

EVIDENCE FOR DECISION

Health Information Services

To fulfill the need of integrated national health information system ensuring timely, reliable and accurate information based on minimal essential data set, the Health Management Information System (HMIS) was established in 1995. The new HMIS could replace the existing practice of data collection based on the information needs of the fragmented vertical health programmes. The main objectives are to ensure minimum essential information of prioritized health projects are integrated in the national health information system, to generate and report health information in the course of implementation of the National Health Plans for timely and effective monitoring and evaluation and to reduce the data collection burden for basic health staff. HMIS includes community based as well as institutional based information as a means to support making evidence based decisions in policy design, planning and management so as to improve overall health system performance. HMIS is now in the process of further development by establishing computer networking (e-Health System) in all states and divisions with support of the WHO.

Hospital reporting is another facet of health information service well established through monthly collection of hospital morbidity and administrative information from public hospitals. Morbidity information which is individual case summaries with analysis of all discharges and deaths is processed at the central office (Department of Health Planning). The medical record services have been established in most hospitals and training programme exists for medical record officers. By using (ICD 10) for disease coding, data entry, processing and analysis international comparison is facilitated. Computerized medical record system has been established in some major hospitals since 2000 and to be further expanded.



To further strengthen the health information system, ICT Centre has been established in the Ministry of Health. This will enable extension of information network and rapid and smooth flow of information. A web site has also been established in the Ministry of Health providing updated information on health activities and achievements and also the opportunity to search health literatures.

Following the launching of Health Matrix Network (HMN) at the World Health Assembly in 2005, Myanmar joined the international effort for strengthening health information system in the country.

As part of HMN activities, assessment of current health information system has been conducted in the Ministry involving stake holders. Findings of the assessment will be used as inputs for developing comprehensive plan for strengthening National Health Information System.

Health Research



Department of Medical Research (Lower Myanmar) carried out extensive research in malaria, diarrhoea, anaemia, iodine deficiency disorders, snake bite, viral hepatitis and intestinal helminthiasis. The findings have contributed to the diagnosis, management, prevention and control of these health problems.

Research programmes are mainly focused on six major diseases namely, malaria, tuberculosis, HIV/AIDS, diarrhoea and dysentery, diabetes and hypertension as well as on application of

traditional medicines in treatment of several illnesses. Quality control and evaluation of available malaria rapid diagnostic tests, therapeutic efficacy testing of different artemisinin combinations on falciparum malaria, different epidemiological, immunological and molecular studies of drug resistant malaria, drug resistant tuberculosis, leprosy, dengue, HIV/AIDS, avian influenza, hepatitis B and C are the leading projects. The findings and evidences came out from these are being disseminated for the effective utilization in management and control programmes of respective diseases. Acute toxicity testing of various traditional medicinal plants, extracts and formulation; screening of these for Pharmacological activity; screening and identification of unknown Drugs, Chemicals and Biological poisonings, by using hi-tech equipments and methods such as High Performance Liquid Chromatography (HPLC), Gas Chromatography Mass Spectrometry (GCMS) and Gas Chromatography (GC); gender verification by Barr body examination; chromosomal abnormalities of human and animals; studies on thalassaemias, haemoglobinopathies, blood and coagulation disorders and tumour markers (for liver, bladder and cervix) are the research based services that the Department is giving to the public.

With the establishment of new departments of medical research in upper and middle parts of the country, more researches, particularly focusing on Traditional Medicine could be done. A herbal garden established in the Department of Medical Research (Upper Myanmar) could nurture over 300 species of herbal and medicinal plants from all over the country. Up to 9000 herbal and medicinal plants are now being grown by the department. The department could also study effects of these plants on treating malaria, diabetes mellitus, hypertension and diarrhoea diseases in collaboration with Department of Traditional Medicine, Department of Pharmacology of the Mandalay Medical University and Mandalay University of Pharmacy. Moreover, basic, applied and health systems research are being carried out in collaboration with 200 bedded Hospital (Pyin Oo Lwin), Children Hospital, Central Women's Hospital, University of Medicine, University of Pharmacy, Vector Borne Disease Control Programme, National Tuberculosis Programme, Public Health Laboratory in Mandalay.

Current research activities undertaken in Department of Medical Research (Central Myanmar) cover both basic, applied and health systems research. They include therapeutic efficacy of anti-malarial drugs combination, and traditional anti-malarial drug. Behavioural studies relating to common communicable diseases like DHF and TB are also in the list. Study on therapeutic efficacy of traditional medicine formulation and plants on non-communicable diseases particularly diabetes mellitus and communicable diseases are also in progress.



Moreover, the Department of Health Planning, the Department of Health, the Department of Medical Science and the Department of Traditional Medicine are also implementing research activities in addition to their principal functions. Two main types of applied research, monitoring and evaluation (M&E) research and health systems research are conducted by the Department of Health Planning.

Health Systems Research Methodology trainings are conducted for post-graduate students in the medical universities in Yangon and Mandalay and for in-service health staff from states and divisions. Goals, functions and concepts of health systems are also disseminated among township health committees. User friendly health systems research tools are also to be developed to conduct health systems research studies.

Community Based Verification of Causes of Death Study in Pyinmanar Township was conducted as second year pilot project during 2008 with the support of WHO as one of the Health System Research activities. The project aimed to develop a sample vital registration system by using verbal autopsy method in order to strengthen mortality statistics in Myanmar. Data obtained from the project such as life expectancy at birth, age specific death rates, infant mortality rate, under-five mortality rate and causes of death information support data for calculation of burden of disease estimates for the Township. Based on the experiences obtained from this project, a system of collecting vital data including cause of death information is intended to expand other townships from each State and Division in phase manner during coming years.

Research unit under the Department of Traditional Medicine is also conducting studies to assess safety, efficacy and quality of Traditional Medicine. In collaboration with Medical Research Departments, research activities to explore new traditional medicine to treat six common diseases namely diarrhoea, dysentery, malaria, tuberculosis, hypertension and diabetes mellitus are also being conducted.

In collaboration with the Planning Department from the Ministry of National Planning and Economic Development and UNICEF the Department of Health Planning is also conducting Multiple Indicators Cluster Survey (MICS) 2008-2009. It is a nationwide survey collecting data for assessing the situation of women and children using healthy life indicators including child mortality, nutrition, maternal and child health, immunization, water and sanitation, education, child protection and HIV/AIDS. Up to date knowledge on situation of women and children obtained from the survey will help monitoring and evaluation of MDGs and other goals for women and children.