Editorial

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The way forward – narrowing the knowledge gap in sub-Saharan Africa to strengthen health systems

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There are several kinds of knowledge gap: for example, that between industrialized countries and the rest of the world, or the generational gap in knowledge between the old and the young. Two major types of knowledge gap are important in the World Health Organization (WHO) African Region:

- Gaps in health knowledge, where essential answers on how to improve the health of the people in the Region are missing. This is an issue related to the generation of health information or evidence.
- Failure to apply all existing knowledge to improve people's health, which is often referred to as the 'know-do gap'. This is related to the issue of sharing and translation of health information, research evidence or knowledge.

Closing these gaps is a major challenge.

The knowledge gap is particularly wide in the Region and presents a challenge to the achievement of the Millennium Development Goals and other agreed targets. The knowledge gap as described above is one of the four gaps identified in WHO's 11th General Programme of Work (2006–2015), along with gaps in social justice, responsibility and implementation.[1]

The key to narrowing the knowledge gap and sustaining health and development gains is a long-term commitment to strengthening national capability to ensure the availability of relevant and high-quality health information and evidence and its use for policy-making and decision-making. Narrowing the gap is achievable if civil society, the private sector, governments, international organisations and individuals work jointly to create an environment where essential knowledge is sought, shared and applied for health development, equity and security in the Region. The need for commitment and the achievability of narrowing the knowledge gap in the Region have been recognised by ministers of health and other policy-makers.[2–4]

Some countries in the Region have made considerable commitments to health research and information, and their national health research and information systems are increasingly effective (as described elsewhere in this issue). However, in many other countries the systems remain under-resourced, with limited potential to generate, disseminate or apply knowledge. Despite the increasing availability of external financial resources, investment in substantive actions to narrow the knowledge gap is generally fragmented and uncoordinated.

To start reversing this fragmentation and ensure better coordination of efforts, and to promote a culture that is conducive to the acquisition, generation, sharing and application of information, evidence and knowledge, countries will need to take a series of essential first steps as described in the Algiers Declaration[5] and the Framework for its implementation.[6]

The Algiers Declaration and the Framework for its implementation include a list of recommendations to countries, which, if implemented, could improve the availability, quality and use of knowledge to enhance their people's health. These were described in the Framework for the Implementation of the Algiers Declaration that was adopted by the 59th Session of the WHO Regional Committee (September 2009). The salient recommendations are given below.

Governance and resources

1. Establish a broad multidisciplinary national working group composed of information scientists, statisticians, researchers, policy-makers and decision-makers from the health, education, science and technology and other relevant sectors, tasked with initiating the process of implementation of the Algiers Declaration.
2. Establish or strengthen national and multisectoral structures or mechanisms such as a national coordination committee to oversee the development and implementation of policies and plans.

3. Conduct a national situation analysis to develop an evidence base on the current state of national health information and research systems, and knowledge management, and ensure that the situation analysis is repeated at regular intervals.
4. Establish or strengthen a health research, information and knowledge management unit within the ministry of health to ensure coordination of efforts and to serve as a secretariat to the multidisciplinary national working group.
5. Develop a comprehensive evidence-informed national policy and strategic plan for narrowing the knowledge gap integrating health information, research and knowledge management systems.
6. Ensure that the health information, evidence and research agenda include broad and multidimensional determinants of health, and that all efforts in these areas are linked to national health needs and policy priorities.
7. Adopt policies that promote access to global health information, evidence and knowledge by examining and adopting the application of intellectual property rights and by supporting North–South and public–private research partnerships within the context of the global strategy and plan of actions on public health, innovation and intellectual property.
8. Establish appropriate national policies and mechanisms for scientific and ethical oversight in the collection of data and generation of health information and evidence, including regulation of clinical trials, and for sensitisation of people to their role, rights and obligations when participating in studies.
9. Establish or strengthen appropriate mechanisms of cooperation, including public–private, South–South and North–South cooperation and technology transfer, and create regional centres of excellence to promote research and generate evidence for better decisions, particularly as regards disease surveillance, public health laboratories, and quality control of food and medicines.
10. Ensure that adequate financial, material and human resources are mobilised and available at each stage of the policy formulation and implementation process, and at all levels.

Generation of health information and evidence

11. Identify and integrate all existing sources of reliable information, including information from the private sector.
12. Institute procedures to ensure the generation and availability of information that meets international norms and standards, and to clearly define relationships between the various components of the health information system.
13. Ensure the availability of relevant and timely health information by: increasing the frequency of national demographic and health surveys; completing the 2010 census round; strengthening birth and death registration; carrying out surveillance and gathering service statistics; and enhancing monitoring of health systems strengthening.
14. Improve the management of health information through: better analysis and interpretation of data; presentation of information using the proper format to ensure use for decision-making; and sharing and reapplying information and experiential knowledge.
15. Promote innovative research directed towards discoveries in basic knowledge and its transformation into new tools such as medicines, vaccines and diagnostics.
16. Ensure the availability of relevant and timely evidence by reorienting the institutional research agenda to pressing local problems such as health systems research.
17. Promote the use of systematic reviews in the production of evidence.
18. Ensure appropriate and adequate generation of evidence by strengthening institutional mechanisms for adequate ethical and scientific review of research from inception to publication and use of results.

Access to health information and evidence

19. Promote open access to primary data, samples and published findings of research results.
20. Promote better dissemination and sharing of information, evidence and knowledge, which would require countries to:
21. Support the establishment of health libraries and information centres at local and national levels, link them to regional and international networks, and ensure that they have the necessary infrastructures, systems and human resources.
22. Ensure availability of printed and electronic materials in appropriate formats and languages.
23. Develop and strengthen the evidence base for health systems by consolidating and publishing existing evidence and facilitating knowledge generation in priority areas.

24. Establish mechanisms and procedures for documenting experiential knowledge and best practices in implementing health programmes.
25. Ensure that all local publications (in all formats and languages) are included on the relevant international indexes.

Use of evidence for policy-making and decision-making

26. Ensure that policy-makers and decision-makers articulate their need for evidence and that they are part of the agenda-setting process.
27. Improve the capacity of decision-makers and policy-makers to access and apply evidence.
28. Improve the sharing and application of information, evidence and experiential knowledge by, for example, supporting the establishment of communities of practice.
29. Support the translation of research results into policy and action by creating appropriate mechanisms and structures, including promoting regional and country networks of researchers, decision-makers and policy-makers for evidence-informed public health action.
30. Promote translational and operational research to assess how discoveries might be optimally utilised and strategically implemented to enhance access.

Use of information technology

31. Promote wider use of indexes, including those that enable access to local, non-English and unpublished (i.e. 'grey literature') materials.
32. Improve use of expertise locators and social networks to better access and utilise experiential knowledge.
33. Promote open-access journals and institutional access to copyrighted publications (e.g. through the WHO-led journal-networking project HINARI [Health InterNetwork Access to Research Initiative]).
34. Develop/strengthen web-based applications and databases.
35. Strengthen the management of databases, information, evidence and knowledge, particularly at district levels.
36. Critically evaluate available technologies to identify those that meet local demands and ensure interoperability between various systems.

Countries are also expected to establish or strengthen monitoring and evaluation mechanisms to track the implementation of the Algiers Declaration by identifying relevant inputs, processes, outputs, and outcomes. It is important to develop or strengthen existing mechanisms in order to institutionalise monitoring and evaluation of all aspects of the implementation of the Declaration. The African Health Observatory will facilitate monitoring of the implementation of the Algiers Declaration and progress towards achieving the Millennium Development Goals and other global and regional health goals.

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