Challenges facing National Health Research Systems in the WHO African Region

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SUMMARY

Many countries in the African region do not have functional national health research systems (NHRS) that generate, disseminate, uses, and archives health-related knowledge/ideas in published form (hard, electronic or audio forms). In such countries, death of each modern or traditional health practitioner constitutes a permanent loss of a library of knowledge, ideas, innovations and inventions. The WHO African Advisory Committee on Health Research and Development (AACHRD) has attributed the fragility of NHRS in the Region to poor environment for research, inadequate manpower, inadequate infrastructures and facilities, inaccessibility to modern technology, and lack of funds. The weak and uncoordinated NHRS partly explain the poor overall performance of majority of national health systems in the Region. Continued fragility of NHRS can be attributed to lack of implementation of the WHO Regional Committee for Africa and the World Health Assembly resolutions on health research. This paper urges African countries, to fully implement the contents of those resolutions, for substantive health research outputs to share with the rest of the world at the next Ministerial Summit on Research for Health, which will take place in the African Region in 2008.

Introduction

In African communities, it has been cultural, for a long time, to pass on knowledge from one generation to another by word of mouth, e.g. through myths, poems, songs, drama, riddles and story telling [1]. Whereas, that form of knowledge transmission and management used to be tenable in pre-independence era (epoch), a time when movement of people and community interactions were limited, it is no longer tenable today. This is partly because urbanization and globalisation have led to the disintegration of traditional ways of life and have significantly catapulted mobility of people, commodities and ideas [2].

Lessons learnt from the high-income and upper middle-income countries unequivocally indicate that, the communities and countries that develop rapidly are those with writing and publishing cultures. In such cultures, current generation builds on the written intellectual accomplishments of the past generations.

Consequently, future generations, instead of starting from scratch, build on the intellectual achievements of the present generation. Such a culture of knowledge management ensures continuity and obviates inefficient intra- and inter-generational duplication of knowledge generation efforts. The high-income and upper middle-income countries have overtime consciously invested in the development of national research systems, including national health research systems (NHRS) [3].

Any country that has no NHRS that researches, disseminates and archives its knowledge/ideas in written form, and preferably in published form (hard, electronic or audio forms), is likely to loose out in the current information and technology (digital) era. In such countries, death of each modern or traditional health practitioner will constitute a permanent loss of a library of knowledge, ideas, innovations and inventions.

A NHRS is a system that integrates and coordinates the vision, mission, objectives, structures, stakeholders, processes, cultures and outcomes of health research towards the improvement in the national health systems performance of its functions of stewardship, health financing, resource creation, resource allocation and service provision and also the achievement of health system goals - health, responsiveness to people’s non-medical expectations and fair financial contributions [4,5].
**Challenges facing NHRS**

In 1998 the WHO African Advisory Committee on Health Research (AACHRD) identified five categories of challenges confronting NHRS in the Region, namely: a) poor environment for research; b) inadequate manpower; c) inadequate infrastructures and facilities; d) inaccessibility to modern technology; e) lack of funds [6].

Firstly, setbacks related to the environment for research, which includes lack of societal appreciation for the importance of research in development; inadequate national commitment to research; lack of strategic planning for health research in most member countries; lack of interactive academic and professional societies; lack of access to scientific information already available in the region and globally; poorly developed end-users of research output (i.e. industries, private sector, civil society, etc); failure of researchers to disseminate research findings beyond journals and donors; and poor administrative support for research both at Governmental and institutional levels.

Secondly, the bottlenecks related to inadequacy of health research manpower, which includes lack of manpower policy in health research to guide basic and in-service training in research methodology for health professionals; lack of critical mass of core group of specialists in scientific sub-disciplines; lack of clear career development paths for researchers; inadequate technical support, i.e. instrument technologists, statisticians, etc; inability to retain trained manpower, resulting partly from poor remuneration and lack of enabling environment; and existence of donor driven training schemes which have serious effects on quality of manpower.

Thirdly, the problems related to inadequate infrastructures and facilities for research, including lack of appropriate laboratory space, equipment, reagents and supplies; inaccessibility to current published health-related research; and lack of transportation for research-related purposes.

Fourthly, inaccessibility to new scientific and technology tools for facilitating research due to high cost. This is related to low computer penetration, email and Internet connectivity in the African Region [7].

Fifthly, issues related to inadequate investment in health research, including lack of or inadequacy of government grants to initiate and sustain research in member countries; donor driven interest toward selected research programmes which may not be in line with national priorities; lack of local competence to compete for internationally available research funds; and lack of local private sector funding for health research.

Furthermore, a recent survey of the status of national research bioethics committees (RBC) in the WHO African region revealed that 36% of the 28 countries that responded did not have functional research ethics review systems for protecting the dignity, integrity, health and safety of citizens who participate in research [8].

The above mentioned challenges in tandem explain the fragility of NHRS in majority of countries of the African Region. The weak NHRS hinder the production of new information and knowledge for strengthening national and district health systems performance; diagnosing and providing solutions; inventing new technologies and health interventions for tackling priority diseases and health conditions; and innovating ways of accessing and putting into effective nationwide use the existing cost-effective, promotive, preventive, curative, rehabilitative and care interventions. Therefore, the fact that the NHRS are generally weak and uncoordinated explains why the overall performance of majority of national health systems in the Region is poor [9,10].

**Recent Regional and Global Resolutions on Health Research**

The WHO Regional Committee for Africa in 1998 adopted a strategic health research plan for the Region [11]. It passed a resolution which urged Member States in the Region to: determine national priority research areas; draw up national research policies and strategies; build national health research capacities, particularly through resource allocation, training of senior officials, strengthening of research institutions and establishment of coordination mechanisms; develop a national health research plan; and establish a national ethics committee to ensure compliance with international ethical standards, especially regarding the conduct of clinical trials on humans [12].

The Fifty-eighth WHO World Health Assembly, in May 2005, adopted a resolution urging Member States to: “invest at least 2% of national health expenditures in research and research capacity strengthening, and at least 5% of project and programme aid for the health sector from development aid agencies should be earmarked for research and research capacity strengthening; establish and implement or strengthen a national health research policy with appropriate political support and to allocate adequate funding and human resources for health-systems research; encourage collaboration with other partners in health research so as to facilitate the conduct of such research within their health systems; to promote activities to strengthen national health-research systems...; establish or strengthen mechanisms to transfer knowledge in support of evidence-based public health and healthcare delivery systems, and evidence-based health-related policies; support, together with WHO and the global scientific community, networking of
national research agencies and other stakeholders with a view to conducting collaborative research in order to address global health priorities; encourage public debate on the ethical dimension and societal implications of health research…” (Operative paragraph 2) [13].

The orientation provided by both the regional and global WHO governing bodies to Member States for strengthening their NHRS is very clear. Therefore, what African populations need is not further debate on the importance of research for health, but full implementation of the contents of the past WHO Regional Committee for Africa and the World Health Assembly resolutions on health research. There is evidence that those resolutions have not been implemented fully [8,12].

Conclusion
In the African Region, the health research and publishing culture is still at its infancy. For example, there are fewer health-related journals in Africa than in any other region in the world. Yet, this is the region with the greatest burden of disease [14] and all other attendant problems, and hence in greatest need of a systematic way of generating, disseminating, archiving and using knowledge and ideas to tackle the old (e.g. intestinal helminths, leprosy, malaria, measles, poliomyelitis, tuberculosis), new (HIV/AIDS) and emerging (e.g. avian influenza) public health problems. It is also the region with the worst performing national health systems. Therefore, development of highly performing NHRS in countries of the African Region is not an elective but an imperative; it may be the only way of breaking from the current vicious cycle of ill health and poverty [12].

Since the next Ministerial Summit on Research for Health will take place in the WHO African Region in 2008, it is the hope of Africans and partners that it will help to promote the culture and practise of health research, knowledge management and evidence-based decision-making as a necessary prerequisite for improving the performance of national and district health systems, and ultimately, the attainment of international [15] and national health goals, and socio-economic development [16]. It is our hope that before the Summit, African countries will strive to build or strengthen their national health research systems so that they will have substantive health research outputs to share with the rest of the world at the next Summit.

References
15. World Health Organization. Accelerating achievement of the internationally agreed