Tracking progress towards the Millennium Development Goals: reaching consensus on child mortality levels and trends

Child Mortality Coordination Group[a]

Abstract The increased attention to tracking progress towards the Millennium Development Goals (MDG), including Goal 4 of reducing child mortality, has drawn attention to a number of interrelated technical, operational and political challenges and to the underlying weaknesses of country health information systems upon which reliable monitoring depends. Assessments of child mortality published in 2005, for almost all low-income countries, are based on an extrapolation of the trends observed during the 1990s, rather than on the empirical data for more recent years. The validity of the extrapolation depends on the quality and quantity of the data used, and many countries lack suitable data. In the long run, it is hoped that vital registration or sample registration systems will be established to monitor vital events in a sustainable way. However, in the short run, tracking child mortality in high-mortality countries will continue to rely on household surveys and extrapolations of historical trends. This will require more collaborative efforts both to collect data through initiatives to strengthen health information systems at the country level, and to harmonize the estimation process. The latter objective requires the continued activity of a coordinating group of international agencies and academics that aims to produce transparent estimates — through the consistent application of an agreed-upon methodology — for monitoring at the international level.

Keywords Child mortality/trends; Data collection/methods; Households; Development; Goals; Infant mortality/trends; Developing countries (*source: MeSH, NLM*).

Mots clés Mortalité de l'enfant/orientations; Collecte données/méthodes; Ménages; Développement; Objectif; Mortalité nourrisson/orientations; Pays en développement (*source: MeSH, INSERM*).

Palabras clave Mortalidad en la niñez/tendencias; Recolección de datos/métodos; Hogares; Desarrollo; Metas; Mortalidad infantil/tendencias; Países en desarrollo (*fuente: DeCS, BIREME*).

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Introduction

The Millennium Development Goals (MDGs) aim to reduce the striking inequalities between the rich and poor countries, and between the rich and poor populations within countries.[1] A set of indicators has been selected to monitor progress towards achieving these goals. One of the most prominent goals for 2015 (MDG-4) is the reduction of child mortality by two-thirds from the level in 1990.

Child mortality rates can be estimated using data from a variety of sources, including population censuses, vital statistics systems and household surveys. Since the early 1990s, household surveys have become an increasingly important source of data for assessing and monitoring progress in improving child survival in low- and middle-income countries.[2] Estimates of child mortality trends based on various data sources and different estimation methods are regularly published.[2,3] Reports on progress in child survival by country, based on such estimates, are published annually and trends are extrapolated to assess whether or not the MDG is likely to be achieved.[4–7]

An important strength of the MDGs is the attention now being given to measurable indicators of progress and an institutionalized system of reporting. Increased commitment to tracking progress in child mortality has drawn attention to a number of interrelated technical, operational and political challenges and to the underlying weaknesses of health information systems in many countries, upon which reliable monitoring depends. This paper discusses the

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challenges in monitoring child mortality, and makes proposals for further improvements in monitoring progress towards the MDG on child mortality during the next decade.

Monitoring progress: technical challenges

From a technical perspective, the simplicity and focus of the MDG indicators masks some significant challenges. In high-mortality countries, health information systems, having suffered from a history of underinvestment, are too weak and fragmented to routinely generate estimates.[8,9] Furthermore, many health-related MDG indicators are difficult to measure and the trends to which the MDGs on health allude are impossible to monitor because of the lack of a suitable 1990 baseline.[10] The mortality rate in under-5-year-olds (U5MR), in terms of which the target for MDG 4 is defined, is however one of the better MDG targets because extensive data are available and it is relatively easy to measure.

Estimates of child mortality, together with expected trends, are published regularly, usually annually, by various international organizations.[5–7,11,12] However, readers are generally not informed about the sources of data and methods of estimation. The underlying methodology is generally explained only in footnotes that sometimes include information on the availability of the empirical data that underlie the estimates. This gives readers the false impression that the progress towards reducing child mortality is monitored annually with great accuracy.

Data availability

Reliable annual reporting on mortality — number of deaths by age, sex and cause — is possible only where there is comprehensive and accurate recording of births and deaths through a civil registration system. Such a system exists in only 72 countries representing around one third of the world's population and primarily the high-income countries.[13,14] For the other two thirds of the world, figures for child mortality are usually derived from estimates, based on the extrapolation of past trends or on modelling. *The world health report 2005 — Make every mother and child count* summarizes data availability and shows the extent to which estimates of child mortality in developing countries, for recent years, rely on extrapolations of past trends rather than on empirical data.[13]

Table 1 summarizes the median estimates of the U5MR for 2003 and data availability for WHO's 192 Member States by quintiles of the U5MR. There are four primary sources of empirical data for the U5MR: vital statistics systems based on civil registration, sample registration systems, household surveys and censuses. Vital registration or sample registration systems provide numbers of deaths by age and sex obtained by direct reporting of individual deaths shortly after they occur. These are usually reported on an annual or biennial basis for a single point estimate.

In the case of a survey or a census, the empirical data are based on retrospective data. Interviews, usually with the mother, provide information on the survival history of children in the household. Mortality information may be gathered for a specific period prior to the census or survey interview (although this approach is not recommended), through a full birth history that records the date of birth and, if appropriate, the age at death of each child, or through questions on the aggregate numbers of children ever born to the respondent and children still alive.[2] It should be noted that a single survey generally provides multiple estimates for different points in time prior to the survey.

Table 1 shows that the higher the estimated mortality the fewer the recent data points. Whereas vital registration data are available on an annual basis in countries with lower mortality, almost all estimates of child mortality in high-mortality countries rely on extrapolations of past trends rather than empirically observed data.[2] The global progress on MDGs clearly depends on the trends in child mortality in such countries. This lack of empirical data is partly the result of data collection being infrequent in high-mortality low-income countries.

Fig. 1 shows the data collection effort in countries by the U5MR quintile from 1950 to 2000. The number of countries in the Q1 group with data collected for a given year approached 100% in the early 1980s. The number

Table 1. **Availability of data by under-five mortality quintile (Q), 1980–2003 (as of April 2005)**

Quintile based on under-five mortality rate (both sexes) in 2003[a]	No. of countries	Under-five mortality rate		No. of countries which have at least one data point						Latest available year (average)	No. of countries without data points during 2000–03
		Median	Range	1980–89		1990–99		2000–03			
				VSS[b]	Survey/ census[c]	VSS[b]	Survey/ census[c]	VSS[b]	Survey/ census[c]		
Q1	39	5.5	3.0–7.9	38	2	38	0	38	0	2001	1
Q2	38	14.4	7.9–21.4	35	13	36	10	30	0	2000	8
Q3	38	31.4	21.4–40.8	29	24	34	29	22	5	1999	14
Q4	38	77.7	40.8–118.3	19	15	19	32	13	6	1998	20
Q5	39	168.6	118.3–283.5	1	27	2	37	1	5	1997	33

[a] Under-five mortality rate is the probability (expressed per 1000 live births) of a child born in a specific year dying before reaching five years of age according to current age-specific mortality rates.

[b] The columns "VSS" (vital statistics with civil registration/sample registration system) show the number of countries which have at least one data point from either system, available at WHO.

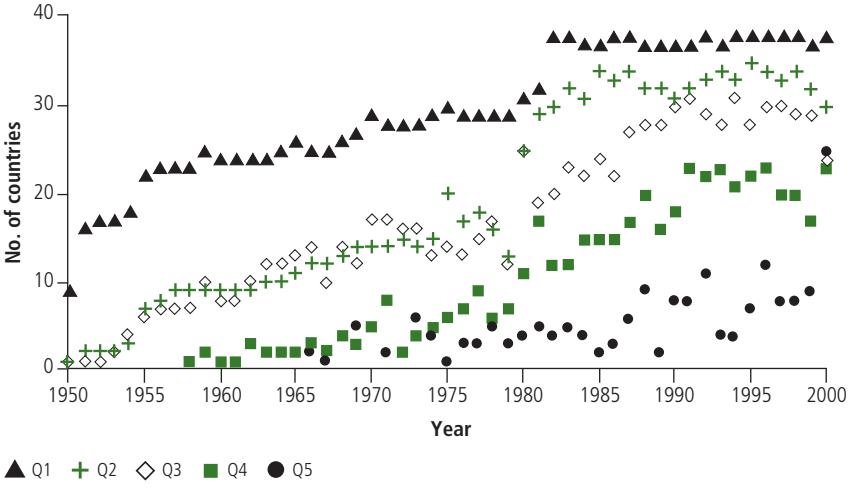
[c] The columns "Survey/census" show the number of countries which have at least one data point from either surveys or censuses with child mortality data available at WHO; only the most recent estimates are taken into account from each.

Source: (*13*)

of countries with data in the Q2–Q4 groups has increased since 1980 and has stabilized to a range between 90% for the Q2 group and slightly over 50% for the Q4 group. The Q5 group has shown only a gradual increase of countries with data to about 25%. The United Nations Children's Fund (UNICEF) Multiple Indicator Cluster Surveys (MICS) contributed to the large increase in the data collected in 2000.

The limited availability of empirical data on recent U5MR levels in high-mortality countries is partly because information on child mortality in surveys and censuses is collected retrospectively and refers to a specific period prior to the census or survey interview.[13] In general, the time-lag between data collection and publication is approximately two years for vital statistics, but tends to average four years or longer for household surveys because of this additional reference period. As of April 2005, the median of the mid-point of the most recent empirical child mortality data lies six years prior to 2004 for household surveys or censuses in 123 countries, whereas the vital registration data are now available, on average, up to 2001.[11,16] Therefore, at best, the data used for estimating child mortality in 2003 in virtually all low- and many middle-income countries tell us what was happening in the late 1990s, the remainder being based largely on extrapolations using even older data. For most countries, whether or not they are on track to reach the MDGs is determined by an extrapolation of the trends observed during the 1990s with a baseline estimate for 1990. New data collection initiatives in the new millennium are beginning to provide data to increase our confidence in both the recent and the 1990 baseline estimates.

Fig. 1. **Number of countries with data sources available at WHO, by under-five mortality quintile (Q), 1950–2000 (at April 2005)**



Note: Data sources are not included before 1980 for former socialist countries such as USSR, Czechoslovakia or Yugoslavia.

Source: (*15*).

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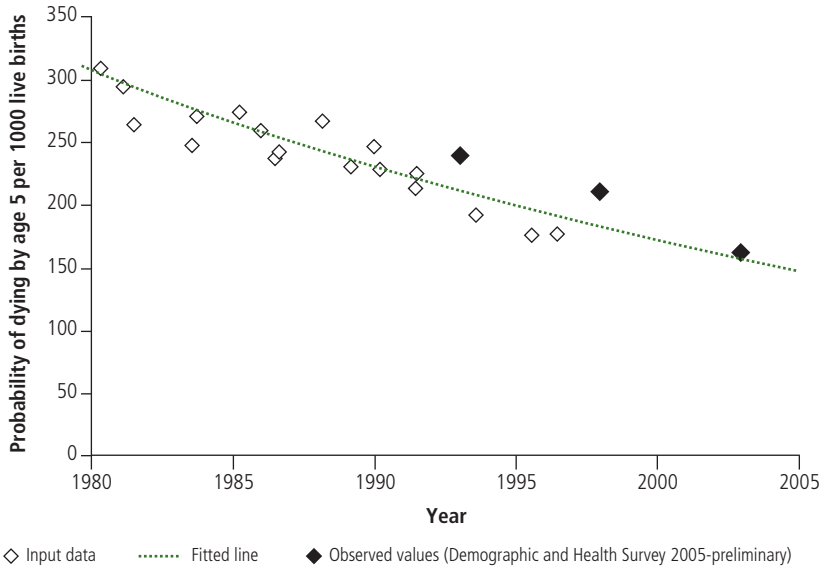
Validity of extrapolation models

The question then is how accurate are these estimates? Since the compilation of the U5MR for 2003, new results from the Demographic and Health Surveys (DHS) have become available for a dozen developing countries. A simple validation technique for the extrapolation model is to withhold these new data from the model parameterization, and to compare them with extrapolated mortality for the period 2000–03. This is obviously not sufficient to validate the entire set of extrapolations, but it does illustrate the performance of current methods in the countries where the vital statistics system is not complete.

Figs. 2–4 show comparisons of U5MRs based on the standard extrapolation method[2] with those observed from the latest surveys in Guinea,[17] Nigeria[18] and the United Republic of Tanzania,[19] for the period 1980–2003. As expected, the results are not generalizable. For the majority of countries where consistent and frequently collected recent data are available, the model predictions are quite consistent with the observed values (e.g. Fig. 2).

However, there is a large discrepancy between the estimates obtained by extrapolations and survey estimates in countries such as Nigeria (Fig. 3), where extrapolated figures showed a steady decline in child mortality, whereas recent

Fig. 2. **Comparisons between extrapolated and recently observed under-five mortality rates: Guinea**



Note: observed values from (*17*).

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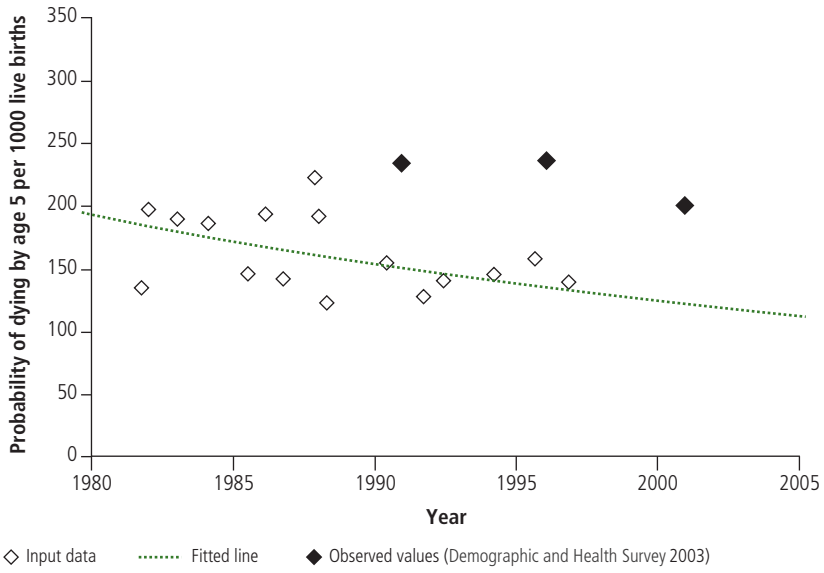
empirical data suggest that mortality was in fact higher and showing no sign of decline across the period. Conversely, in the United Republic of Tanzania, the extrapolated model suggested unchanged child mortality levels during the 1990s, although recent data seem to support the hypothesis that child mortality has declined steadily as shown in Fig. 4.

The validity of extrapolations clearly depends on the quality and quantity of input data, and there is a need to strengthen the empirical basis for estimation of mortality in countries with fewer and less consistent data. The quality of input data used to generate child mortality estimates and to populate and validate models is improving. Better empirical data support better modelling efforts and vice versa. We need the two to complement one another.

Fig. 3. **Comparisons between extrapolated and recently observed under-five mortality rates: Nigeria**



Note: observed values from (*18*).

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Improved data collection methods

Point estimates of mortality in children under five years old will obviously be improved if data are collected more frequently. However, the quality of the data is equally important. So what are the options? Given the difficulty of implementing a fully functioning vital registration system — the gold standard of mortality data — sample vital registration has been proposed as an interim solution to strengthen both the quantity and quality of mortality information.[20] However, aside from successful implementation in India (and perhaps China), setting up a representative sample registration system requires a pre-existing registration system and substantial resources to sustain the activities.

Although such efforts should be made as a part of a long-term commitment to strengthening country health information systems, it would be difficult for high-mortality countries to implement them in a relatively short time. Population censuses provide a good opportunity to gather data nationwide, but the interval between censuses — generally only once every 10 years — is too long for monitoring the U5MR. Thus, in the absence of a system that routinely provides reliable enumeration of vital events at the national level, household surveys remain the major tool for assessing recent child mortality levels.

Currently, the most common approach used in household surveys is to include a full birth history from which direct estimates of child mortality can be obtained. However, household surveys using direct estimation require intensive training and supervision of interviewers and are thus expensive. The estimates are also known to be prone to some systematic errors that may result in an artificially low estimate of U5MR for the most recent period.

Household surveys also require relatively large sample sizes to provide statistically reliable estimates. The problem of wide confidence intervals is not simply that such estimates are imprecise. They may also lead to inappropriate interpretation of the figures. For example, using point estimates for child mortality may give the impression that the U5MRs are substantially different in different settings or at different times whereas, in fact, such differences may not be statistically significant because the confidence intervals overlap.

The uncertainty ranges for the point estimates directly derived from surveys or vital registration systems are often presented by taking into account errors due to a finite sample size. On the other hand, the trend line fitted by the standard method does not necessarily encompass all uncertainties associated with estimates, because many data sources are affected by systematic errors (bias) as well as random errors (sampling). Therefore, the extrapolation line should be interpreted with great caution.

Age patterns of child mortality

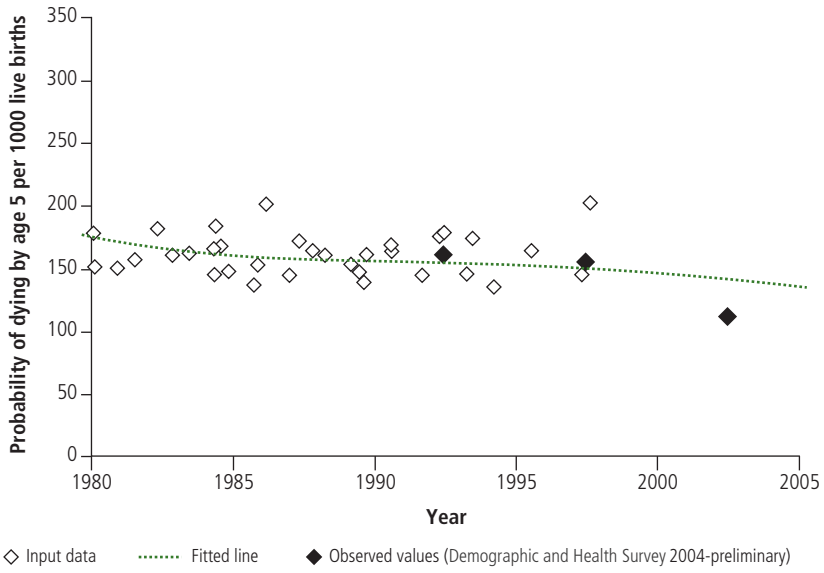
MDG-4 deals with mortality in children aged under five years, primarily because it reflects overall child mortality and can be measured more accurately and reliably than, for example, the infant mortality rate. On the other hand, there is a growing interest in determining age-specific mortality among neonates, infants and children aged 1–4 years. First, empirical data suggest that U5MR is generally a good predictor of infant mortality except in some countries in western Africa. Second, as U5MR declines, the proportion of deaths of infants under one year of age, and particularly the proportion of deaths among neonates, increases. In fact, nearly 4 million neonatal deaths occur annually worldwide, now accounting for an estimated 37% of all deaths in children aged under five years.[13,21] To achieve the MDG-4, the reduction of deaths in the first year of life is crucial, in particular the reduction of deaths among neonates.[22]

Data sources for estimating infant mortality and neonatal mortality are largely the same as for U5MR; they come primarily from household surveys and in some cases from vital statistics. However, the empirical basis for age-specific mortality rates is more limited.[11] Better insight into the age patterns of mortality may enable some cause-specific patterns to be identified and, hence, lead

to a better understanding of the epidemiological transition i.e. the systematic shift in cause-of-death patterns, within childhood mortality.

The standard approach to developing extrapolated estimates of mortality in the first year of life is to derive infant mortality rates from extrapolated U5MRs using Coale–Demeny model life tables.[2] However, because many countries (particularly in sub-Saharan Africa) no longer fit the model life tables, the approach needs to be modified, including updating the model life tables to reflect patterns observed in recent data, re-assessing the general relationship between infant mortality and U5MRs, and establishing a rule for how best to smooth out the "heaping" (the tendency to report deaths occurring at around 12 months as occurring at exactly 12 months) at age one. Further work on age-specific mortality rates, possibly coupled with an analysis of cause-of-death structure, should be a priority for assessing child mortality.

Fig. 4. **Comparisons between extrapolated and recently observed under-five mortality rates: United Republic of Tanzania**



Note: observed values from (*19*).

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Political challenges: towards consistent estimates across international agencies

In the past, readers of annual reports published by different UN agencies were often confused by the inconsistencies between the figures given for some countries in the various reports. This was because, prior to 2004, the U5MR was estimated with some degree of independence by UNICEF, WHO, the World Bank and the United Nations Population Division, leading to each producing different figures (Table 2).[5,7,12,13] Such a discrepancy is not surprising because the estimates would be substantially different depending on the data used and the extrapolation methodology selected. For example, more recent data are not necessarily shared by all agencies. Until recently, WHO put more weight on data from vital registration whereas other agencies weighted survey data more heavily.

However, it is imperative that the international agencies disseminate internally consistent estimates on child mortality to enhance appropriate use of such figures in MDG monitoring and evaluation, and policy formulation. Indeed, there is an urgent need to develop a system through which the international agencies will speak with a single voice and produce estimates that are consistent across agencies.

It is also essential that these estimates be of the highest possible quality, use transparent methods and are developed and reviewed by an independent expert group. As a step towards this goal, four UN agencies responsible for monitoring child mortality trends have established the Child Mortality Coordination Group. This group aims to conduct a critical review of current procedures used in each institution for compiling data and arriving at oint estimates; to discuss mechanisms for data distribution that would ensure that each organization has all available data (e.g. from DHS, MICS, the World Bank's Living Standards Measurement Study, vital statistics, censuses and other sources) as soon as they become publicly available; and to harmonize and coordinate the estimation and projection methodology and results.

Since inception, the Coordination Group has been actively working to harmonize and carry out joint estimations. Starting from empirical data and standard regression output for extrapolations,[2] each country-by-country estimate is critically reviewed. If a discrepancy remains, more detailed assessments of the quality of input data and the appropriateness of statistical methods are carried out (Table 2). Through this process, UNICEF, WHO, the World Bank and the United Nations Population Division have been working towards jointly producing a consistent set of U5MRs by country. To this end, several reports have recently been published based on such mortality rates for the period 1990–2003.[13,23–25]

The Group has initiated joint activities on a regular basis to improve estimation through reviews of currently-used methods, and as means of improvement: creation of a common database; and more focus on country capacity-building and training to improve data availability and quality, including workshops for the regions with weaker health information systems. One of the major efforts of this Coordination Group is to set up a common database, including input data from agencies and institutions specializing in different sources of mortality data (censuses, vital statistics and household surveys), metadata and estimation processes. By doing so, the estimation process will be reproducible and eventually become publicly available to ensure its transparency and accuracy.

UNICEF, WHO and partners in the Coordination Group have also begun to develop a common metric of uncertainty that can be used in future mortality estimates. The process builds on previous work by various groups and organizations and will lead to production of a set of guidelines and standards for calculating uncertainty associated with an estimate. These approaches will provide not only comparable mortality estimates, but also comparable data on the uncer-

Table 2. **Consistency in under-five mortality rate: percentage difference in estimates compared with United Nations Children's Fund (UNICEF) estimates**

Agency	Year of publication	No. of countries[a]	Relative difference compared with UNICEF estimates				
			<10%	10–20%	20–50%	50% +	Ranges
Estimates for 2002 (before the establishment of the Coordination Group)							
WHO	2004	154	97	25	24	8	0–238 %
World Bank	2004	151	143	3	3	2	0–61 %
UN Population Division[b]	2003	144	56	37	39	12	0–115 %
Estimates for 2003 (after the first two meetings of the Coordination Group)							
WHO	2005	154	144	5	5	0	0–41 %
World Bank	2005	151	146	2	2	1	0–67 %
UN Population Division[b]	2005	144	89	24	20	11	0–160 %

[a] The number of countries with data available for both UNICEF and each agency among 155 non-industrialized countries for which UNICEF produces estimates.
[b] The UN Population Division produces estimates for periods of 5 years. For comparison purposes, figures were interpolated based on estimates of 1995–2000 and 2000–05.
Source: (*5, 7, 11–13, 23–25*)

tainty of the mortality estimates. Details of the various approaches to quantifying uncertainty are available in publications relating to work done on disease-specific estimates.[22,26]

Policy challenges

From a policy perspective, child mortality has played an important role in drawing attention to the needs of children and to monitoring the responses at global and country levels. However, there are inherent tensions in the monitoring process that need to be managed.

One tension is the balance between global and country reporting. From a global perspective, the emphasis is on comparability between countries, to identify which countries are on track to achieve the goals and which are faltering. From this perspective, it is critical that the measure of child mortality be generated using standardized definitions and data collection approaches and that there be agreed methods for filling gaps in data. However, from a country perspective, comparability is less relevant than ownership and representativeness. At the country level, policy-makers need to be able to monitor the effectiveness of their policies and programmes — what works to reduce child mortality and what does not — for which the evidence base is quite limited.

Ideally, the identification and generation of global indicators should respond to country needs and emanate from country health information systems. In practice, global and country needs do not necessarily coincide in the same indicators. Part of the difficulty is that, for many indicators, those which are most needed at the country level and are most relevant to improving performance may not be the same as those selected for global tracking.

A related consideration is the complexity of strengthening technical capacity at the country level. Global reporting requires standardized and comparable measures of child mortality; in the absence of data from civil or sample registration, the most feasible way of monitoring progress is household surveys. On the other hand, countries require the development of long-term systems for monitoring their own progress.

An added level of complexity relates to the relevance of child mortality at the sub-national level, an issue that has generated considerable discussion in the context of equity. Achieving the MDG-4 at the national level is not the same as achieving the goal for all, or even most, of the children in a country. Although the global health community has necessarily focused mainly on the national level in the context of global reporting, there is an urgent need within countries to address progress among particular subpopulations or in particular areas of the country.[27,28]

Better opportunity to improve child mortality tracking

Notwithstanding the practical difficulties and political implications, the MDGs have succeeded in focusing attention on the importance of sound data as a basis for making decisions on public policy. MDGs have built considerable momentum and generated real commitment to addressing global challenges,[8] but the demand to know the present position on one of the primary progress indicators — child mortality — has distorted the assessment of progress. The assessment of whether countries were on track to reach the goals in 2005, is for almost all low-income countries simply an extrapolation of the trends observed during the 1990s, and there is an urgent need for more up-to-date empirical bases.

The current global preoccupation with outcomes-based development, including MDG targets, may inadvertently aggravate the situation where countries and donors invest in data collection in an inefficient and unsystematic way.[29] The supply side is also proliferating, with more resources being allocated to health information and statistics, including establishment of the Health Metrics Network and the Ellison Institute.[30,31] There is now a great opportunity to improve both the quality and quantity of health statistics by expanding the current collaborative efforts among UN agencies and research partners.

Countries are the major producers and users of health information. The efforts to harmonize and improve child mortality estimates, exemplified by the activities of the Child Mortality Coordination Group, will need to be stepped up to provide technical and other assistance to countries to strengthen their capacity to collect and assess data.

Conclusions

The increased attention to tracking progress in child mortality has drawn attention to a number of interrelated technical, operational and political challenges and to the underlying weaknesses of country health information systems upon which reliable monitoring depends. The good news concerning child mortality and other health MDGs is that monitoring progress is being taken much more seriously, which has led to harmonization, emphasis on data availability and quality, and the establishment of reference and coordination groups for monitoring and evaluation, and initiatives on health information. Such an effort is particularly important in the current global health arena where the health situation in low- and middle-income countries has become more complex, with health transitions moving at different speeds and in different directions between and within countries leading to a heterogeneous picture of health and mortality. ■

Competing interests: none declared.

Résumé

Suivi des progrès dans la réalisation des objectifs du Millénaire pour le développement : vers un consensus à propos des chiffres et des tendances concernant la mortalité juvénile

L'attention accrue accordée au suivi des progrès en direction des objectifs du Millénaire pour le développement (OMD), dont notamment l'objectif 4 qui vise une réduction de la mortalité juvénile, a mis en lumière l'existence d'un certain nombre de défis techniques, opérationnels et politiques étroitement liés et de faiblesses sous-jacentes des systèmes d'information nationaux, dont le bon fonctionnement est indispensable à une surveillance fiable.

Les évaluations de la mortalité juvénile publiées en 2005 pour la plupart des pays à faible revenu reposent sur une extrapolation des tendances observées pendant les années 90, plutôt que sur des données empiriques relevées au cours des dernières années. La validité de cette extrapolation dépend de la qualité et de la quantité des données utilisées et nombre de pays disposent de données insuffisantes sur le plan quantitatif et qualitatif.

A long terme, on espère que des registres d'état civil ou des systèmes d'enregistrement par sondage des faits d'état civil seront mis en place pour assurer un suivi durable des faits d'état civil. A court terme cependant, le suivi de la mortalité juvénile dans les pays où la mortalité est élevée continuera de reposer sur des enquêtes auprès des ménages et sur des extrapolations à partir de tendances antérieures. Cette situation exigera donc une plus grande collaboration dans la collecte des données qui passera par des initiatives pour renforcer les systèmes d'information sanitaire des pays et pour harmoniser les procédures d'estimation. Ce dernier objectif suppose l'intervention continue d'un groupe coordonnateur, composé d'agences internationales et d'universitaires, pour obtenir des estimations transparentes, grâce à l'application systématique d'une méthodologie convenue pour la surveillance à l'échelle internationale.

Resumen

Seguimiento de los progresos hacia los Objetivos de Desarrollo del Milenio: por un consenso sobre los niveles y tendencias de la mortalidad en la niñez

La mayor atención prestada al seguimiento de los progresos hacia los Objetivos de Desarrollo del Milenio (OMD), en particular hacia la meta 4 de reducir la mortalidad en la niñez, ha puesto de relieve varias dificultades técnicas, operativas y políticas interrelacionadas, así como los fallos de que adolecen los sistemas nacionales de información sanitaria en los que hay que basarse para garantizar una vigilancia fiable.

Las evaluaciones de la mortalidad en la niñez publicadas en 2005, para casi todos los países de bajos ingresos, están basadas en una extrapolación de las tendencias observadas durante los años noventa, más que en los datos empíricos de años más recientes. La validez de la extrapolación depende de la calidad y cantidad de los datos utilizados, y muchos países carecen de datos apropiados.

A largo plazo, se confía en establecer sistemas de registro civil o de registro por muestreo para vigilar los eventos vitales de una manera sostenible. A corto plazo, sin embargo, el seguimiento de la mortalidad en la niñez en los países de alta mortalidad seguirá dependiendo de las encuestas de hogares y de las extrapolaciones de las tendencias históricas. Ello exigirá una mayor colaboración, tanto para reunir datos mediante iniciativas que fortalezcan los sistemas de información sanitaria a nivel de país como para armonizar los procedimientos de estimación. Este último objetivo requerirá el trabajo continuado de un grupo coordinador de organismos internacionales y personal universitario que procure obtener estimaciones transparentes -aplicando sistemáticamente una metodología convenida- para las tareas de vigilancia a nivel internacional.

ملخص

اقتفاء التقدُّم المحرز نحو بلوغ المرامي الإنمائية للألفية: نحو بلوغ اتفاق في الآراء حول مستويات معدلات الوفيات لدى الأطفال واتجاهاتها

يتزايد الاهتمام باقتفاء التقدُّم المحرز نحو بلوغ المرامي الإنمائية للألفية، ومن بينها المرمى الرابع بخفض معدلات وفيات الأطفال. ولقد لفت ذلك الانتباه لعدد من التحديات التقنية والتنفيذية والسياسية لمواطن الضعف الدفينة في نُظُم المعلومات الصحية في البلدان والتي يعتمد عليها الرصد الموثوق.

لقد طبعت نتائج معدلات وفيات الأطفال عام 2005، وكانت تغطي جميع البلدان ذات الدخل المنخفض، واستندت على استقراء الاتجاهات التي لوحظت في التسعينيات أكثر مما اعتمدت على المعطيات التجريبية في السنوات الحالية. وتعتمد صحة الاستقراء على جودة وكمية المعطيات المستخدمة، إلا أن كثير من البلدان تفتقد للمعطيات الملائمة.

ومن المأمول أن تتوطد نُظُم السجلات المدنية أو نُظُم التسجيل للعينات، لرصد الأحداث الحياتية على المدى الطويل بطريقة مضمونة الاستمرار. أما على المدى القصير فإن اقتفاء معدلات وفيات الأطفال في البلدان التي تعاني من معدلات مرتفعة ستستمر في الاعتماد على التحريات السكانية وعلى الاستقراء التاريخي للاتجاهات، وهذا ما يتطلب المزيد من جهود التعاون لتجميع المعطيات باتباع مبادرات تهدف لتقوية نُظُم المعلومات الصحية على الصعيد الوطني، ولتنسيق عملية التقدير. ويتطلب تحقيق التنسيق بين عمليات التقدير القيام بأنشطة مستمرة لمجموعات منسقة من الوكالات الدولية والأكاديمية التي تهدف للخروج بتقديرات تتمتع بالشفافية بالتطبيق المتناسق لمنهجية متفق عليها للرصد على الصعيد الدولي.

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