate speed) to physical intervention as a last resort.

Since sites of humanitarian aid may be unsafe due to weather, local phenomena (additional earthquake or flood), or military conflict, planning for emergency evacuation or rescue is essential. Travel to the volunteer site (if different from the base of operations) with a “bug out” bag that contains medications (if needed), water (or a purification device), communication device(s) and power aids, as well as food for three days [15] Shelter may be more problematic to transport and a waterproof suit and a heat-retaining collapsible blanket may instead suffice. In the event of emergency evacuation, mobility is favored over durable shelter. Predetermine at least two egress routes from your volunteer location and base of operations and chart them on a map stored in the bag; do not rely on an electronic device for directions. Identify trustworthy local contacts (if present) and access numbers in advance, including law enforcement, emergency medical services, and your local embassy (if it is still staffed). Some specialty companies provide full-service extraction options (including hostile threat scenarios) but are generally prohibitively expensive for the volunteer. If such services are a serious concern, volunteering in that location should be strongly reconsidered.

Travel to the volunteer site and back home typically relies on the clinician to arrange. This includes travel from the airport or ship terminal to the volunteer base of operations. Schedule driving services from an established service provider ahead of arrival and avoid using impromptu drivers. Ensure that your supplies travel with you by watching luggage get placed in the vehicle before entering the car or van. Plan a tiered set of actions if the driver is not proceeding to the desired location.
for evacuation while awaiting rescue. Avoid sheltering near a water hole as predators will also use that site for hydration; higher ground away from a well-worn trail is preferred.

On-site supplies such as medications, instruments, and intravenous fluids are provided by the hosting organization (when there is one). Similarly, restocking at care sites as well as supply depot security should be provided by the hosting organization which may be the national government or a more local agency. When there is no organization to coordinate activity, ensure scene safety, or direct resupply the humanitarian aid effort may be crippled. Thus, confirming that there is an overarching architecture is paramount for clinician volunteers to provide care commensurate with their capabilities. Finally, many crisis locations suffer from lawlessness, and volunteers may be targets [17]. Volunteers may be visually and aurally different from local individuals especially with regard to clothing, footwear, and language and may therefore be specifically targeted. Robbery, injury, and various forms of kidnapping are realistic potentials that are only partly mitigated by prior self-defense training [18]. Unlike many medical education updates, personal security cannot be crafted by “just-in-time” approaches.

Volunteering to serve others is noble and laudable. It is, however, a calling fraught with risks, many of which are avoidable or mitigatable [19, 20]. Training is essential as is preparation for care outside of the highly structured and well-resourced established acute care facility. Outside of military medical service, most healthcare clinicians are principally untrained with regard to safety concerns while volunteering to render humanitarian aid—a gap that the global medical community, and medical professional organizations—should strive to repair. On-scene care is only one way to volunteer during a crisis, but it is uniquely personal and clearly demonstrates the altruism, dedication, and humanity that permeates health care regardless of where it is practiced around the world.

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References
1. Bielka K, Kotfs K, Poropatich R, et al. Act now! Critical care roles and obligations during an urban war. Crit Care. 2022;26:65. https://doi.org/10.1186/s13054-023-03951-z.
2. Pickell Z, Gu K, Williams MA. Virtual Volunteers: the importance of restructuring medical volunteering during the COVID-19 pandemic. Med Humanit. 2020;46(4):537–40.
3. Turtle L, McGill F, Bettidge J, Matata C, Chistley R, Solomon T. A Survey of UK healthcare workers’attitudes on volunteering to help with the Ebola outbreak in West Africa. PLoS ONE. 2015. https://doi.org/10.1371/journal. pone.0120013.
4. Callahan MV, Hammer DH. On the medical edge: preparation of expatriates, refugee and disaster relief workers, and Peace Corp volunteers. Infec Dis Clin. 2005;19(1):85–101.
5. Ye J, Stanford S, Gousse S, Tosatto R. Developing strong response capacity: training volunteers in the Medical Reserve Corpus. Dis Med Public Health Preparedness. 2018;6(6):527–32. https://doi.org/10.1017/dmp.2014.128.
6. Aldamman K, Tamrakar T, Dinesen C, Wiedemann N, Murphy J, Hansen M, Elsiddig Badr E, Reid T, Valleeles F. Caring for the mental health of humanitarian volunteers in traumatic contexts: the importance of organisational support. Eur J Psychotraumatol. 2019;10(1):1694811.
7. Jaffe E, Saxon U, Knobler H, Aviel E, Goldberg A. Volunteers and the risk of posttraumatic stress disorder. Nonprofit Manag Leadersh. 2012;23(3):367–77.
8. Kankanamge N, Yigitcanlar T, Goonetilleke A, Kamruzzaman M. Can volunteer crowdsourcing reduce disaster risk? A systematic review of the literature. Int J Disaster Risk Reduct. 2019;35:101.
9. United Nations Security Council Resolution 2286 (2016). Protection of civilians in armed conflict. http://unscr.com/en/resolutions/2286, accessed March 24, 2022.
10. De Cauwer H, Somville F, Sabbe M, Mortelmans L.J. Hospitals: soft target for terrorism? Prehosp Disaster Med. 2017;32(1):94–100.
11. Jalihal D, et al. A rapidly deployable disaster communications system for developing countries. In: 2012 IEEE international conference on communications (ICC) 2012, pp. 6339–6343https://doi.org/10.1109/ICC.2012.6364929.
12. Seekumgar G, Chekkichail V, Oshmitha A, Nair AS. Smart solar portable power supply system for emergency medical equipment. In: 2021 5th international conference on trends in electronics and informatics (ICOEI) 2021, pp. 261–266. https://doi.org/10.1109/ICOEI51242.2021.9433064.
13. Swygard H, Stafford RE. Effects on health of volunteers deployed during a disaster. Am Surg. 2009;75(9):47–53. https://doi.org/10.1177/000348090935003.
14. Maxwell CJ, Sledge S. Perspectives on global health and volunteerism for healthcare providers: the importance of preparation, identification and management of infectious diseases, and mitigation of other risks. In: Oliver M, Croteau-Chonka C, editors. Global health and volunteering beyond borders. Cham: Springer. 2019. https://doi.org/10.1007/978-3-319-88660-9_3.
15. Ostrovskyi G, Shemesh A. Contents of a bug-out bag. Prehosp and Dis Med. 2018;33(6):647–9. https://doi.org/10.1017/S1049023X18000948.
16. Jobe K. Disaster relief in post-earthquake Haiti: Unintended consequences of humanitarian volunteerism. Travel Med Infect Dis. 2011;9(1):1–5.
17. Gormley MA, Crowe RP, Bentley MA, Levine R. A national description of violence toward emergency medical services personnel. Prehosp Emerg Care. 2016;20(4):439–47. https://doi.org/10.1080/10903127.2015.1128029.
18. Lachish T, Tenenboim S, Schwartz E. Humanitarian aid workers. In: Travel Medicine (pp. 335–340). Elsevier (2019).
19. Tan A, Fong YT, Ho SF, Tay BK, Chua YL. Management and safety of a medical mission: occupational hazards of volunteering. Dev Pract. 2016;26(2):251–7.
20. Sauer L, Catlett C, Tosatto R, Kirsch T. The utility of and risks associated with the use of spontaneous volunteers in disaster response: a survey. Disaster Med Public Health Preparedness. 2014;8(1):65–9. https://doi.org/10.1017/dmp.2014.12.

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