REPRODUCTIVE HEALTH matters

FEATURE

Data do count! Collection and use of maternal mortality data in Peru, 1990–2005, and improvements since 2005

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Abstract: *This paper reports on a qualitative, exploratory study in 2005, based on interviews with 15 key decision-makers from the Peruvian Ministry of Health responsible for maternal mortality prevention and officials responsible for national data and information on maternal deaths. The main aims were to find out the sources of data and information used by Ministry of Health officials for programme planning and decision-making, whether policies and programmes were informed by the data available, and data flows among central decision-makers within the Ministry and between Ministry and regional and local health centres. Information systems require staff and systems capable of collecting, processing, analysing and sharing data. In Peru, none of these conditions was fulfilled in a homogeneous way. Vertical programmes in the poorest regions had funds for information systems and infrastructure, but limited technical and human resources. Public health workers were overwhelmed with provision of services and not always trained in data collection or informatics. Thus, quality of data collection and analysis varied greatly across regions. Data collection and usage since the study have been improved, reflected in a fall in maternal mortality ratios and women's increased use of maternity services, but efforts to maintain and improve data quality must continue to ensure that initiatives to prevent maternal mortality can be monitored and services improved.*

Keywords: maternal mortality, health policy and programmes, data collection/analysis/dissemination, health information systems, Peru

Since the 1980s, when the World Health Organization, the feminist movement and other civil society organizations placed maternal health and mortality on the international agenda, there have been many international and national initiatives to reduce maternal mortality.[1] The latest of these was the UN Millennium Development Goals commitment to reduce the maternal mortality ratio by 75% by 2015.

Peru has been involved in these initiatives and, according to Ministry of Health official sources, has reduced its national maternal mortality ratio from 318 deaths per 100,000 live births in 1980 to 298 in 1990[2] and 173 in 2000.[3] Despite the development of modern data collection methods and information systems, maternal mortality data continue to be based on estimates in Peru, and estimates have been calculated by other national and international institutions, which provide different ratios for these periods. The National Institute of Statistics and Informatics (INEI) reported a maternal mortality ratio of 185 per 100,000 live births for 2000,[4] while the UN estimated the ratio to be 410 (ranging from 230 to 590) for the same year,[5] and showed that most maternal deaths were concentrated in rural areas and among native populations, including in Apurimac, Amazonas, Huánuco, Cajamarca, Cusco, Madre de Dios, Ayacucho, Huancavelica, and Puno, with ratios ranging from 227 to 361 deaths per 100,000 live births.[3]

Each of these sources has validity but they use differing methodologies. However, to plan and evaluate health policies and achieve international standards of health, it is essential to have reliable data. In 2005, the question of what data were used for planning health policies in Peru, and how and by whom they were used was unknown. We therefore conducted research to find out which sources of data and information were used by Ministry of Health officials for planning and decision-making at the national level, who provided that information, and how decision-making processes were informed

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by the data available. We also studied how data and information arrived to and flowed among Ministry of Health decision-makers involved in maternal mortality prevention, and between Ministry of Health and regional/local health centres.

Methodology

This was a qualitative, exploratory study based on a literature review and interviews with a total of 15 key decision-makers from the Peruvian Ministry of Health responsible for maternal mortality prevention programmes and officials responsible for production and/or systematisation of national statistical and epidemiological information on maternal mortality. Most respondents held key positions at the Ministry of Health in 2005 at the time of the research; few of them had been in these positions in the 1990s.

The interviews consisted of open-ended, semi-structured questions. The main areas of inquiry covered how key information was collected and processed and how it was used in the Ministry at national level. We asked: Which Ministry offices collected information? How often was it collected? How did the information flow from health centres to central policy decision-making officials? How was the information processed and shared between offices? Was the information used to develop, implement, monitor and/or evaluate strategies, programmes and budgets for maternal mortality prevention? Were there feedback mechanisms?

Interviews lasted an average of 1.5 hours and took place in Lima. All interviews were recorded and transcribed, and the responses organized thematically and chronologically. The respondents are identified here by their positions at the time of interview but not named.

We also reviewed national policy guidelines, programme and project reports and operational procedures, and academic publications. We covered the six-year period from 1999, when maternal mortality became a target of national surveillance for the Peruvian Directorate of Epidemiology, to 2005 when the interviews were conducted. However, several of our interviewees provided important information regarding mechanisms for data collection in the 1990s, which we report here for their historical perspective. Although we do not discuss information systems per se, we do report the perceptions and experiences of those systems of our interviewees.

Policy researchers[6,7] agree that the extent of complete and available information for decision-making determines the rationale for, quality and soundness of problem-setting, policy formulation, analysis, implementation and evaluation. Studies have analysed the inter-relationship between research and action throughout the different stages of knowledge production, dissemination and transfer – as processes that must be shared by researchers and decision-makers in order to be effective.[8–11] Researchers and to some extend policy-makers recognize the need for research to inform policy, but there are still few studies dealing with the perspectives and attitudes of policy-makers towards research.[12]

Our original concern about the use of maternal mortality data took us one step back, to look at the process of data collection and information production as the result of monitoring and evaluating procedures. We felt we could not start from the assumption that the existing research – conceived as a "structured process of collecting, analyzing, synthesizing and interpreting data to answer theoretical questions not visible in the data themselves"[11] – had necessarily yielded trustworthy data to begin with.

Maternal health and prevention of maternal mortality initiatives

During the 1990s, the Fujimori administration, in power for more than a decade, implemented a series of neoliberal economic and social reforms common to most Latin American countries in that period. Health sector reform, following guidelines from the World Bank[13] and other financial institutions, was among them. In Peru this included the establishment of fees for services, a mixed system that prioritized private health insurance, decentralisation of clinic administration, and targeted basic health care packages for specific populations in extreme need.[14] Most targeted programmes were supported by international financial institutions and were set up as independent initiatives or projects, with independent consultants, separate from standard services provided by the public health system and the Ministry of Health.

Within this broader picture, there were two different approaches to reproductive health services. In the public health system, there were limited maternity services in the country's health care facilities. At the same time, vertical programmes for family planning and maternal–infant health were being run, focusing only on specific regions and groups living in extreme poverty, and working from a top-down approach. Rural and poor women