Death Registration System in I.R.Iran

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Abstract

Death and disease information are key information in priority setting. Because importance of valid and reliable mortality data, death registration system in I.R.Iran as a multi source registration system was established and improved from 1998. In this system mortality data are collected from hospitals, health houses and health centers, forensic medicine bureau, authorized cemeteries, civil registration bureau and other probable sources in district and within a defined process data are collected in provincial health centers and then in ministry of health. For improvement of registered data some important activities have to done in different level such as continuous education and strengthening intersectoral collaboration.

Introduction

Because of the importance of death and disease information in priority setting and overall appraisal of health system performance, the process of death and disease registration is reviewed. In the Islamic Republic of Iran, the Civil Registration Organization (CRO) is legally responsible for death registration. Because improve the reliability, validity, and representativeness of death registration especially cause of death, it was decided to improve the capacity of the district health network to register all deaths by age, sex, cause, and place of residence. Based on the existing structure, the following sources could be used for the registration of deaths:

• District hospital;

• Health houses (for deaths that occur in rural areas);

• Health volunteers (for deaths that occur in urban households);

• Forensic medicine department (for deaths that should be investigated because of legal concerns); and

• Authorized cemeteries (1).

In Fig. 1 data flow in death registration system is shown.

Data from health houses and health centers in urban and rural areas, hospitals, forensic medicine and cemeteries are collected to district health center, in district health center data is checked with civil registration. Data is sending to provincial health center each 3-6 months and then to ministry of health annually.

Data registered by age, sex, cause of death, date of death, place of residence, place of death and other characteristics based on death certificate.

Physicians issue death certificates when the cause of death can be given. Where it is not possible for physicians to determine the cause of death (based solely upon the available data) the district forensic medicine bureau assumes responsibility for this. In the absence of physicians (which is a very rare event nowadays) local authorities are permitted to verify death and determine its probable cause (by verbal autopsy) (2).

Death certificate is completed in 3 copies. One copy remains in patient record or physician's documents, two copies are given to deceased family (one copy for cemetery and another for civil registration bureau to cancellation of identity certificate). For verbal autopsy has been prepared a questionnaire based on Iran geographical and health condition from WHO questionnaire. In different places data is checked with other sources. For example in rural area number of deaths is checked with Vital Horoscope, also number of deaths and some other characteristics are checked with civil registration bureau. Causes of death are recorded according to ICD 10 and a modified mortality table based on Iran health condition included more than 320 causes.

Death registration system in Iran was started as a pilot project in one province at 1998 (Bushehr Province) and then was established in other provinces in subsequent years and by 2004, 29 provinces were covered by the system and now system has covered all area in the country except Tehran city, (57 million population)(1,3).

Based on death registration system, crude death rate was 445 (per 100000) in 2005. CDR is different between provinces from 557 in Guilan to 320 in Kohkiluye & Boyerahmad.

In recent years registered garbage code decreased from 23.7% in 2001 to 11% in 2006.

Mean age at death is different from 64 in Guilan province to 46 in Systan & Baluchestn province.

Leading causes of death in 2005 have been acute myocardial infarction, cerebrovascular accident, traffic accident, hypertension related diseases etc (4).

Conclusion

Death and disease information are key information in priority setting, and any health system need to these data for decision making and planning around health problems and resource allocation especially in sun national regions. Death registration system in Iran is a multi source registration system included in health system. To establish this system, the district health network does not need to recruit new health personnel or to make any change in its structure. Because importance of valid and reliable mortality data in decision making and planning in provinces, continuous education of authorities in the medical sciences universities is the most important activity to improvement of death registration system. Another important activity is strengthening intersectoral collaboration between related organizations such as Civil Registration Organization and Forensic medicine bureau.

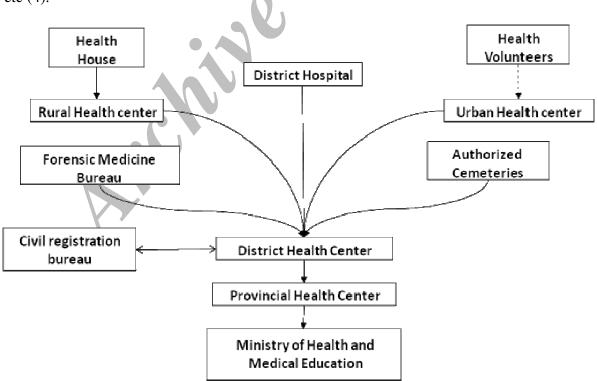


Fig.1: Flow of data through the death registration system.

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