

ORIGINAL ARTICLE

## A Study on Death Certification in Ras-Al-Khaima

B Meel

### ABSTRACT

#### INTRODUCTION:

**BACKGROUND:** Audited information on the causes of death is one of the basic components of a country's health information system. Data are usually derived from death certificates. A critical analysis of Ras-Al-Kheimah (RAK) hospitals' death certification was done establish the quality of care. Such an audit is simple, cheap, and useful for monitoring the quality of services.

**OBJECTIVE:** To determine the accuracy of death certification by doctors in the RAK Hospital.

**METHOD:** Second year medical students were assigned to collect copies of death certificates as a part of their assignment from a prominent RAK hospital. They were divided into two groups. A lecture on death certification was delivered prior to the students going to the hospital. Students examined the certificates, and the results were displayed.

**RESULTS:** Fifty-one death certificates were collected from the RAK hospital. A majority 36 (70.58%) of them were for males, and their mean age was 42 years. There were 14 females (29.41%) in this study. About half (49%) of them were foreigners from 14 different countries. Cardiac failure was the commonest (70.58%) cause of death, followed by respiratory failure (11.76%).

**CONCLUSION:** Cardio-respiratory failure as a cause of death was found in the majority (82.34%) of cases as per the death certificates from the RAK hospital.

KEYWORDS | Death certification; Mortality statistics; Quality of care

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### INTRODUCTION

Audited information on the cause of death is one of the basic components of a country's health information system. Data are derived from death certificates and are useful in decision making in running a hospital.<sup>1</sup> (Meel, 2003). Wrong opinions and decisions in writing down a cause of death is undesirable and sometimes very dangerous. A culprit can be free, and an innocent person can be charged. Therefore, an expert opinion is always required before certifying a death.<sup>2</sup>

(Meel, 2017).

The research found that there were many death certificates that were filled incorrectly, even though it is an important job. Many times, a natural death was made to be an unnatural one and vice versa. This led to a lot of medicolegal problems. It is particularly difficult and problematic to state an unnatural death as a natural death. This leads to trauma for the deceased's family at a time of emotional

stress, and insurance companies may deny payments on their life policies.<sup>3</sup>

A death notification form (BI 1663) is a legal form proposed by the World Health Organization (WHO).<sup>4</sup> It needs to be completed upon the death of a person by a medical practitioner in terms of Act No. 51 of 1992, of Births and Deaths Registrations.<sup>5</sup> A copy of the certificate of cause of death must be submitted to the Department of Home Affairs but this process varies from country to country. This is secret information and is supposed to be submitted in a sealed envelope, but this practice is also not followed in many countries. Generally, the doctor is expected to attend during the process of dying and should be able to diagnose death correctly but again a nurse practitioner is does this task in many countries. The medical practitioner should also know the fact that issuing a death certificate is an important issue. Despite this fact, very few medical schools offer formal teaching in the process of death certification.<sup>6</sup> The purpose of this article is to highlight the problem of death certification in RAK hospitals, United Arab Emirates.

#### METHOD

The RAK hospital is attached to RAK university medical school and is a teaching hospital. The author was a visiting professor to teach undergraduate students. This hospital serves the Res-Al Khaimah people who are residing in that area. Most of them are foreigners from different countries. A group of medical students were taken to the hospital to do an exercise to learn about death and death certification. They were given the job to record all the deaths from the death notification forms - the so-called death certificates-during a six-month period. They found 51 deaths and the cause of death was recorded in each case. The death notification forms were obtained from the hospital and the causes of death based on these forms were compiled and then analysed manually.

#### RESULTS

Fifty-one death certificates were collected from the RAK hospital (Table 1). The majority of 36 (70.58%) of them were males and the mean age

was 42 years. Females constituted 14 (29.41%) in this study. About half (49%) of them were foreigners from 14 different countries. Cardiac failure was the commonest (70.58%) cause of death, followed by respiratory failure (11.76%). Car accidents were listed in 7.84% cases (Table 1). Cerebral vascular accidents were recorded in 5.88% cases, while esophageal hemorrhage and burns were accounted for only 1.96% respectively (Table 1). Falling and low blood pressure were stated in 20% of the cases along with heart failure, and rest of them were listed as miscellaneous with labels such as stopped heart and high fever.

**Table 1:** The cause of death in the RAK hospital, UAE.

Cause of death	Number	Percentage
Car accidents	4	7.84%
Heart attack/heart stoppage/cardiac arrest	36	70.58%
Cerebral vascular accident/stroke	3	5.88%
Respiratory failure	6	11.76%
Burns	1	1.96%
Oesophageal haemorrhage	1	1.96%
Total	51	100%

#### DISCUSSION

This study was carried out in the Res-Al-Keimah hospital which is a component of United Arab Emirates (UAE). It is relatively less developed than other parts of UAE. It is an important to teach the students who are going to become medical officers to understand the value of death certification. This study identified that up to 82.34% of the death certificates were incorrect and thus had no value. The author tried to find out the reasons for these many inaccurate death certificates, and then one colleague mentioned that this is because of failure in diagnosis. The doctors could not establish a diagnosis and therefore they choose to way out as it leads to least legal problems, so they simply write it as fall of blood pressure, heart stop, or low function of the respiratory system. It is not only in UAE but also in some countries like South Africa have also been very poor diagnosis written in the certificate

of death as in Transkei region. Poor quality of death certification was thus reported by the author.<sup>2,7,8</sup>

The stigma attached to HIV-related disease has made medical officers reluctant to specify it as a cause of death.<sup>9</sup> This is partly because insurance companies are not prepared to pay in the case of a positive result. The perceived lack of confidentiality in the previous death certificate form has been thought to contribute to this reluctance.<sup>11</sup> This reluctance is persisting in medical officers. Moreover, the certifying physician purposefully includes wrong information on certificates of death to conceal diagnosis that might cause discomfort to family members.<sup>10</sup>

Cardiorespiratory failure is commonly used as a cause of death in many hospitals worldwide. It means that the heart and lungs stopped functioning. It is simple to explain that death doesn't occur without the heart and lungs stopping. Cardiorespiratory failure is not a cause of death. It is also not a mechanism of death. In 1993 Jordan and Bass<sup>11</sup> discovered that 31.9% of a sample of death certificates completed at a Canadian tertiary care teaching hospital contained major errors. The highest rate of inaccurate completion occurred within the Department of Medicine with 40.3% of certificates classified as unacceptable because of major errors.<sup>12</sup>

The mechanism of death is important as an underlying cause of death; without it death could have not occurred.<sup>4,10</sup> This is happening because most the physicians do not receive training in determining the cause death. The Department of Forensic Medicine has the responsibility to train their students so that they do not have difficulty in certification of death. Most of the time the information given on death certificates either has no meaning or is misleading. Health care managers utilise this inaccurate data and may draw inaccurate conclusions regarding the cause of death, which

may have an impact on health care planning.<sup>13</sup>

The external causes of death such as a motor vehicle accident and burns were recorded in this study but again the mechanism of death was not described. There are no guidelines to help medical officers in dealing with such cases and death certification is often arbitrary and inconsistent.<sup>14</sup> Death certification is supposed to be written by the senior doctor; however, previous studies suggest that seniority alone does not guarantee of accuracy in certification of death.<sup>15</sup>

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### CONCLUSION

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Cardio-respiratory failure as a cause of death was found on the majority (82.34%) of death certificates in the RAK hospital. This is very high inaccuracy in certification of death. There was knowledge deficiency among medical practitioners who are certifying death. Medical education in this regard is needed for medical students as well as medical practitioners, and frequent auditing of certificates of death is an important step in improving quality of care in hospitals.

**ETHICAL ISSUE:** This is a record review of death notifying forms but commonly called as a death certificate. Res-Al-Kheimah University has given permission to visit hospital and to review record the cases.

The author has also received ethical permission for case report publication (approved project No. 4114/1999) from the Ethical Committee of the University of Transkei, South Africa.

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*The author has made no acknowledgment in this article.*

#### Conflict of Interest:

*The author declares that there is no commercial or financial links that could be construed as conflict of interests.*

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