BRIEF COMMUNICATIONS/*COMUNICAÇÃO BREVE*

How to improve the quality of mortality information?

Como melhorar a qualidade da informação sobre mortalidade?

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INTRODUCTION

The importance of mortality statistics for the health area is recognized worldwide. However, it is also recognized that fewer than half of the deaths worldwide are recorded[1].

The Millennium Goals have reinforced the need to obtain quality information on causes of death. However, in the era of the Sustainable Development Goals – with dozens of indicators –, the situation of health information at world level remains problematic.

IMPLEMENTING CHANGES

The Brazilian Ministry of Health (MS) and the Pan American Health Organization (PAHO) created, in 1996, the *Rede Interagencial de Informações para a Saúde* (Interagency for Health Information Network – Ripsa), seeking to harmonize information and indicators from different governmental agencies.

Ripsa developed methods for correcting indicators such as infant and maternal mortality, identified problems in the quality of data, carved paths and reinforced the culture of data use.

From 2003 onwards, the MS started a series of interventions on information systems of epidemiological interest. The program *Experiências Bem-Sucedidas em Epidemiologia* (Successful Experiences in Epidemiology – ExpoEpi) was created, focusing on the appreciation of local experiences. The use of data was valued with the study *Saúde Brasil: uma análise de situação* (Brazil's Health: a situation analysis), published annually since 2004.

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The priority was to improve information on mortality. The active search for death in notary offices, hospitals, funeral homes and unofficial cemeteries was the strategy chosen to broaden the completeness of the *Sistema de Informação sobre Mortalidade* (Mortality Information System – SIM). The System organized the collection of cases and the cause of death, working together with local health management institutions. Using the Global Positioning System technology, 25,000 unofficial cemeteries were identified in all regions of Brazil, followed by the organization of routine data collection in these locations.

The increase in completeness was associated with the project to reduce ill-defined causes of death – Chapter XVIII of the International Statistical Classification of Diseases and Related Health problems (ICD-10).

The strategy was based on the identification of deaths with ill-defined cause of death and investigation of the cause. The steps were: linkage of mortality with hospital data; research in medical records and verbal autopsy; completion of the death certificate; and recording into the SIM.

The intervention reduced the proportion of ill-defined causes of death and increased the completeness.

The monitoring of death was instituted in 2009 to maintain efforts to increase completeness and improve the quality of data on mortality. Teams, committees and mortality surveillance groups were created at local level. Agreements were made with states and municipalities with financial incentives and goals.

The evaluation of the SIM completeness consisted of surveys of active search for deaths in a sample of municipalities. The monitoring of the completeness was implemented by means of the general coefficient of mortality standardized by age and with a pre-established goal for the municipalities, with financial incentives for compliance.

THE DATA FOR HEALTH INITIATIVE

In 2016 the minister of Health accepted the invitation of Bloomberg Philanthropies to participate in the Data for Health initiative[1]. That was an important moment because data on cause of death still had problems; the monitoring of death maintained the good quality of data but without significant advances over the last years.

The focus would be to improve the quality of the cause of death data by reducing garbage codes (GC), considering that, currently, SIM's low completeness is localized problem.

Several joint interventions were implemented: (1) sensitization of health secretaries, hospital directors and primary care workers; (2) investigation of causes of death with GC in hospitals with standardized protocol; (3) training for the correct filling of the medical certificate of the cause of death; (4) elaboration of instructional and interactive material for doctors – cell phone application (*AtestaDO*), practical exercises and the software Iris for doctors; (5) CG monitoring panel by municipalities and hospitals; (6) working with the Brazilian Forensic Medical Institute in the qualification of death by external cause;

(7) strengthening of death-verification services; (8) national meetings with the presence of representatives from states and municipalities; and (9) knowledge production – participation in congresses and publication of articles.

The interventions on SIM were to: initiate implementation of Iris, a software for automated coding of cause of death; create a data dictionary; validate and train coders; and to initiate the approval of the new system initiate in 2019.

The actions were performed by municipalities and States, with methodological support from the School of Medicine of Universidade Federal Minas Gerais (UFMG) and operational coordination of the MoH, with monitoring of the organization conducted by Vital Strategies and the University of Melbourne.

The Data for Health initiative strengthened the creative and engaged component that existed in the monitoring of death and teams of states and municipalities. UFMG's incumbency was to keep everyone within the scientific method as much as possible.

The evaluation of the results is being shown in this supplement. Such experience remains for those who participated and for those who want to take advantage of it as a way to concretely improve information on mortality and cause of death.

CONCLUSION

Monitoring health indicators and evaluating what works and what does not work requires good information thus excluding the possibility of using estimates.

Many governments want to improve their information but do not know how. Conceptual models and instruments that reflect universal knowledge and general concepts are created; however, these are not useful because they are not operative – they only scratch the surface of reality.

Governments are key to improving information, but not just them. The Brazilian experience is the involvement of governments at all levels and strong alliance with services, public administrators and health workers. Universities and professional societies are involved in the production of knowledge and in the training and use of the data. Civil society participates as the main stakeholder through health councils. Good information and good care walk together.

Only a strong commitment to change can transform the reality of health information in Brazil and in the world.

REFERENCE

1. Bloomberg Philanthropies. Data for Health [Internet]. 2017 [cited 2019 June 15]. Available from: https://www.bloomberg.org/program/public-health/data-health/#overview