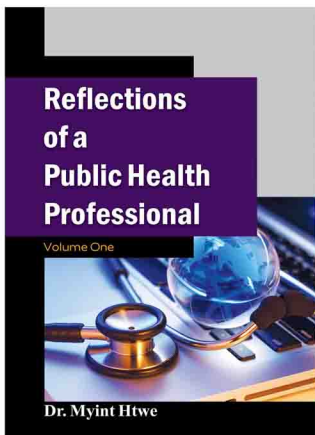


# Strengthening Health Research Information System



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## 4. Strengthening health research information system

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Health Research Information System (HRIS) is the backbone of any health research system and helps to make it function efficiently. The stages of development of HRIS vary from one institution to another. The importance accorded to HRIS is not commensurate with its usefulness. HRIS is essential for making the correct decision pertaining to planning, administrative, logistics, management and technical matters of the research institution. If HRIS is not performing well, the following situation, among others, can arise.

- *Research planning and monitoring may not be up to the mark;*
- *Rational resource allocation to different disciplines of research may not be possible;*
- *Long-term as well as short-term human resource planning in research will be difficult;*
- *Intramural and extramural networking and collaboration will not be that strong;*
- *Resource mobilization for research will be ineffective and inefficient.*

We, therefore, need to find practical ways and means to further strengthen and establish a robust and responsive HRIS in the country.

### ***Initial exploratory questions to be asked***

The following exploratory questions may need to be asked before we embark on strengthening HRIS.

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- *Do we have an electronic or computerized overall research information system in the country? If so, what is the level of performance in terms of efficiency and networking status?*
- *Do we have electronic or computerized HRIS in health research and affiliated institutions in the country?*
- *Are they effectively serving the real needs of research professionals working in these institutions?*
- *The generic questions which can be asked are: Are they functioning well? Is the system comprehensive, dynamic, robust and responsive?*
- *Does it give sufficient information for research planning and also for health planning?*

If the response to these questions is not a straight “YES”, we need to do something to improve it as soon as possible.

## ***HRIS scenario in a developing country***

HRIS of developing countries is generally not up to the mark. Most institutions have a system of recording and reporting on paper but they are not in proper order. Sometimes databases are not properly maintained and updated. Staff responsible for maintaining research database have not been specifically assigned and trained and necessary support to them is not always available. Research reports are generally not referenced seriously, although they are presented at a research symposium or congress. The overall sense of ownership of HRIS needs to be inculcated among researchers. HRISs are generally not recognized as a priority activity.

## ***Characteristics of a good HRIS***

An efficient HRIS (electronic and computerized) should have at least the following basic characteristics. It must be simple, dynamic, responsive,

user-friendly, ease of updating, smooth and sustainable extramural and intramural linkages, and managed by an efficient and forward-looking coordinator. The key components of HRIS are:

- (i) *Trend of resource flow to different disciplines of research;*
- (ii) *Resource mobilization pattern and status;*
- (iii) *Availability of human resource for research and its trend;*
- (iv) *Research training or capacity building activities (intramural as well as extramural) being conducted including researcher exchange programmes being initiated;*
- (v) *Details of research projects being conducted;*
- (vi) *List of research publications, discipline-wise;*
- (vii) *Research infrastructure in terms of several perspectives;*
- (viii) *Records of challenges being faced by the research institution;*
- (ix) *Various perspectives of research management, etc.*

### ***Key success factors for efficient functioning of HRIS***

Establishment of HRIS must be at least mentioned in the national health research policy and preferably elaborated in the institution's mission statement and strategies. This will allow getting good input, support, and resources for strengthening HRIS in an institution. For any HRIS to be successful, efficient and sustainable, *regular and critical review of the system* is essential in addition to having a sense of ownership by researchers. Practical ways and means should be continuously sought to promote a sense of ownership by all those involved in the research system in the country. After all, proper management of HRIS by fully committed staff members is essential.

### ***Key action areas in HRIS***

The key action areas to be considered when developing, establishing or strengthening an HRIS are as follows: *generating database framework,*

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*synthesizing, verifying, storing, retrieving, analyzing, disseminating, utilizing information, assessment and evaluation of HRIS.* Thorough brainstorming, involving relevant professionals, is required when finalizing the overall framework.

### ***Key activities for consideration before establishing or strengthening HRIS***

Before establishing or strengthening an HRIS, it is worthwhile to do a quick review of national and institutional health research policy, statement or strategy on HRIS, and existing HRIS in terms of input, infrastructure, management, linkages, etc. A thorough brainstorming is required for finalizing HRIS framework and its contents. Based on it, clear guidelines on the management of HRIS should be developed. These guidelines must be dynamic and should be subject to change depending on the changing scenario or requirement. The research information emanating from HRIS must also be readily available and easily accessible to policy strategists, research planners, and research managers. At the same time, it is essential to *institutionalize capacity building activities* for management of HRIS.

At the national level, it is also worth considering the establishment of a *national oversight centre for overall research information for all disciplines related to health and beyond the health domain*. HRIS can provide strategic information for formulating or reformulating a rational national health research policy and strategy. For HRIS to be comprehensive and useful, it is essential to promote inter-institutional and intra-institutional information networking. *Mandatory registration of research studies*, clinical trials and also for fugitive research carried out in the country must be made. A regular forum for the dissemination of research findings and utilization can stimulate dynamicity and responsiveness of HRIS. Budgeting for the dissemination of research findings should be included when submitting the research project proposal.

### ***Benefits of a good HRIS in the country***

Having a good HRIS can lead to several benefits to the domain of research, such as:

- (i) Reducing the administrative burden;*
- (ii) Providing up-to-date information on research and research management-related issues;*
- (iii) Obtaining a streamlined, single point access to research information;*
- (iv) More chance of getting financial support from funding agencies and technical collaboration from big research organizations or institutions;*
- (v) Facilitating responsible conduct of research (RCR);*
- (vi) Reducing fraud and unwanted manipulation; and*
- (vii) Facilitating good research planning and research strategy formulation.*

The ultimate benefit is the availability of decision-making information for professionals working in service departments of the Ministry of Health, who should, in fact, be the real users of research information.

### ***Conclusion***

To reap the full benefit of research projects being carried out in the country, we need to have a strong, dynamic, robust, user-friendly and sustainable overall *“Country Research Information System” (CRIS)*. It must be linked with *“Health Research Information System(s)” (HRIS)* of the research institution(s) in the country. It is worthwhile to consider conducting a national seminar on *“Strengthening, Streamlining and Optimizing Research Information Systems in Myanmar”*.