

National Maternal Mortality Surveillance System in Iran

*A Azemikhah, MA Amirkhani, P Jalilvand, N Emami Afshar, L Radpooyan, *N Changizi*

Ministry of Health & Medical Education, Family Health & Population Department, Maternal Health Unit, Tehran, Iran

Abstract

Finding the root causes of maternal mortality plays a significant role in identifying the status of development in the society and in expressing the current situation of maternal health and the adoption of appropriate measures towards its improvement. With the above in mind and for the purpose of fulfillment of objectives and national and international commitments, the National Maternal Mortality Surveillance System was designed in 2000 and implemented from 2001 through out the country in Iran. Implementation of this program aimed at identifying the factors contributing to maternal mortality during prenatal, delivery and postnatal periods through discovering the process that each mother has followed until her death, identifying avoidable causes of death and designing interventions in order to solve problems and prevent occurring of similar deaths.

Keywords: *Maternal mortality, Health, Surveillance, Iran*

Introduction

The Surveillance System has been defined in the book "Public Health and Preventive Medicine" as follows:¹

"Surveillance is the ongoing systematic collection, analysis, and interpretation of health data essential to the planning, implementation, and evaluation of public health practice, closely integrated with the timely dissemination of these data to those who need to know. The final link in the surveillance chain is the application of these data to prevention and control".

Maternal mortality surveillance system is implemented to reduce maternal mortality rates and pregnancy and delivery complications by exploring the processes that lead to maternal death; to identify preventable factors in every case of death; to formulate systematic interventions that resolve the problems identified and prevent similar cases from occurring again. The specific objectives of the maternal mortality surveillance system are as follows:

Exact registration of mortality data

Identification of the risk factors associated with maternal mortality

Designing and carrying out suitable interventions in order to improve maternal health indicators

In this program, definition of maternal death means "The death of a woman while pregnant or within 42 d of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes" (Definition of death according to ICD-9)

According to this Surveillance System:

All activities carry out exactly in accordance with the pre-noticed timesheet of the "flowchart for investigation of maternal deaths and formulation of interventions".

The dean of the University/College is responsible for implementation of the program.

There is a Maternal Mortality Reduction Committee in every university/college and it is located at the central level of the medical universities.

(The members of this Committee are:

A- Fixed members: the dean of the university of medical science, the head of obstetrics & gynecology, the deputy for health and treatment, the

¹ John M. Last, Public Health & Preventive Medicine, 13th Edition, 1993

senior provincial family health expert and the interview team (this team completes the questionnaire and do interview about details of mother's death)

B- Temporary Members: the interview team in district, the director of district health centre, others according to the place and type of death such as the deputy for education of the university of medical science, the director of midwifery and nursing services, the head of anesthetics, the general manager of the hospital and other staff as required)

Maternal death in rural areas is reported by the community health worker (behvarz, physician at the health centre) or the villagers themselves to the district, then province Health Centre and then maternal health unit in MOHME. Maternal death in cities is reported by the person responsible at the hospital, private clinic, different organizations, urban health centre and health post or by a member of the public to the province Health Centre and directly to the maternal health unit in MOHME. Both of them are reported through an urgent maternal death report form or by telephone. Within two weeks of death, an interview team has an interview at the house, hospital, maternity facility or private clinic where the death occurred.

Maternal Mortality Reduction Committee meets within two weeks of a report being submitted. They study questionnaires, suggest the preventable and intervening factors, determine the type of intervention and the level of intervention then complete the forms and forward the necessary feedback.

During implementation, the program must be monitored and evaluated. The monitoring and evaluating system of this package is designed for two purposes:

Monitoring the implementation of activities from initial identification of cases to formulation of intervention to ensure implementation of activities according to the flowchart submitted;

Evaluating the results of the review of death and calculation of indicators like factors affecting death causes of death;

For monitoring and evaluation, certain indicators have been set and related data collected on a six-month period by pre-designed forms. Based on the results, appropriate interventions for reduction of maternal mortality should be designed and implemented.

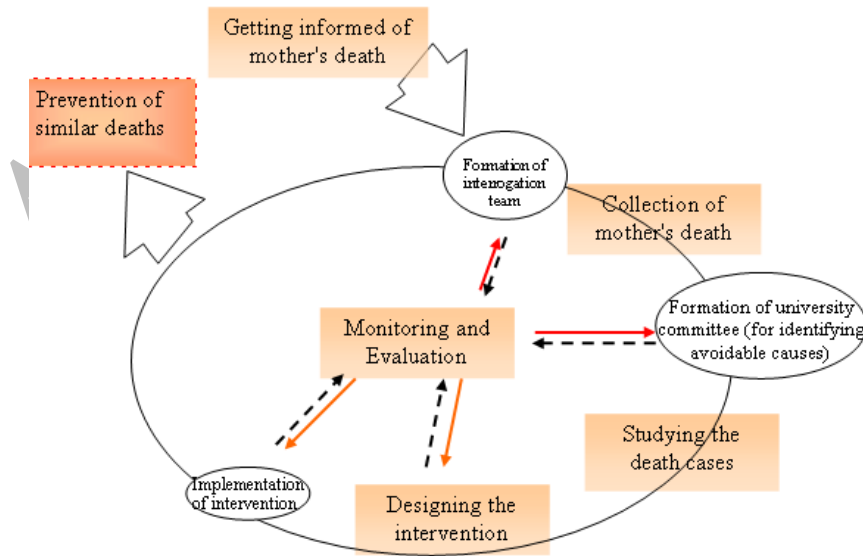


Fig. 1: The procedure and measures set out in implementation of the system

Conclusion

One of the goals of the surveillance system is the recording of all maternal deaths in the areas, but it is not sufficient. To investigate deaths analytically, identifying avoidable causes and finally formulating and implementing an appropriate intervention program to prevent similar deaths is more important. If such a process does not proceed properly up to the end, all attempts to collect comprehensive mortality data would be futile. Identified causes of maternal mortality in the country and the statistical description of the contributing factors, based on the National Maternal Mortality Surveillance System during 2001-2007, show that 5 strategies listed below, should be given more attention for the reduction of maternal deaths:

Improving the quality of hospital services;

Improving the quality of out-patient emergency obstetric care;

Increasing the coverage and quality of family planning services provided for mothers especially those at risk;

Increasing access to emergency obstetric care

Timely identification and prevention of delays in decision-making and referral of the high-risk cases

Minimizing delays and or mistaken or harmful practices in providing maternal health services, especially in emergencies;

Increasing public awareness regarding emergency obstetric care.

Reference

National Maternal Mortality Surveillance System, first Revision, Second Edition, 2006.

Archive of SID