



STRENGTHENING THE MONITORING OF PROGRESS ON THE HEALTH-RELATED MDGs IN THE AFRICAN REGION

There is an emerging view that progress on achieving the Millennium Development Goals (MDGs) in the African Region may be better than what is currently being reflected by official statistics. This is believed to be a result of the lack of recently updated data on the MDGs in the Region. In order to strengthen the monitoring of the MDGs, it is important to look for viable options for the timely collection, processing, analysis of relevant and quality data, and the dissemination of information products based on this data. It is essential to improve the institutional capacities in countries in order to overcome the weak data sources and data management. The monitoring of progress on the MDGs could be strengthened by: improving the content, frequency, quality and efficiency of national health surveys; strengthening birth and death registration and cause of death ascertainment; improving the availability of demographic data by completing the 2010 census round; improving surveillance and service statistics; enhancing the monitoring of health systems strengthening; and, strengthening country analytical and evaluation capacity, and data use for decision-making. The latter requires the establishment and strengthening of national health observatories charged with health statistics analysis, synthesis, dissemination, sharing, and use of information and evidence.

Paul-Samson Lusamba-Dikassa
Derege Kebede
Edoh William Soumbe-Alley
Luis Gomes Sambo

World Health Organization, Regional Office for Africa

Corresponding author:

Derege Kebede

Email: kebeded@afro.who.int

Photo © UNHCR/H. Caux

RÉSUMÉ

Il y a un nouveau point de vue selon lequel les progrès concernant la réalisation des Objectifs du Millénaire pour le développement (OMD) dans la région africaine sont plus importants que ce que reflètent actuellement les statistiques officielles. On pense qu'il s'agit d'une conséquence de l'absence de données récemment mises à jour sur les OMD dans la région. Afin de renforcer le suivi des OMD, il est important de chercher des options viables pour la collecte en temps opportun, le traitement, l'analyse des données pertinentes et de qualité et la diffusion de produits d'information basés sur ces données. Il est essentiel d'améliorer les capacités institutionnelles dans les pays afin de surmonter les faibles sources de données et la gestion de celles-ci. Le suivi des progrès sur les OMD pourrait être renforcé par : l'amélioration du contenu, de la fréquence, de la qualité et de l'efficacité des enquêtes nationales de santé; le renforcement de l'enregistrement des naissances et des décès et la cause de la détermination des décès; l'amélioration de la disponibilité des données démographiques par l'achèvement du recensement de 2010; l'amélioration de la surveillance et des statistiques des services; l'augmentation du suivi du renforcement des systèmes de santé et le renforcement de la capacité d'analyse et d'évaluation du pays ainsi que celle de l'utilisation des données pour la prise de décisions. Cette dernière étape nécessite la création et le renforcement des observatoires nationaux de la santé chargés de l'analyse des statistiques de santé, de la synthèse, de la diffusion, du partage et de l'utilisation des informations et des témoignages.

SUMÁRIO

Existe uma opinião emergente de que o progresso no alcance dos Objectivos de Desenvolvimento do Milénio (ODM) na Região Africana pode ser superior ao que as estatísticas oficiais actuais indicam. Acredita-se que a razão para tal é a falta de dados, recentemente actualizados, sobre os ODM na região. Para reforçar a monitorização dos ODM é importante procurar opções viáveis para a recolha, o processamento e a análise em tempo útil de dados relevantes e de qualidade e a divulgação de produtos de informação baseados nestes dados. É essencial melhorar as capacidades institucionais nos países para ultrapassar as fragilidades das fontes de dados e da gestão de dados. A monitorização do progresso relativo aos ODM pode ser reforçada através de: uma melhoria do conteúdo, da frequência, da qualidade e da eficiência dos inquéritos nacionais de saúde; o reforço dos registos de nascimentos e óbitos e da determinação das causas da morte; a melhoria da disponibilidade de dados demográficos através da conclusão do censo 2010; a melhoria da vigilância epidemiológica e das estatísticas dos serviços; a promoção da monitorização do reforço dos sistemas de saúde; e o reforço da capacidade analítica e avaliativa dos países e da utilização de dados na tomada de decisões. Este último exige a introdução e o reforço de observatórios nacionais de saúde responsáveis pela análise das estatísticas de saúde, a síntese, a divulgação, a partilha e a utilização de informações e de evidências.

THIS PAPER FIRST DESCRIBES THE ISSUES AND CHALLENGES, AND FOLLOWS WITH OPTIONS ON THE WAY FORWARD TO IMPROVE THE MONITORING OF PROGRESS ON THE HEALTH-RELATED MDGs IN THE REGION.

At the mid-point towards the 2015 target date, countries in the African Region have increased coverage of key interventions aimed at achieving the MDGs. Despite these successes, progress towards the achievement of the health-MDGs remain slow and huge challenges remain. It is projected that unless the current trends are changed dramatically, the African Region is unlikely to achieve the health-related MDGs.

The MDGs are associated with measurable indicators of progress and an institutionalized system of reporting. However, the increased focus on tracking progress has drawn attention to a number of interrelated challenges, and to the underlying weaknesses of country health information systems upon which reliable monitoring depends. In order to address this problem, it is important to look for viable options for the timely collection, processing, analysis of relevant and quality data, and the dissemination of information products based on this data.

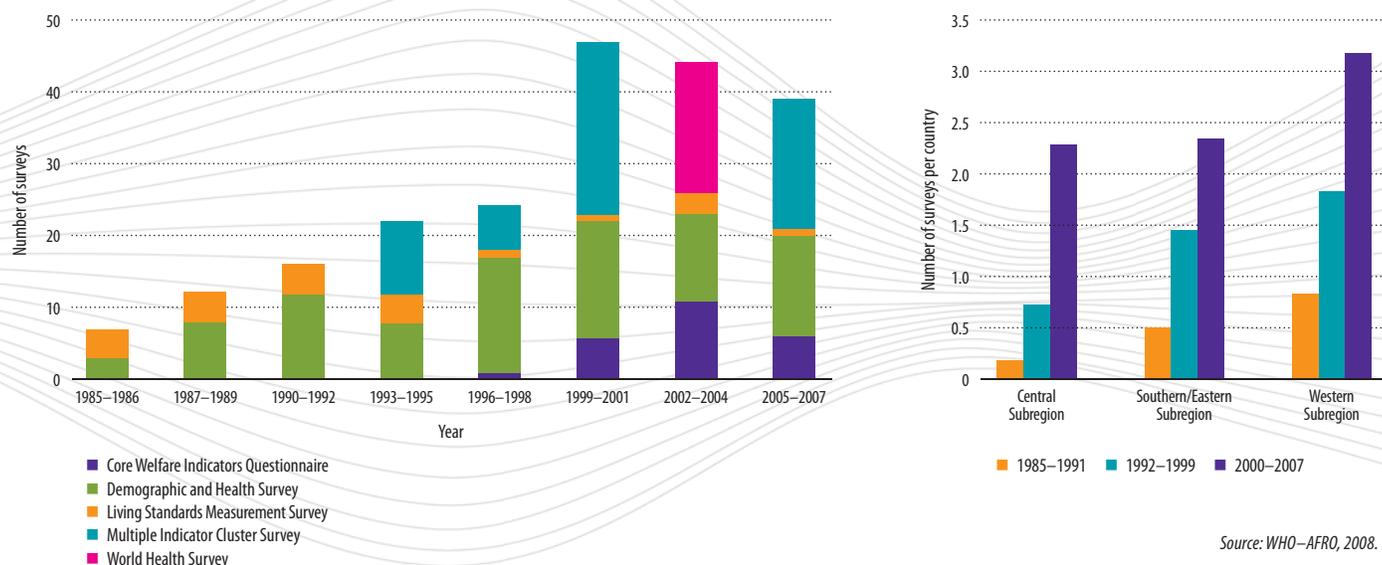
ISSUES AND CHALLENGES

INFREQUENT HOUSEHOLD SURVEYS

Given the weakness of civil registration in the Region and infrequent censuses, population-based surveys are the single most important source of population health information. In actual fact, 17 of the 23 health-related MDG indicators can be generated through household surveys. Between 1985 and 2007 a total of 211 household surveys were conducted in the Region of which 121 were conducted after 2000. The number of surveys has increased over the years, reaching a peak of 50 during 2002–2004 alone. The number of surveys per country has also been increasing. It is highest in the Western African subregion, followed by the Southern/Eastern African and the Central African subregion (Figure 1). Despite this increasing trend and heavy reliance on household surveys for many health indicators, national surveys have been conducted on average only once every 3–5 years. The frequency is often too low to allow close monitoring of MDG progress of several indicators. Moreover, data emanating from household surveys are inevitably subject to margins of uncertainty with the result that apparent changes between surveys may not be statistically significant.

The most commonly applied survey instrument in the Region is the USAID-supported Demographic and Health Survey (DHS). Since 1985, over 98 DHS have been conducted. The second most common survey instrument is the UNICEF-supported Multiple Indicator Cluster Survey (MICS). More than 58 such surveys have been carried out since 1995. In recent years, a number of disease-focused surveys (such as the Malaria or AIDS Indicator Surveys) have been undertaken. In addition to these internationally sponsored surveys, many countries conduct their own surveys. Most of national household survey timing and objectives are largely driven by funding agencies. Because the focus is on international data needs and cross-country comparability, such survey programmes are sometimes perceived as burdens on already over-stretched national health information systems. In addition, externally funded household surveys may neglect major health data needs of countries. However, household surveys are one of the few data sources able to generate data on inequities between population groups.

Figure 1: Household health surveys, WHO African Region, 1985–2007



Source: WHO–AFRO, 2008.

INADEQUATE COVERAGE OF BIRTH AND DEATHS REGISTRATION

Data on births, deaths, and causes of death (i.e. evidence for progress in attaining key MDGs on levels and causes of mortality) are poor in the majority of countries of the Region, where vital events go unregistered and causes of death remain poorly understood. Of the 46 countries of the region, only four have mortality registration coverage rate of 75% or higher. Vital registration is used to estimate under-five mortality rate for Algeria, Seychelles and South Africa (Figure 2). Coverage of birth registration is 75% or higher in only nine countries of the Region. In many settings, available data from civil registration systems that

could provide important (albeit incomplete) information are not compiled and analyzed.

In the absence of functional civil registration systems, data on births and deaths can be generated through alternative strategies such as demographic surveillance. A number of demographic surveillance sites have come together to form INDEPTH.¹ This is an international platform of sentinel, longitudinal demographic and health surveillance sites that provides health and demographic data and research. INDEPTH has 38 demographic surveillance sites in 19 different countries. Of these sites, 26 are in Africa. Enumeration of births and deaths is a key aspect of demographic surveillance, but the data

are largely used for research purposes and are generally not considered integral to the national HIS. However, one extremely important output of these sites was the publication of model life tables for Sub-Saharan Africa based on the mortality data gathered in these sites in the course of 1995–1999.²

INFREQUENT AND INADEQUATELY PROCESSED CENSUSES

Census data cannot be considered a substitute for reliable, comprehensive and ongoing birth and death statistics from civil registers but are particularly valuable in most countries of the Region where birth or death registration is incomplete. The available data shows that four

Figure 2: Death registration coverage, WHO African Region, 2000–2006

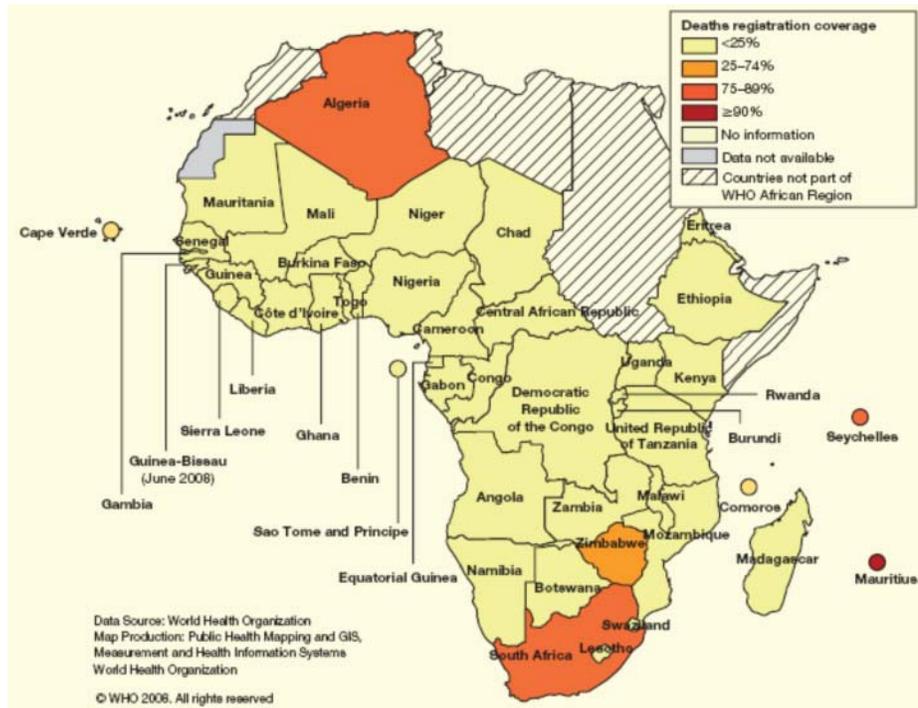
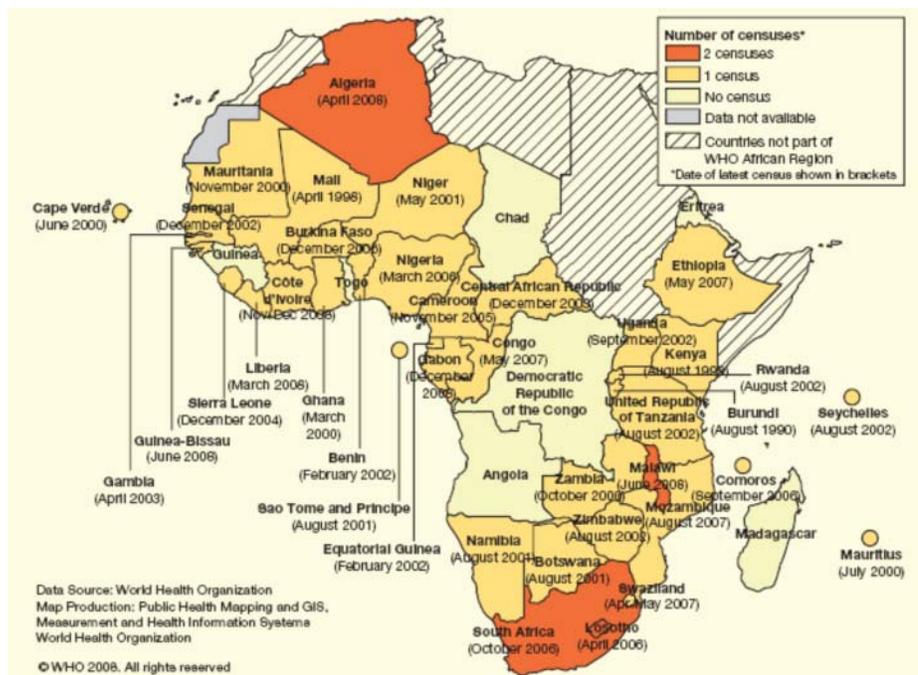


Figure 3: Availability of census data, WHO African Region, 1998–2008



countries have not conducted a national census in the past twenty years, and three countries conducted only one census over the period. Most countries of the Region however have a decennial census program (Figure 3). Experience from a number of countries indicates that whereas support for conducting the census is generally forthcoming, there remain major gaps in technical support for subsequent data cleaning, analysis, projections and dissemination³.

WEAK HEALTH MANAGEMENT INFORMATION SYSTEMS

All countries routinely collect data from health facilities and assemble and report them in annual (or bi-annual or five-yearly) health statistical abstracts or reports. Such information is often described as the health management information system (HMIS). Several disease-specific information systems have benefited from intensive technical quality control and financial inputs, such as outbreak disease surveillance, eradication programmes (e.g. polio), TB, HIV/AIDS and immunization. Despite the volume and variety of data generated through the routine health management information system, the information is systematically under analyzed and under utilized for

monitoring of MDGs, planning and programme reviews. Completeness, timeliness and quality of reporting are often described as problematic and the data are inevitably biased because they relate only to the populations using public health services and improving access to these services constitutes an ongoing challenge, as does capturing data from the private sector. Furthermore, information technology solutions have been introduced in a piecemeal manner resulting in multiple, incompatible systems in countries and the parallel existence of databases that are not interoperable.⁴

INADEQUATE MONITORING OF HEALTH SYSTEMS STRENGTHENING

The slow progress on MDGs has been attributed to weak health systems, the human resources for health crisis, and persisting inequities in access to interventions that could keep people alive and well. Thus, tracking health system performance and evaluating the impact of health programmes on health outcomes in the context of scaling-up and the MDGs have become important priorities⁵. However, few countries carry out regular national health accounts studies and data on financial flows and expenditures are limited,

especially at district level; data on the extent to which people are unable to use health services due to financial constraints and on the degree of financial risk protection are collected and reported in a minority of countries, and even then, only intermittently; data on the availability and distribution of health facilities and the health workforce are often incomplete, inaccurate and out of date; few countries have systems that can monitor the service delivery or the availability of essential medicines, equipment and supplies; data on population access to essential services, especially at sub-national or district level is limited.

Multiple actors are involved in improving monitoring aspects of the health system resources, including health financing (e.g. World Bank, WHO, UNAIDS, USAID), human resources, infrastructure, access to drugs and service delivery (e.g. WHO, USAID, JICA). However, such investments have been limited and sporadic with the result that few countries are able to monitor the basic information about the inputs and outputs of their health systems.

WEAK COUNTRY CAPACITY FOR DATA MANAGEMENT

Data management comprises a set of procedures for the collection, storage, analysis, and

distribution of data. Accurate and complete data are a fundamental prerequisite. Once data have been collected, a sound management approach is essential. This includes the development of a metadata dictionary, and sound data storage procedures with a well-designed logical structure that permits data retrieval and comprehensive analysis.

The recent assessment of national health information systems in 14 countries of the African Region⁶ has revealed that data management is not adequate in most countries indicating that countries do not have clear procedures for the collection, storage, analysis, and distribution of data, including a centralized data depository. In many countries, more than one agency is involved in collecting and disseminating information, and each uses different methods and approaches. Ministries of health gather data through their administrative reporting systems, whereas central statistical offices generally focus on population-based data. Differences in sources and methods mean that data obtained from administrative records and data from surveys are not directly comparable.

Health workers at a local level are often overburdened with excessive data and reporting demands owing to multiple and often poorly coordinated

systems with a large number of uncoordinated forms to fill. A major problem is the lack of standardization and alignment within and between reporting forms.

There are thus six challenges that need to be addressed to overcome the weak data sources and capacity on data management. These include how to:

- ① improve the content, frequency, quality and efficiency of national health surveys;
- ② strengthen birth and death registration and cause of death ascertainment;
- ③ improve availability of demographic data and statistics on the health workforce by completing the 2010 census round;
- ④ improve surveillance and service statistics;
- ⑤ enhance monitoring of health systems strengthening; and,
- ⑥ strengthen country analytical and evaluation capacity, and data use for decision-making.

THE WAY FORWARD

It is essential to improve monitoring of MDG indicators by strengthening national health surveys, particularly by promoting the development and implementation of country health survey plans with at least two surveys every 5 years.

The surveys need to have module driven contents with periodicity for specific indicators calibrated to achieve adequate sensitivity, efficiency, and relevance to country needs. In addition, innovative methods are needed to be able to generate sound population-based data at sub-national and district levels.

There is a need to improve mortality and fertility data by strengthening birth and death registration by scaling up efforts to improve vital events registration, including cause of death, in countries. This could be achieved through increased coordination, technical support and funding by relevant country and global stakeholders. The health sector has particular responsibilities for reliable cause of death ascertainment for deaths that occur in health facilities. Where deaths occur outside health facilities, the use of verbal autopsy techniques can help fill critical gaps in cause of death data.

It is also important to improve demographic data by strengthening the census platform. This will need the promotion and support the 2010 Round of Censuses, including ongoing support for data analysis, small area and temporal projections and dissemination.

There is also need to improve surveillance and coverage monitoring by strengthening facility reporting systems. This requires identifying the core information needs and appropriate incentives for improved management for results at local, national and global levels. It will also require the improvement of data quality and timeliness, supported by the introduction of information technology.

Improving the monitoring of health systems strengthening by promoting regular National Health Accounts with improved systems to monitor country expenditure is also required. Moreover, developing a comprehensive, district-based monitoring system for facilities, health workers, access to medicines, and provision of key health interventions is required. WHO has developed a toolkit to assist the monitoring health systems strengthening that combines better synthesis and

analysis of available data coupled with facility assessments to fill important data gaps.

Strengthening country capacity for analysis, synthesis, validation and use of health data is also essential for strengthened monitoring of the MDGs. This requires the establishment and strengthening of an institutionalized country mechanism (a national health observatory) charged with health statistics analysis, synthesis and quality assessment of data from population, clinical and administrative sources. Such a mechanism could be quasi autonomous or independent, but working closely with Ministry of Health and national statistical office.

Improvement in the monitoring of country progress towards the MDGs would also benefit from by establishing and strengthening an African Health Observatory (currently in formation). The Observatory will need to build on existing data, collaborate closely with partners, including the WHO Global Health Observatory, and issue analytical reports and country profiles through special publications and an integrated web portal.

Regional and global partners can contribute to the improving of the monitoring of the MDGs by doing the following:

I. INCREASING INVESTMENT IN COUNTRY DATA SOURCES AND SYSTEMS BY: committing a significant proportion of their resources to investments in country health information systems, including monitoring performance, evaluation and operational research (a ballpark figure is 5–10% of the investment);

II. WORKING TOGETHER TO ENHANCE QUALITY AND TRANSPARENCY OF STATISTICS BY: enhancing access to data and interoperability of databases; better coordination and collaboration between the various expert groups; and

III. HARMONIZING MONITORING AND EVALUATION WORK BY: regional and country level coordination of evaluation work in countries, in line with the principles of the common evaluation framework⁷; minimizing the reporting burden on countries by improved coordination between and within agencies and investment in capacity strengthening alongside evaluation

Strengthening the monitoring of health-related MDGs in all countries is possible if countries continue sustaining high-level political commitments and work with development partners towards strengthening their health information system. 

ACKNOWLEDGEMENTS

We gratefully acknowledge the comments and suggestions on an earlier version of this paper received from colleagues from WHO Headquarters, particularly Ties Boerma and Yohannes Kinfu. We also acknowledge the contributions of all those professionals at the country level who are involved in data collection, processing and dissemination. Assessment of progress on MDGs would not have been possible without their crucial efforts.

REFERENCES

- 1 INDEPTH Network Website. www.indepth-network.org (last accessed 10 December 2009).
- 2 INDEPTH Network. INDEPTH Model Life Tables for Sub-Saharan Africa. Aldershot, Hampshire: Ashcroft, 2004.
- 3 WHO. Health and the Millennium Development Goals. 2005. Geneva.
- 4 WHO. Improving the monitoring of progress and evaluation of the MDGs. Paper presented by H8 focal point on statistics for H8 meeting, July 2008.
- 5 WHO. Everybody's business. Strengthening health systems to improve health outcomes. WHO's Framework for Action. Geneva. 2007.
- 6 WHO-AFRO. Chapter 3: *Health information systems*. In., Narrowing the knowledge gap to improve Africa's health. The African Regional Health Report 2008 (forthcoming).
- 7 An IHP+ common evaluation strategic framework has been developed with a set of principles to maximize country and international benefits, in line with the Paris Declaration on aid effectiveness. The general principles are collective action, alignment with country planning and reporting cycles, balance between independence and country ownership, use of internationally accepted methods and standards, strengthening health information systems and appropriate timely investment in evaluation.