



Managing human resources in post-conflict health systems: a review of research and knowledge gaps

Overview

Forty-five violent conflicts took place globally last year: an unprecedented number. During conflict, health systems can break down, with health facilities destroyed and shortages of drugs and medical supplies, leaving populations at high risk of infectious diseases. Health workers can be targets in a conflict, forcing many to flee the area, as in Cambodia and Mozambique. Long after conflict has ended, people remain at greater need of health care than in more stable, low-income countries.

Understanding the complex area of human resource management (HRM) and the role it can play in rebuilding health systems in a post-conflict setting is valuable. Effective HRM policies are essential to mitigate the effects of conflict on the health workforce: not only the flight of health workers but also distortions in

salary, workers' skills which do not match the service needs, patchy human resource data, inadequate medical training, weak management capacity, and staff under-performance.

The number of studies in this field is, however, limited, with few reviews pooling the evidence. To address this need, partners in the ReBUILD research consortium have carried out a comprehensive review of published research on HRM in post-conflict health systems. In all, 56 publications were identified from the period 2003 to 2013. Using an analytical framework, HRM topics were considered under three "functional areas" (the supply, distribution and performance of the workforce), with corresponding topics and a number of cross-cutting issues. Significant research gaps were identified which will guide future studies to contribute to the evidence base on HRM.

ABOVE
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KEY MESSAGES

- **The majority of studies and reports analysed covered health workforce supply issues such as education and training, pay, recruitment and selection.** Less is known about the other two areas of workforce distribution and performance: these are areas that would benefit from more research to enhance understanding.
- In post-conflict settings, there is an urgent need to increase the number of health workers, however, the skills of those recruited may not be appropriate to the service needs. Lessons from Rwanda and Afghanistan show the importance of strengthening governance to overcome political interference and nepotism in selecting staff.
- **Pay, a factor in the supply of workers, is discussed in a third of the publications identified.** High salaries paid to NGO workers can distort pay expectations and hasten the brain drain from the public sector, thereby decreasing the number of workers available to provide basic health services. Pay reforms after a conflict tend to be ineffective, although hard evidence is lacking.
- **Training - both pre-service training, that is, medical teaching prior to employment and in-service training for existing health workers - emerged as the most popular topic area covered.** Scaling up medical teaching to increase the number of health workers after a conflict can be challenging due to incomplete human resource data, a shortage of qualified teachers and lack of quality assurance. In South Sudan, for instance, one in ten graduates was considered unsafe to practise. After a conflict, most health workers need intensive re-training, which is often provided by NGOs, to update their medical skills and knowledge: an area decision-makers tend to overlook. Studies from Liberia illustrate the effectiveness of training when in line with long-term objectives.
- **Workforce distribution was discussed in less than a third of the total publications reviewed.** Unsurprisingly, zones affected by conflict tend to be understaffed and filling health positions with suitably qualified workers in remote, unstable areas is difficult. Systems for the effective deployment and re-deployment of health workers are key in order to achieve the provision of equitable health care.
- **Workforce performance, apart from in-service training, featured rarely in the publications.** In the urgency to scale up the workforce, decision-makers may disregard the need to ensure that workers perform adequately. Nonetheless, effective supervision and support are essential to improve performance in post-conflict settings. Task shifting – the sharing of tasks from trained, qualified workers to less skilled ones – is used to improve performance and mitigate shortages of health workers, however, clear job descriptions are vital. In Afghanistan, for example, health workers had to carry out midwifery tasks that exceeded their training. The appraisal of workers by managers was mentioned in only two publications and yet its relevance can be seen in Palestine where inappropriate appraisal systems reduced the effectiveness of public health services.
- **Almost two-thirds of the publications were based on secondary data,** mainly case study analysis, perhaps reflecting the difficulties of carrying out research in post-conflict settings. Most research focuses on HRM in the early post-conflict stage.

THE RESEARCH PROBLEM

Although there is increasing awareness of the need to understand health systems reconstruction in post-conflicts settings, relatively few studies exist on the contribution of HRM. This area is, nonetheless, growing. Of the three functional areas analysed in the review, most learning relates to workforce supply issues, highlighting the need for more research in the other two areas, namely, workforce distribution and performance. Comparing current knowledge against the analytical framework, the review identifies specific research gaps, including:

- Primary research across all three areas of workforce supply, distribution and performance.
- A longer term view of HRM, through each stage of reconstruction. Looking at how decisions taken in the early post-conflict phase can determine the development of the health system, is an area which merits further research.
- Workforce performance is a relatively neglected area, besides in-service training. More learning is required in the areas of incentives to improve performance, management and supervision, job design and appraisals.
- Workforce distribution: more studies are needed on governance and administrative systems for deployment in post-conflict settings, as well as incentives to even out geographical imbalances in the workforce.
- Cross-cutting issues such as leadership and governance, gender equity, task shifting and human resource data. Strong governance is critical for HRM and is an area that warrants more research. There is a lack of evidence on the effects of task shifting after a conflict, notably the ability of over-stretched workers to deliver health services safely. Scant human resource data hinders an assessment of the state of the workforce after a conflict. Evidence is also lacking on gender-sensitive policies to support female health workers who have

suffered trauma during conflict, and other equal opportunity issues such as ethnicity.

THE ANALYTICAL FRAMEWORK

The team designed an analytical framework, adapted from one by Martinez and Martineau, which focuses on three functional areas in managing a health workforce and their corresponding topic areas. A number of important cross-cutting topics, such as NGOs and finance, which relate to more than one of the functional or topic areas, were included.

COLLECTION TOOLS AND SOURCES

Using the analytical framework to underpin the review, the team conducted a comprehensive desk-based global review of published research on HRM in health systems in post-conflict settings. Publications were selected that explicitly looked at the post-conflict context. PubMed, Google Scholar, Science Direct and the Cochrane database were scanned for articles in English over the last decade (2003-2013). In addition, reports were examined from websites such as the World Health Organization, the World Bank and the Health and Fragile States Network.

VARIABLES STUDIED

Keywords were used to search the texts, including three context words (post-conflict, reconstruction and fragile) and almost 30 topic keywords, such as human resources, skills, pay, training and incentives. In order to be included in the literature review, publications had to meet two criteria: firstly that they contained at least one of the context keywords and secondly, at least one of the topic keywords (or synonyms of these keywords).

METHODOLOGICAL CHALLENGES

The analytical framework used to structure the review is not definitive, due to the potential for overlap between the topics. As some

publications discussed post-conflict issues in greater depth than others, the judgement about which texts to choose was to a certain degree subjective. In addition, the term “post-conflict” is somewhat problematic, given that around 40 per cent of countries relapse into conflict.

GENERALISATION AND RECOMMENDATIONS FOR THE FUTURE

The lessons learnt outlined in the review may also be applicable to HRM and health systems strengthening

in stable countries. The review identifies research gaps in specific topic areas and cross-cutting issues, and underlines the need for more first-hand research, with a longer term perspective, encompassing different post-conflict phases. If these research gaps are filled, greater understanding will be fostered on how HRM decisions in the early post-conflict phase can influence health systems in the long term. This increased knowledge can be used to shape key policy for the attainment of universal health coverage - a critical challenge for countries affected by conflict.

REFERENCE TO THE FULL PAPER

Roome E, Raven J, Martineau T. Human resource management in post-conflict health systems: review of research and knowledge gaps. *Conflict and Health*. 2014;8(1):18.

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