BRIEF REPORT

Second Evidence Aid Conference: Prioritizing Evidence in Disaster Aid

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ABSTRACT

The Second Evidence Aid Conference took place in Brussels, Belgium, in October 2012, jointly organized by Evidence Aid and the Belgian Red Cross–Flanders. It provided an opportunity to build on the discussions from the 2011 First Evidence Aid Conference in Oxford, England, and prioritize the future work of Evidence Aid. Within the plenary presentations, discussions, and small work groups, the more than 80 international participants addressed issues regarding the need, use, and prioritization of evidence. Three parallel workshops focused on the prioritization of research, systematic reviews, and data to be collected during disasters, leading to a suggested prioritization framework and a commitment to identify key areas for evidence in disasters. Working with a wide variety of people and organizations from the disaster and humanitarian sectors, Evidence Aid will take this framework and develop a list of top priority questions in need of research and systematic reviews. Although Evidence Aid will not be able to address all of the research questions that will be identified in this process, it will collect them for sharing with relevant agencies. (*Disaster Med Public Health Preparedness*. 2013;7:593-596)

Key Words: disaster, evidence, prioritization, global

As disasters become more common and devastating, the need is increasing for better access to knowledge that will help ensure that interventions and actions do more good than harm. For many years, health care relied mainly on answers to practical medical and nonmedical questions that came from experts rather than research. However, in recent decades, the growing awareness has been that individual expertise has its limitations. At the same time, studies investigating the effects of specific interventions and evidence-based medicine have greatly increased as a means of ensuring that decisions and choices are informed by the systematic use of the best available, objective evidence in combination with expertise, values, and preferences. This process is being applied in areas outside of medicine, with the rise of evidence-based practice. There is no reason why the same standards should not be sought in disaster risk reduction, planning, response, and recovery.

Evidence Aid is an independent, international initiative to improve access to the findings of systematic reviews on the effects of interventions and actions of relevance to natural disasters and other humanitarian emergencies. Its overarching aim is to provide decision-makers with knowledge that will improve health-related outcomes. Evidence Aid was established by members of the Cochrane Collaboration after the Indian Ocean tsunami of December 26, 2004. The Cochrane Collaboration is the world's largest organization dedicated to the preparation of systematic reviews in health care, with 30 000 contributors in more than 100 countries. In more than 5500 Cochrane systematic reviews, the findings have been summarized from tens of thousands of studies, which recruited millions of patients and cost billions of dollars. Evidence Aid has identified people and organizations across the disaster and humanitarian sectors that have a desire for reliable information to help with decisions and choices, and is now working with them to identify their priorities and fill in the gaps.

The First Evidence Aid Conference, which was held in Oxford, England, in September 2011, brought together 70 participants from a range of organizations and interests including agencies from the United Nations (United Nations High Commission for Refugees [UNHCR], UN International Children Emergency Fund [UNICEF], the World Health Organization [WHO]), government organizations (US Centers for Disease Control and Prevention [CDC] and UK Department for International Development [DFID]), international nongovernmental organizations (NGO) (Oxfam and Save the Children), the Red Cross (International Committee for the Red Cross and Belgian Red Cross), publishers (Wiley-Blackwell, The Lancet, Public Library of Science [PLoS], and

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Research4Life), and academic institutions and producers of systematic reviews (Cochrane Collaboration; Columbia University, New York; Trinity College Dublin; and University of Oxford).

Building on the success of the inaugural conference, the Second Evidence Aid Conference, with more than 80 participants from a similar range of organizations, was hosted by the Belgian Red Cross–Flanders in Brussels, Belgium, on October 29-30, 2012, with a particular focus on disaster aid. Many of the organizations from the first conference were represented, and the international expertise assembled for the conference participated in intense workshops to discuss a workable compromise between rigor and feasibility, and to prepare the groundwork for efforts to select the priorities for Evidence Aid.

THE NEED FOR EVIDENCE

The Second Evidence Aid Conference was opened by the President of the European Council, Herman van Rompuy, who talked about the role that evidence should play in disasters. He stressed how crucial research-based objective information becomes in difficult and challenging situations and told the delegates "Evidence Aid has provided governments, agencies, NGOs and individuals with the most reliable information, in order to take the right choices in difficult circumstances … the work that you are doing is important for mankind."[1]

Satya P. Agarwal, MD, from the International Red Cross, started the discussions of priority setting for research in disasters, highlighting questions such as the use of homemade masks for preventing communicable diseases and minimal space requirements in shelters. He also raised the importance of equitable global aid for disaster risk reduction, or resilience. The challenges of producing the necessary evidence were raised by Amine Dahmane, MD (Médecins Sans Frontières [MSF], Belgium), who described how MSF is tackling the situation that confronts many organizations in situations for which reliable and robust evidence on effective interventions is often lacking. Dr Dahmane detailed activities requiring more evidence under a number of headings and initiated a lively debate on priorities for evidence building, including the identification of these priorities.

Roger Van Hoof, MD (International Committee for Military Medicine), followed with a presentation on ethical problems and the consequences of law and armed conflict. He discussed the level of care delivered to local populations, the need for respect for local cultures, and the problem of prioritizing within the military medicine field. Next, Evidence Aid co-ordinator Dr Bonnix Kayabu outlined the results of the Evidence Aid needs assessment survey obtained from more than 100 detailed responses.[2,3] Dr Kayabu referenced the 200 areas of uncertainty about the effects of interventions that had been suggested to date. Prathap Tharyan, MD, from the South Asian Cochrane Centre, closed the session with an account of his experience using systematic reviews to ensure good practice after the Indian Ocean tsunami.[4] He described poignant situations during that challenging time, how psychological responses were diverse and shaped by cultural variations, and the finding that 85% of people recovered without a great deal of formal psychological support.[5]

After these presentations, a group discussion covered many of the challenges for Evidence Aid and the disaster sector in general, some of which were revisited several times during the conference. These challenges included the need for a clear definition of *evidence* in the disaster context, the importance of encouraging and facilitating the publication of the results of research so that information is shared and data are accessible, and the need to provide training and support to improve both the conduct and reporting of research findings. Among the other issues raised in the discussion were how to (1) contextualize guidelines, tailor research questions and prioritize them, ensure that the items given are useful, and avoid bias when setting priorities; (2) share working practices and communication with multiple agencies and local government; (3) develop frameworks that help decision-makers make distinctions; and (4) gain access to the grey literature, transmit the right information to the decision-makers relating to the connection among evidence, research, and learning, and ensure that the evidence is of high enough quality to be accepted into guidelines. Susan Cookson, MD, from the CDC, chaired a special lunch session on the role of grey literature as a source of evidence. This discussion focused on the difficulties of identifying and appraising information that is published outside the scientific literature, in agency and government reports.

At the close of the first day, the participants agreed that a key outcome of the meeting should be to provide a framework for Evidence Aid to identify its priorities in the coming year. It was recognized that Evidence Aid would not be able to tackle all the research questions that will be identified, but that it could provide a means to collect and share them with other agencies.

THE USE OF EVIDENCE

Dr Philippe Vandekerckhove, from the Belgian Red Cross-Flanders, began the second day describing his organization's efforts to base first aid guidelines on evidence.[6] He outlined how the results of a systematic review about the safety and effectiveness of transfusing blood from patients with hemochromatosis had led parliamentarians to indicate a wish to change the law.[7] Johan von Schreeb, MD, PhD, from the Karolinska Institute, Sweden, talked about the role of emergency medical teams in response to disasters and how field hospitals often arrive too late to be useful. He noted the difficulties of co-ordinating multiple agencies, and how the introduction of foreign medical teams aims to improve health care for disaster-affected populations, but that their work needs to be guided by pragmatic evidence.

Michel Debacker, MD, from the Academy for Emergency Management and Disaster Medicine, discussed data reporting in disasters and prioritization of research questions. He posed questions about the collection and validation of the data. Dr Dahmane followed up on his previous presentation by describing how MSF is providing practical training in the conduct and reporting of research to field workers. The course is product oriented, with participants moving through the complete research cycle and having to continue to reach milestones for the entire 9 months.

The conference concluded with presentations reflecting on the prioritization of research and the monitoring of practice. Paul Spiegel, MD, MPH, from the UNHCR, discussed his experiences monitoring and evaluating areas of safe water, sanitation, and shelter in emergencies, when measurable standards are insufficient. He reinforced the problems of gathering reliable data that Dr Debacker raised. The final presentation was given by Chris Lewis, MD, from the UK DFID. He spoke about the prioritization and challenges of research into humanitarian health from a donor perspective. Also, he provided some information on a system-wide gap analysis that is being planned for humanitarian public health and sought guidance from the participants on the scope and detail for this.

THE PRIORITIZATION OF EVIDENCE

Widely discussed throughout the conference were key steps that need to be taken by Evidence Aid and by the disaster sector in general to raise the profile of evidence in this area, improve its quality, and ensure that it is useful and used by decision-makers in disaster risk reduction, planning, response, and recovery. Included were questions about what should be regarded as an acceptable, minimum standard for evidence-based practice in the disaster setting, how data should be shared, and how the information and experiences gathered in internal reports, including qualitative findings, could be published or made available as efficiently as possible. To help prioritize these and other challenges for Evidence Aid, 3 parallel workshops to which delegates had been assigned in advance considered the prioritization of (1) research questions, (2) systematic reviews, or (3) the data to collect in a disaster.

Prioritization of Research Questions

Virginia Murray, FRCP, from Public Health England (formerly Health Protection Agency), and Professor Mike Clarke, from Evidence Aid and Queen's University of Belfast, facilitated this workshop, which discussed the prioritization of the precursors for the systematic reviews that will be the core source of knowledge in Evidence Aid, namely, research studies. The overall goal was to set the framework for identifying priorities for new research rather than attempt to prioritize specific research questions. The general conclusion was that a mechanism is needed to bring together all relevant parties (ie, ranging from stakeholders to people who are on-site making decisions about aid and assistance) to prioritize areas of uncertainty and the need for future research. Areas identified for future work were

- if and how the framework should be communicated to other agencies;
- if a general framework for research prioritization is applicable for multiple organizations or if each organization should have its own framework, reflecting its areas of interest, level of expertise, and available funding; and
- how the gaps among researchers, policy makers, and implementers might be narrowed.

Prioritization of Systematic Reviews

Facilitated by Dr Lewis and Rudi Coninx, MD, from WHO, this workshop discussed the importance of systematic reviews as the bedrock of evidence for guidelines, which would then provide the basis for humanitarian activities and responses. Participants noted that guidelines are dependent on the quality of research available, and the workshop used a series of 10 specific questions to help shape the discussions. Questions were prioritized by the group and given to Evidence Aid. The workshop concluded that people preparing for and responding to disasters probably do not realize how much additional scientific evidence is needed to make well-informed decisions, and that Evidence Aid should be a key means for improving access to this evidence.

Priorization of Data to Collect in Disasters

Dr Cookson and Richard Garfield, DrPH, from Columbia University, as facilitators of this workshop, divided the participants into expert panels. These panels were given the hypothetical task of dealing with a flooding disaster and worked on the prioritization of problems, responses, and data collection in this scenario. After listing a set of problems, responses, and information systems, the panels were asked to use criteria to find a way to prioritize the topics, identifying many of the challenges of doing this when multiple needs exist for different types of data.

CONCLUSIONS

The Second Evidence Aid Conference, building on the findings from the previous year's inaugural conference and intervening discussions, laid the foundation for a process to prioritize key aspects of the work of Evidence Aid to improve timely access to the reliable knowledge needed by people involved in disaster risk reduction, planning, response, and recovery. The participants agreed with the potential for Evidence Aid to act as a provider of this knowledge, and stressed the need for the work to be collaborative and focused on topics identified as priorities by the potential users of the resource. It was accepted that the core of this resource should be systematic reviews of the effects of interventions and actions, with a focus on health outcomes; and that these reviews should be supplemented

by contextual and other information to help decision-makers and other users interpret the knowledge and apply it in their setting.

As a consequence, Evidence Aid has worked with a wide variety of people and organizations from the disaster and humanitarian sectors in 2013 to create a list of top priority questions in need of research and systematic reviews.[8] Although it was recognized that Evidence Aid would not be able to tackle all the research questions identified in this process, it would provide a means to gather them together for sharing with relevant agencies. The need to develop good communication, secure funding, and define and identify the relevant evidence featured highly in the final discussions and were accepted as important themes for the Third Evidence Aid Conference. In addition, Evidence Aid's identity and governance were discussed at length, with the conclusion that the next steps for Evidence Aid should include partnerships, followed by work on strategy, definitions, mission, vision, and deliverables.

For more information on the conference, including the agenda, speaker profiles, and presentations, photographs, posters, and video recordings, see *http://www.evidenceaid.org/evidence-aid-conference-2012-photographs/*.

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