

Sharing evidence on humanitarian relief

Needs a publicly accessible, searchable, and comprehensive database

One year ago the Asian tsunami struck, resulting in the largest humanitarian efforts of our generation. This year's hurricane Katrina and earthquake in Kashmir also showed that both developed and developing nations are ill prepared for major disasters. Rapidly sharing relevant information from relief agencies and academic and non-government organisations (NGOs) at such critical times can make an important difference to tens of thousands of people.

Relief agencies conduct fact finding expeditions in emergencies, as well as important public health measurements such as water testing, measles surveillance, and conflict surveillance. Their reports often provide the most up to date and relevant evidence on relief situations,¹ but are too often shared only internally. For agencies and field coordinators to make informed decisions, access to this information is vital.

We must, therefore, consider how to create and disseminate evidence regarding humanitarian interventions.² One absolute necessity is a publicly accessible, searchable, and comprehensive database on humanitarian disasters and approaches to relief. The lack of systematically documented or disseminated information leads to unnecessary duplication of efforts and ill informed decisions. Given the inadequacy of funding for relief aid, resources must be used wisely.

Some relief databases are already accessible to the public and NGOs. The largest is Relief Web (www.reliefweb.int), established in 1996 by the United Nations, but it has been hindered by a lack of submissions from agencies and a reticence by academics to submit reports that may be under review at journals. Other resources include the SHARED Global Database, ELDIS (the Electronic Development and Environment information System), and ID21 (Information for Development in the 21st Century), but these have the same drawbacks as Relief Web and their reporting styles vary widely. Large NGOs and international agencies have, at times, maintained publicly accessible databases; smaller agencies sometimes post reports on their websites. None of these resources is sufficiently comprehensive.

A comprehensive database would have many aims but would also have to overcome certain challenges (box). Furthermore, the quality of evidence needs to be considered. The thresholds for acceptable evidence on humanitarian situations may be different from those for therapeutic interventions,³ and a formal hierarchy for it has not yet been established.^{1 4} Access to reports may allow evaluation of the effects of interventions

through before and after analyses and systematic reviews. Many reports remain unpublished or inaccessible, however, making interpretation of single reports potentially misleading and interpretation of systematic reviews unnecessarily difficult.

Lack of access to reports from humanitarian agencies can reduce the quality of aid provided, just as inadequate evidence can hamper health care.⁵ After the tsunami, for example, several agencies made poorly informed decisions, such as using resources for mass burials.⁶ In areas of Banda-Aceh, Indonesia, health agencies conducted overwrought measles campaigns, resulting in children receiving as many as four measles vaccinations.⁷

On the other hand, access to evidence on psychological debriefing for survivors changed practice during the tsunami crisis. The best available evidence, a Cochrane review, showed that the intervention was of little use (odds ratio for post-traumatic stress disorder 1.22, 95% confidence interval 0.60 to 2.46) and may be harmful (2.88, 1.11 to 7.53),⁸ as well as wasting resources that could be applied to beneficial ends.⁹ The Cochrane Collaboration's work in the aftermath of the tsunami led to Evidence Aid, a growing resource of summaries of best evidence on the effects of health care in disasters (www.cochrane.org/evidenceaid/project.htm).

Aims of a comprehensive database

- Help the people who are making decisions by giving them access to the best current information
- Facilitate systematic reviews to summarise and synthesise information
- Avoid unwarranted duplication of efforts
- Encourage collaboration across agencies
- Provide ready access to the public directly and through the media
- Improve before and after evaluations of conflicts, disasters, and interventions
- Identify gaps in knowledge
- Facilitate the development of measures and methods to evaluate relief and development

Challenges

- Creating a culture of responsible participation
- Minimising threats to agencies on issues of contention and threats to staff from host nations
- Encouraging academics to release findings before journal publication

Responsible participation can make these initiatives work. Academics should submit their relevant manuscripts to databases such as Relief Web. Moreover, we urge journals to submit the full text of all of their public health related articles to Relief Web, a policy which BioMed Central, an open access publisher, has pioneered, and has recently been joined by *PLoS Medicine*. The mass media could report more accurately on humanitarian situations. And funding agencies should look more favourably on evaluations of relief efforts and of the impact of their own responses.

We do not seek to place blame upon the many agencies and NGOs that provide selfless and important care to the most vulnerable people in humanitarian crises. We understand that our proposal may be viewed as a challenge, and we recognise that it is impossible to make all reports available, particularly those about relief in political disasters. In exceptional circumstances, publishing a report that seemed to be censorious of a host country could place an organisation's staff or the population in danger or risk the expulsion of the agency. Indeed the head of the Sudan mission of Médecins Sans Frontières (MSF) was arrested in May 2005 and detained for releasing a report reporting sexual violence observed at MSF clinics.¹⁰

We share a vision that everyone involved in making decisions about relief will be able to use evidence and knowledge generated by agencies and others. Archived evidence is a potent form of witness and testament for historical accountability and memory, and to achieve

such an archive we have to collaborate. It is only a matter of time before another disaster will find us in disarray.

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How Islam changed medicine

Arab physicians and scholars laid the basis for medical practice in Europe

Islamic civilisation once extended from India in the east to the Atlantic Ocean in the west. Buildings in Andalusia such as the Alhambra in Granada, the Mezquita in Cordoba, and the Giralda in Seville are reminders of the architectural imprint this civilisation left on western Europe. Less well remembered, however, is the impact of Islamic civilisation on Western science, technology, and medicine between the years 800 and 1450.¹ As was argued this month at the Royal Institution, today's Western world might look very different without the legacy of Muslim scholars in Baghdad, Cairo, Cordoba, and elsewhere.²

As Islam spread out of the Arabian Peninsula into Syria, Egypt, and Iran it met long established civilisations and centres of learning. Arab scholars translated philosophical and scientific works from Greek, Syriac (the language of eastern Christian scholars), Pahlavi (the scholarly language of pre-Islamic Iran), and Sanskrit into Arabic. The process of translation reached its peak with the establishment of the "House of Wisdom" (Bait-ul-Hikma) by the Abbasid Caliph Al-Mamun in Baghdad in 830. It made Arabic the most important scientific language of the world for many centuries and preserved knowledge that might otherwise have been lost forever.

As well as assimilating and disseminating the knowledge of other cultures, Arab scholars made

numerous important scientific and technological advances in mathematics, astronomy, chemistry, metallurgy, architecture, textiles, and agriculture. Techniques they developed—such as distillation, crystallisation, and the use of alcohol as an antiseptic—are still used.

Arab physicians and scholars also laid the basis for medical practice in Europe. Before the Islamic era, medical care was largely provided by priests in sanatoriums and annexes to temples. The main Arabian hospitals were centres of medical education and introduced many of the concepts and structures that we see in modern hospitals, such as separate wards for men and women, personal and institutional hygiene, medical records, and pharmacies.

Ibn Al-Nafis, a 13th century Arab physician, described the pulmonary circulation more than 300 years before William Harvey.³ Surgeon Abu Al-Qasim Al-Zahrawi wrote the *Tasrif* which, translated into Latin, became the leading medical text in European universities during the later Middle Ages. Al-Zahrawi was also a noted pathologist, describing hydrocephalus and other congenital diseases as well as developing new surgical technologies such as catgut sutures.^{4,5} Some describe Al-Razi (Rhazes), born in 865, as the greatest physician of the Islamic world. He wrote *Kitab Al-Mansuri* (*Liber Almartsoris* in Latin), a 10 volume treatise on Greek medicine,⁶ and also

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