Chapter 7.5
Doing Health EDRM Research in the Field

Lucy Fagan
Katie Carmichael
Virginia Murray

Learning objectives

To understand the following in the context of doing health emergency and disaster risk management (Health EDRM) research in the field:

- Key preparations necessary before conducting research in the field.
- Logistics involved in undertaking field research and data collection.
- Key elements needed for a successful deployment to the field.

Introduction

- Conducting real-time research during disasters is necessary to inform the response, build the evidence base and identify strengths and weaknesses.
- Maintaining the integrity of the research involves:
  - Preparation and operational independence.
  - Personal safety (e.g. training, vaccinations, security, cultural competence).
  - Resilience to deal with change and uncertainty.
- The preparation phase ensures that the research is effective, safe and contextually appropriate.
- Deficits in this phase may delay the research and lower the quality of the data.

Relationship and team building

- The principal or chief investigator (PI or CI) delegates the roles and responsibilities of team members.
- Local relationships and networks are essential for aspects such as safety and security, data quality and collection, and disseminating the results.
- Local experts and stakeholders with expertise should be included in the research team.
- Each onsite trip must be planned carefully before departure, taking environmental contexts into consideration.

Before you start (1)

- A formal mandate is needed before starting, which might come from the government or an emergency control center.
- Studies may need ethical approval (see chapters 3.4 and 7.4).
- While approvals can be expedited for emergencies, obtaining approval must be prioritized to avoid delays.
- It is beneficial to engage with networks and communities on the ground before arriving.

Before you start (2)

- Research protocols should be established before deployment.
- If new procedures are to be established, researchers should review guidelines beforehand.
- Standard operating procedures might be used for research studies but, involatile environments, the research may require specialized protocols.
- The PI / CI is responsible for reviewing and approving the standard operating procedures and training the team on these procedures.

Logistics and risk assessments

Local logistic arrangements should include:

- Collecting staff on arrival.
- Organizing transportation and lodging.
- Arranging local availability of resources.
- Understanding culture and socio-political environment.
- Assessing scale of the emergency.

Risk assessments should also:

- Account for possible threats and vulnerabilities.
- Reduce and mitigate risk.

Equipment and supplies (1)

- All equipment and software should be ready for deployment.
- All electrical and electronic equipment should be compatible with local electrical voltage levels.
- All personnel should be trained in the use of equipment.
- All supplies should be prepared beforehand, including:
  - Specimen collection (e.g. kits, packaging, collection and storage)
  - Measurement tools (e.g. calipers, scales, peak flow meters)
  - Transport mechanisms (e.g. cold chains)

Equipment and supplies (2)

Data security is essential to any research study.

- Data security measures should have the same standards in high-, middle- and low-income countries.
- Data security measures should be applied, even in emergency settings.
- Electronic data should have physical security as well as safe servers and data access protocols.
- Paper-based data should have increased physical security.

Special considerations for researchers coming from other countries

When conducting research fieldwork internationally, consider:

- The context of the environment (cultural norms and political or social pressures).
- How the presence of an international research team will be perceived.

Before deployment, the research team should receive training in:

- Physical and psychological first aid.
- Deployment.
- Data management.
- Security and safeguarding.

Safety and security in the field

- **Safety officer:** responsible for the safety of the team, conducting frequent assessments and alerting the research team of concerns.
- **Lodgings:** security measures include evaluating the safety of the premises, identifying protective measures, keeping valuable items safe, etc.
- **Transportation:** ensuring vehicles are roadworthy, have trustworthy drivers and have valuables kept in a locked trunk.
- **Field office:** should have robust information technology and communications.
- **Specialized protective equipment and medical supplies** may be needed.
- **Incident or near-miss events** should be reported so that action can be taken.

Relationship management

Trust must be fostered between researchers and the community involved:

- This involves demonstrating reliability and communicating the value of the research.
- If this process is rushed, the community may mistrust the researchers.
- Community members, academics, medical professionals and governmental and non-governmental parties should be involved, because they understand local dynamics and are important for data gathering.

Implementing research

- Ethical approvals and in-country protocols should be reviewed, ensuring that local codes of conduct are not violated.
- Informed consent is required when collecting individual-level data (see Chapters 3.4 and 7.4).
- All coordination and logistics support must be agreed upon beforehand.
- The technology used for data collection should be acceptable to the community.

Processes and mechanisms for research in the field

- The research team working in the field should share responsibility using protocols, which will make it easier to transfer responsibility back to the local team when they leave.
- Timelines for reporting should be agreed upon beforehand.
- Minutes should be taken at all meetings.
- Schedules for reports and updates should be developed in order to meet all deadlines.
- If the local media is involved, communication should be with the local incident controller in order to release accurate information.

Close out of the research and handover

- The pre-implementation and implementation phases of research are usually completed by a collaboration of researchers.
- The data collection phase might be carried out by local team members.
- During ongoing data collection or in the close-out phase of a study, it is important to ensure a smooth transition. Consider:
  - Data and equipment transport
  - Sharing of results
  - Personal well-being

Data storage and reporting

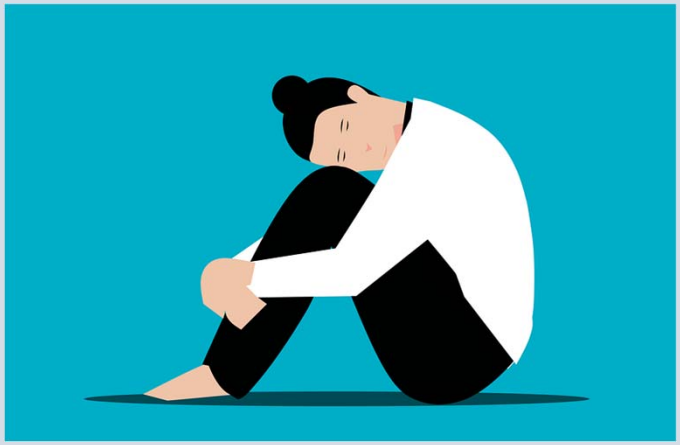
- Data must be securely archived and accessible only to those who need to review it (see Chapter 4.4).
- Any outstanding results (laboratory or clinical) should be communicated to partners using secure methods.

Dissemination

- A preliminary report should be prepared before departure.
- A lead writer should be appointed to prepare the final report.
- Before the results are widely disseminated, local institutions and ethics committees may need to give approval.
- Results should be shared with stakeholders, such as the government and the general public.

Health and wellbeing

- Hold a debrief to discuss the challenges and opportunities encountered, and use this to update existing policies.
- Staff health and well-being can be supported by offering a period of rest and recuperation, particularly for those who worked in high-risk environments.
- Staff should be able to discuss health requirements confidentially (e.g. mental health services, counselling, etc.).



Conclusions

- When undertaking fieldwork in disaster contexts, good preparation and organizational skills are essential.
- It is necessary to enlist the help of local agencies, especially in unfamiliar contexts.
- All team members must be acknowledged when presenting the findings.
- When disseminating research to communities involved, ensure that everyone is acknowledged in order to strengthen relationships with current and future contributors.

Key messages (1)

- Preparation is critical to ensuring that research in the field is effective, safe and contextually appropriate. This includes obtaining the necessary administrative and ethical approvals, preparing protocols and standard operating procedures, as well as careful planning in regard to equipment, data security and logistical questions.
- Security and safety in the field is paramount and should be considered before and during field work. Training courses are available in this.

Key messages (2)

- A good relationship should be developed between researchers and the community, by demonstrating reliability and communicating the value of the research to the community.
- Ethical approvals and in-country protocols for research should be reviewed and the relevant policies should be followed.
- Using agreements and protocols can ensure clarity as to roles and responsibilities.
- Adhere to standard operating procedures.
- Document all decisions and the rationale used to make them.

Further readings

Hilhorst DJM, Hodgson L, Jansen BJ, Mena Fluhmann RA. Security guidelines for field research in complex, remote and hazardous places. 2016.
Provides research guidance on risk management for fieldwork.

Liamputtong P. Researching the vulnerable: a guide to sensitive research methods. London, United Kingdom: SAGE Publications. 2007.
Guide to approaching vulnerable groups in a methodologically rigorous and socially conscious manner.

Ulin PR, Robinson ET, Tolley EE. Qualitative methods in public health: A field guide for applied research. San Francisco, CA: Jossey-Bass. 2005.
Comprehensive overview of the planning and conduct of qualitative studies in public health.

References

This chapter: Fagan L, Carmichael K, Murray V. Chapter 7.5: Doing Health EDRM Research in the Field.
Handbook of Disaster Research: New York: Springer. 2007.
UK Public Health Rapid Support Team (UK-PHRST): https://www.gov.uk/government/collections/uk-public-health-rapid-support-team-uk-phrst
Ethical Codes in Humanitarian Emergencies: Disasters. 2003: 27 (2): 95-108.

Contact information

Virginia Murray
Head of Global Disaster Risk Reduction
UK Health Security Agency
Virginia.Murray@UKHSA.Gov.UK

Health EDRM Research Network Secretariat
WHO Centre for Health Development (WHO Kobe Centre)
Email
wkc_tprn@who.int