Strengthening cause of death registry in Palestine: Evidence- based Recommendations

INTRODUCTION

Mortality statistics are widely used for medical research, monitoring trends in public health, and the planning and evaluation of health care.   It is vital to ensure a high degree of accuracy of death registry due to the many important public health needs. This can be attained through accurate diagnosis of the cause of death by the person certifying the event, in addition to the correct identification and coding of the underlying cause of death in line with international standards.

In 2013-2014 a study of accuracy of Palestine mortality statistics was carried out among randomly selected 371 hospital deaths in West Bank (WB) and 199 in Gaza Strip (GS). For each death, three underlying causes of death were compared as follows:

• The underlying cause according to the deceased patient hospital record
• The underlying cause according to the original DNF, coded by international Iris coding software;
• The underlying cause according to the original DNF, coded by the Palestinian Health
  Information Centre (PHIC).

Comparisons at the most detailed level available in the International Classification of Diseases (ICD) were conducted to assess the accuracy of the coding at PHIC.

MAIN FINDINGS

A) Completeness of DNFs and other characteristics

• 97% of DNFs in WB had incomplete administrative data (Part I of the DNF) compared 46% in Gaza.

- 41% of DNFs in WB and 38% in Gaza contained abbreviations
- 30% of DNFs in WB and 6% in Gaza contained illegible writing
- 20% of DNFs in WB and 19% in Gaza contained sequence errors (diseases reported in
- 23% of DNFS in WB and 26% in Gaza contained non-informative cause of death (for example reporting a symptom instead of a disease)
- The median days for registering death was 89 in WB and 57 in Gaza

B) Accuracy of DNFs and accuracy of death registry

- 19% of the causes of death in the West Bank sample and 31% in the Gaza sample in the PHIC registry were accurate (based on deceased patient hospital records).
- 56% of the DNFs in the WB and 52% in GS were accurate (measured by the agreement between the underlying cause of death based on deceased patient hospital record and the underlying cause derived from DNF)
- 23% of PHIC coding in the WB and 39% in GS were accurate (assessed by comparing the underlying cause of death coded by PHIC to the underlying cause according to the DNF coded by international coding software -IRIS) .

Based on the above, there are two major reasons for the low accuracy of Palestinian death registry

- Incomplete/and or unsatisfactory reporting on hospital deaths
- Coding at PHIC which departs form ICD10 coding rules and guidelines

RECOMMENDATIONS

Policy Level

- Law enforcement of the need for burial permit to enforce timely death notification
- Copies of DNFs of deceased persons referred to autopsy must be sent directly to Primary Health Care (PHC) directorates.
- Introduce the international coding software for coding and classification of cause of death (IRIS)[1]

Primary Health Care Level

- Prepare a pamphlet with short instructions on how to complete the DNF based on WHO guidelines.
- Develop web based- Death Notification Forms to be used by hospitals to fill DNFs of hospital deaths and by PHC directorates to fill deaths outside hospitals.
- Train focal points at PHC directorates on the data entry for the web based DNFs
- Request certified doctors to notify Primary Health Care directorates of attended deaths.
- Train three coders in both WB and GS on the use of IRIS
- Constitute a committee of stakeholders to follow up on improving the accuracy of death registry

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[1]The Iris coding software has been developed by an international group of experts in coding and classification of causes of death in close cooperation with several WHO Collaborating Centres for Classifications in Health Care. . The software automatically applies ICD 10 instructions for selection and classification of causes of death, also for less frequent cases that coders might be less familiar with, which brings coding and classification in line with the ICD instructions.   A further advantage of automated coding is that the software codes all causes of death mentioned on the certificate, both the underlying cause and the contributing causes.

with the following responsibilities

• Prepare an action plan that sets out specific objectives and activities
• Monitor and evaluate planned and implemented interventions

Primary Health Care Directorates Level

• Check the content for completeness and coherence of DNF before stamping it at PHC Directorates
• Fill in a web-based DNF from DNFs received from the legal department for deceased referred for autopsy and for deaths outside the hospital

Palestinian Health Information Center (PHIC) Level

• Train the director of PHIC on the use to IRIS
• Supervise and monitor coding carried out at PHC directorates level

Hospital Level

• Review all DNFs for completeness and accuracy by a senior physician/or the specialist committee that has been set up to review all hospitalizations that ended with the death of the patient.
• Train hospital focal points on the data entry for the web-based DNFs

The Palestinian National Institute of Public Health brings the health of Palestinians to the heart of policy, by promoting evidence-based decision-making and the use of information for action.

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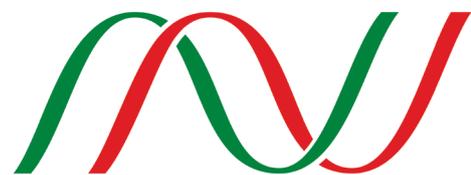
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