

The burden of disease in Maputo City, Mozambique: registered and autopsied deaths in 1994

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Objective To classify the causes of death in Maputo City, Mozambique, using the methods of the Global Burden of Disease study, in order to provide information for health policy-makers and to obtain a baseline for future studies in Maputo City and provincial capitals.

Methods Data were taken from the Maputo City death register and autopsy records for 1994.

Findings A total of 9011 deaths were recorded in the death register, representing a coverage of approximately 86%. Of these, 8114 deaths (92%) were classified by cause. Communicable, maternal, perinatal, and nutritional disorders accounted for 5319 deaths; noncommunicable diseases for 1834; and injuries for 961. The 10 leading causes of registered deaths were perinatal disorders (1643 deaths); malaria (928); diarrhoeal diseases (814); tuberculosis (456); lower respiratory infections (416); road-traffic accidents (371); anaemia (269); cerebrovascular diseases (269); homicide (188); and bacterial meningitis (178).

Conclusions Infectious diseases of all types, injuries, and cerebrovascular disease ranked as leading causes of death, according to both the autopsy records and the city death register. AIDS-related deaths were underreported. With HIV infection increasing rapidly, AIDS will add to the already high burden of infectious diseases and premature mortality in Maputo City. The results of the study indicate that cause of death is a useful outcome indicator for disease control programmes.

Keywords Cause of death; Mortality; Registries; Autopsy; Cost of illness; Mozambique (*source: MeSH*).

Mots clés Cause décès; Mortalité; Registre; Autopsie; Coût maladie; Mozambique (*source: INSERM*).

Palabras clave Causa de muerte; Mortalidad; Sistema de registros; Autopsia; Costo de la enfermedad; Mozambique (*fuelle: BIREME*).

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Introduction

Burden-of-disease estimates that include cause of death can help in determining public health priorities. In sub-Saharan Africa, child mortality is high and perinatal conditions and communicable diseases are leading causes of death (1). Results from studies such

as the Adult Mortality and Morbidity Project in the United Republic of Tanzania show that adult mortality is also high. In Dar es Salaam, the probability of dying between the ages of 15 and 59 years was 45% for women and 50% for men in the early 1990s. AIDS was the leading cause of death in this age group (2). In Lusaka, Zambia, a community survey in 1995 showed that the probability of dying between the ages of 15 and 59 years was 77.8% (3). Detailed analyses of sources of data on adult deaths using standardized methods may improve our knowledge of patterns of ill-health in sub-Saharan Africa (4).

For the Global Burden of Disease (GBD) study (5), Murray & Lopez used an inequality-of-death distribution method to estimate the causes of mortality for southern Africa, using estimates based on South Africa's vital registration data. Maputo, the capital of Mozambique, has a vital registration system with a high coverage, and demographic surveys show that both infant and adult mortality rates are high, with an estimated infant mortality rate (IMR) in 1993 of 70 deaths per 1000 live births (6). A Demographic and Health Survey in 1997 estimated that the annual

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IMR for the previous 10 years was 49 deaths per 1000 live births (7). The probability of dying between the ages of 15 and 59 years in 1991 was estimated to be 29% for women and 36% for men (National Statistics Institute data).

In 1995, we analysed the cause-of-death data for the previous year from the Maputo City death registry, using the GBD classification of disease. Our objectives were to provide information for health policy-makers and to obtain a baseline for future studies in Maputo City and provincial capitals. Maputo City is in southern Mozambique and close to the South African border. The AIDS epidemic reached Maputo City late, mainly because it was isolated by war until 1992. In 1994, the HIV seroprevalence in a sample of women attending antenatal clinics was 2.7% (National AIDS Control Programme data). With the end of war and an exploding HIV epidemic in South Africa, HIV infection and AIDS-related deaths are now increasing rapidly in Maputo. Mozambique was one of the poorest countries in the world in 1994, with an estimated gross domestic product per capita of around US\$ 90 (8).

Methods

Death register data

In 1994, the estimated population of Maputo City was 1 103 100. Deaths were recorded at two civil registry offices and the data were combined into one register. Almost all registered deaths occurred either in public hospitals or at home, with most hospital deaths occurring at Maputo Central Hospital. Few deaths occurred in the two small private clinics with beds, since seriously ill patients were transferred to Maputo Central Hospital or to hospitals in South Africa. In Maputo Central Hospital and other hospitals, the doctor certifying death also assigned the cause. For deaths at home, nurses trained to ascertain cause of death interviewed the family. A death registration certificate was needed before the dead could be buried; home burial was illegal in the city and there were no illegal burial grounds.

Classification of cause of death

The Maputo City registries used the eighth revision of the *International Classification of Diseases* (ICD-8) to code deaths; we manually re-coded all deaths using the ninth revision (ICD-9). Autopsied deaths were classified using ICD-9. In addition, using the list of causes of death that was developed for the 1993 *World Development Report* (9), as well as knowledge of common local causes of death, we compiled a basic list of 90 causes of death based on ICD-9. If a disease was listed as a cause of death in Maputo City, but did not appear on the basic list, we added the disease to the list. Conversely, if diseases were on the basic list, but were not registered as a cause of death in Maputo City, they were removed from the list. This resulted in a list of causes of death that was based on local pathology.

All deaths listed in the city registries and autopsy records were then classified according to this basic list.

Hypertension was added to our list, although it is a risk factor and not a disease, as it was frequently classified in the register. Autopsy records confirmed that hypertensive heart disease was a frequent cause of death. In the register, deaths from hypertension and hypertensive heart disease were classified under hypertension as the cause of death.

Ranking causes of death

To rank causes of death, we used the GBD tree structure (5). At the first level there are three broad groups: group 1 comprised deaths attributed to communicable diseases and to maternal, perinatal, and nutritional conditions; group 2 comprised deaths from noncommunicable diseases and group 3 comprised deaths due to injuries. Deaths from diseases such as rheumatic heart disease, pericarditis, renal infections, and lung and cerebral abscesses, which are caused by infectious agents, were placed in group 2, in agreement with the GBD study: in Maputo City, however, these deaths probably belong in group 1. Each of the three groups was further divided into several major subcategories (level two), and third and fourth levels were used to classify specific causes of death. For demographic data, we used the results from a 1991 Demographic Survey and projections to 1994 supplied by the National Statistics Institute.

Autopsy records

We also examined all autopsy records in Maputo Central Hospital pathology and medicolegal departments, which autopsied 1523 and 1505 deaths, respectively, in 1994. The medicolegal autopsies included deaths referred from outside Maputo City. Medicolegal autopsies are compulsory for violent deaths. The pathology department carries out autopsies mainly on request from Maputo Central Hospital. Autopsies were carried out usually when the cause of death was uncertain, and less frequently for certain infectious diseases; very few autopsies were carried out on perinatal deaths. The age structure of the autopsy deaths is therefore different from that of the deaths listed in the city registries.

Death from conditions such as asthma, epilepsy, osteoarthritis, rheumatism, and senility occurred mostly at home and were not listed at autopsy as causes of death. Deaths caused by osteoarthritis, rheumatism, and senility were therefore considered as ill-defined. For children under five years old, deaths from epilepsy were considered to be caused by communicable diseases; for children aged five years or older, deaths from epilepsy were considered as ill-defined. Deaths from asthma attacks at home were attributed to lower respiratory infections if the individuals were younger than 15 years of age at the time of death or to other respiratory diseases for those older than 15 years at time of death.

After this redistribution, we were able to assign a level-two cause of death for 90% of deaths (8114

Table 1. **Distribution of registered deaths by group and level-two cause in Maputo City, Mozambique, 1994**

Cause of death	No. of deaths (%)
Group 1	
Infectious and parasitic diseases	2776 (34.2)
Perinatal disorders	164 (20.2)
Respiratory infections	43 (5.3)
Nutritional disorders	411 (5.1)
Maternal disorders	58 (0.7)
Total	5319 (65.6)
Group 2	
Cardiovascular disorders	656 (8.1)
Malignant neoplasms	313 (3.9)
Digestive disorders	209 (2.6)
Respiratory disorders	181 (2.2)
Neuropsychiatric disorders	139 (1.7)
Congenital abnormalities	115 (1.4)
Genitourinary disorders	106 (1.3)
Diabetes mellitus	73 (0.9)
Skin disorders	23 (0.3)
Other	19 (0.2)
Total	1834 (22.6)
Group 3	
Unintentional injuries	497 (6.1)
Intentional injuries	230 (2.8)
Ill-defined injuries	234 (2.9)
Total	961 (11.8)
All defined causes	8114 (100.0)

out of 9011). Cases in which the cause of death was known, but the age and/or sex of the individual was not, were distributed proportionately to an age or sex category within the cause of death.

Results

Registered deaths

In 1994, 9011 deaths were registered in Maputo City. According to demographic survey estimates, 10 509 deaths were expected, giving an estimated registration rate of 85.7%. The age and sex distribution of registered deaths was close to the expected pattern from the Maputo City life tables supplied by the National Statistics Institute, except that the proportion of deaths was higher than expected in adult males and lower in adult females. According to the life tables, 22.7% of total deaths were expected in males over 15 years of age, whereas this group actually accounted for 28.9% of deaths recorded in the death register. In contrast, the corresponding percentages for females over 15 years of age were 25.2% (life tables) and 19.8% (death register). Of the 9011 deaths registered in Maputo City, 6085 deaths (67.5%) occurred in hospitals and were therefore medically certified. The proportions of deaths from ill-defined causes and deaths at home were higher in those over 60 years of age. Some 897 deaths (8.1%) were due to ill-defined causes, and

could not be assigned to a group. When we refer to defined causes, we are therefore referring to the remaining 8114 deaths. A further 996 deaths that could be assigned to a group or level two category were classified within the group or category as other or ill-defined: 194 of 2776 deaths (7.0%) due to infectious and parasitic diseases (group 1); 94 of 313 deaths (30.0%) due to malignant neoplasms (group 2); and 474 of 1402 deaths (33.8%) due to system disorders (group 2). Within group 3, 234 of 961 deaths (24.3%) due to injuries were ill-defined.

Table 1 shows the distribution of 8114 deaths by group and level-two cause. Most deaths were in group 1 (65.6%); noncommunicable diseases (group 2) accounted for 22.6% of the defined causes of death, and injuries (group 3) for 11.8% of deaths. **Main causes of registered death.** Table 2 shows the twenty leading causes of registered deaths: perinatal disorders were the main cause, accounting for 1643 deaths. We excluded 677 stillbirths that were included in the death register. Malaria (928 deaths) was the second leading cause of death, followed by diarrhoeal diseases (814), and tuberculosis (456). Only 22 deaths from AIDS were registered. The 656 deaths from cardiovascular disorders were classified in the register as cerebrovascular disease (269 deaths), hypertension and hypertensive heart disease (171), ill-defined cardiac disease (84), heart failure (63), ill-defined vascular disease (36), ischaemic heart disease (29), and rheumatic heart disease (4 deaths).

Autopsied deaths

Non-medicolegal autopsies. Table 3 shows the ten leading causes of death in the non-medicolegal autopsies. The autopsy result was not routinely used to alter the cause of death listed on the death certificate. The autopsy data were age-biased, as more adults were autopsied than children. Of these non-medicolegal autopsies, adult males comprised 38.7% of the cases and adult females 24.1%. However, the autopsy study gave more specific diagnoses and confirmed that tuberculosis, cerebrovascular disease, malaria, lower respiratory infections, and diarrhoeal diseases were leading causes of death (there were other leading causes of death not picked up on the non-medicolegal autopsy study). Of the 153 cerebrovascular disease deaths, 99 were caused by intracerebral haemorrhage, 43 by cerebral infarction, and 11 by subarachnoid haemorrhage.

Some 113 deaths were attributed to cardiac disease: hypertensive heart disease (48 deaths); cardiomyopathy (17 deaths); rheumatic heart disease (15 deaths); bacterial endocarditis (8 deaths); ischaemic heart disease (7 deaths); pericarditis (6 deaths); myocarditis (1 death); and other causes (11 deaths). Liver cancer was the sixth-equal leading cause of death in the autopsy study (68 deaths), yet only 49 deaths from this cause were listed in the city register. Liver cancer was the most common cause of cancer death in men, in both the city death register and the autopsy records. In the city death register, cervical cancer was the most common cause of

cancer death in women (39 deaths), but was diagnosed in only 12 deaths at autopsy.

Medicolegal autopsies. The 1505 medicolegal autopsies are not strictly comparable with the data from death register, because some autopsy cases came from outside Maputo. Nonetheless, cases from outside Maputo do not explain the large differences between data in the medicolegal autopsies and death register. For example, the medicolegal autopsies listed 638 deaths attributed to road-traffic accidents, but only 371 deaths were attributed to this in the death register. Similar discrepancies between the autopsy records and death register were seen for other causes of death, including homicide (343 and 188 deaths, respectively) and burns (91 and 40 deaths, respectively). Even if all 234 cases of ill-defined violence were redistributed proportionately among the known causes, as proposed by the GBD study, the number of registered deaths from violence would still be less than that in the medicolegal autopsy records. Other leading causes of death in the medicolegal autopsies were suicide (80 deaths), falls (36), and poisoning (26).

Age- and sex-specific ratings. Tables 4–6 show the ten leading causes of death by age and sex for three age groups: 0–14 years; 15–59 years; and 60 years of age and older. The rankings of the different causes of death changed with age, with the proportion of deaths due to causes in group 2 increasing with age.

Deaths due to causes classified in group 3 were particularly high for males aged 15–44 years old, where violence accounted for 43% of all deaths. Overall, injuries accounted for 6.9% of female deaths and 15.7% of male deaths, thus injuries were responsible for approximately three male deaths for every female death (718 male deaths compared to 243 female deaths).

For women in the same age group, maternal disorders were the fourth leading cause of death. The 58 deaths attributed to maternal disorders correspond to a maternal mortality rate of approximately 117 maternal deaths per 100 000 live births. In men 60 years of age and older, tuberculosis was the leading cause of death (18.2% of all male deaths in this age group). The proportion of deaths from ill-defined causes was also higher in men and women aged 60 years and older (18.9%), compared to other age groups.

Discussion

We estimated the main causes of death in Maputo City in 1994 from the city death register, and sorted them by age and sex. There are limitations to the data because some causes of death may be relatively underreported and others poorly classified. In addition, migration patterns (e.g. men migrating to the city in search of work, leaving the women behind in rural areas) may account for the higher proportion of adult males listed in the death register than would be expected from life tables.

Another limitation is that the city register included only deaths that occurred in Maputo City.

Table 2. **The 20 leading causes of registered deaths, Maputo City, Mozambique, 1994**

Rank	Cause of death	No. of deaths (%)
1	Perinatal disorders	1643 (20.2)
2	Malaria	928 (11.4)
3	Diarrhoeal diseases	814 (10.0)
4	Tuberculosis	456 (5.6)
5	Lower respiratory infections	416 (5.1)
6	Road-traffic accidents	371 (4.6)
7	Anaemia	269 (3.3)
8	Cerebrovascular disease	269 (3.3)
9	Homicide	188 (2.3)
10	Bacterial meningitis	178 (2.2)
11	Hypertension	171 (2.1)
12	Protein-energy malnutrition	141 (1.7)
13	Congenital anomalies	115 (1.4)
14	Sepsis	79 (1.0)
15	Cirrhosis of the liver	74 (0.9)
16	Diabetes mellitus	73 (0.9)
17	Maternal disorders	58 (0.7)
18	Nephritis and nephrosis	52 (0.6)
19	Liver cancer	49 (0.6)
20	Measles	43 (0.5)
All defined causes		8114 (100.0)

Table 3. **The 10 leading causes of non-medicolegal autopsied deaths, Maputo City, Mozambique, 1994**

Rank	Cause of death	No. of deaths (%)
1	Tuberculosis	187 (12.3)
2	Cerebrovascular disease	153 (10.0)
3	Malaria	127 (8.3)
4	Lower respiratory infections	119 (7.8)
5	Diarrhoeal diseases	111 (7.3)
6	Liver cancer	68 (4.5)
6	Bacterial meningitis	68 (4.5)
8	Maternal disorders	55 (3.6)
9	Hypertensive heart disease	48 (3.2)
10	Diabetes mellitus	44 (2.9)
All causes		1523 (100.0)

Consequently, it is not known how many Maputo City residents died in South Africa after seeking medical treatment there, nor how many went home to die in rural areas. The number of non-residents who died in the city also is not known. The number of deaths attributed to chronic diseases may be too low, due to underreporting of the causes of death in the elderly.

Perinatal disorders — the leading killer

Perinatal disorders (1643 deaths) were the overall leading cause of death. The high numbers were confirmed by data from the neonatal ward of Maputo Central Hospital, which recorded 1813 perinatal-related deaths in the same year. Together with the estimated maternal mortality ratio of 117 maternal deaths per 100 000 live births, these perinatal deaths are of concern in a city where coverage for both

Table 4. **The 10 leading causes of registered deaths, Maputo City, Mozambique, 1994: 0–14-year age group**

Rank ^a	Cause of death	No. of deaths (%) ^b	No. of female deaths (%) ^c	No. of male deaths (%) ^d
1	Perinatal disorders	1643 (38.0)	770 (37.8)	873 (38.2)
2	Malaria	623 (14.4)	299 (14.7)	324 (14.2)
3	Diarrhoeal diseases	520 (12.0)	233 (11.4)	287 (12.6)
4	Lower respiratory infections	279 (6.5)	140 (6.9)	139 (6.1)
5	Anaemia	176 (4.1)	95 (4.7)	81 (3.5)
6	Protein–energy malnutrition	128 (3.0)	61 (3.0)	67 (2.9)
7	Congenital anomalies	111 (2.6)	52 (2.6)	59 (2.6)
8	Bacterial meningitis	92 (2.1)	40 (2.0)	52 (2.3)
9	Road-traffic accidents	86 (2.0)	40 (2.0)	46 (2.0)
10	Sepsis	51 (1.2)	26 (1.3)	25 (1.1)
	All defined causes	4322 (100.0)	2038 (100.0)	2284 (100.0)

^a Data ranked according to total deaths for males and females combined.

^b Percentages of all deaths with defined causes.

^c Percentages of all female deaths with defined causes.

^d Percentages of all male deaths with defined causes.

Table 5. **The 10 leading causes of registered deaths, Maputo City, Mozambique, 1994: 15–59-year age group**

Rank ^a	Cause of death	No. of deaths (%) ^b	No. of female deaths (%) ^c	No. of male deaths (%) ^d
1	Tuberculosis	278 (10.6)	89 (9.8)	189 (11.1)
2	Road-traffic accidents	255 (9.7)	61 (6.7)	194 (11.4)
3	Malaria	216 (8.3)	97 (10.7)	119 (7.0)
4	Diarrhoeal diseases	179 (6.8)	80 (8.8)	99 (5.8)
5	Homicide	170 (6.5)	19 (2.1)	151 (8.8)
6	Cerebrovascular disease	99 (3.8)	42 (4.6)	57 (3.3)
7	Hypertension	90 (3.4)	31 (3.4)	59 (3.5)
8	Lower respiratory infections	83 (3.2)	23 (2.5)	60 (3.5)
9	Bacterial meningitis	73 (2.8)	23 (2.5)	50 (2.9)
10	Maternal disorders	58 (2.2)	58 (6.4)	0 (0.0)
	All defined causes	2617 (100.0)	909 (100.0)	1708 (100.0)

^{a-d} See Table 4.

antenatal clinic attendance and delivery at health facilities was over 70%.

Malaria was the second leading cause of death according to the city death register (Table 2), but there were factors that could lead both to over- and underreporting of malaria cases. For example, classifying other febrile illnesses as malaria would lead to overregistration. Even the clinical diagnosis of malaria can be difficult and the presence of malaria parasites is not synonymous with malaria. A community study in a peripheral suburb of Maputo City in 1993 gave a cause-specific mortality rate from malaria of 0.8 deaths per 1000 people (10). Extrapolated to the whole city, the expected number of malaria deaths would be 882, slightly less than the 928 (11.4%) registered deaths. Malaria may have also been underregistered as an underlying cause of death, as deaths attributed to other causes such as anaemia may have been due to malaria. A study of 239 maternal deaths in Maputo Central Hospital between 1989–93 showed that 15.5% of the

cases were directly attributable to malaria (11). Studies in other countries suggest that total mortality due to malaria may be two to three times as large as direct malaria mortality (12).

The high ranking of diarrhoeal diseases in both the young and old (Tables 4–6) was partly due to epidemics of shigella dysentery at the beginning and end of 1994. A meningococcal meningitis epidemic mid-1994 caused bacterial meningitis to be ranked as the tenth leading cause of death in the register. Tuberculosis was a leading cause of death in adults, especially in elderly men. Many tuberculosis deaths in the sexually active age groups were probably due to coinfection with HIV. Given the 2.7% HIV seroprevalence rate of women in antenatal clinics, we might have expected more deaths from AIDS than the 22 registered. Probably many deaths registered as diarrhoeal diseases and malaria also had AIDS as the underlying cause.

We had difficulty classifying causes of death from cardiovascular diseases. Our decision to include

Table 6. The 10 leading causes of registered deaths, Maputo City, Mozambique, 1994: 60-years and older age group

Rank ^a	Cause of death	No. of deaths (%) ^b	No. of female deaths (%) ^c	No. of male deaths (%) ^d
1	Cerebrovascular disease	170 (14.5)	96 (16.3)	74 (12.6)
2	Tuberculosis	137 (11.7)	30 (5.1)	107 (18.2)
3	Diarrhoeal diseases	115 (9.8)	71 (12.1)	44 (7.5)
4	Malaria	89 (7.6)	56 (9.5)	33 (5.6)
5	Hypertension	81 (6.9)	54 (9.2)	27 (4.6)
6	Lower respiratory infections	54 (4.6)	27 (4.6)	27 (4.6)
7	Anaemia	43 (3.7)	34 (5.8)	9 (1.5)
8	Road-traffic accidents	30 (2.6)	9 (1.5)	21 (3.6)
9	Diabetes mellitus	27 (2.3)	16 (2.7)	11 (1.9)
10	Liver cancer	14 (1.2)	3 (0.5)	11 (1.9)
	All defined causes	1175 (100.0)	589 (100.0)	586 (100.0)

^{a-d} See Table 4.

hypertension and hypertensive heart disease in one category under hypertension, and cerebrovascular disease (mostly caused by hypertension) in another is unsatisfactory. Ischaemic heart disease was still a rare cause of death.

A rise in homicides

A comparison of data from the city death register and medicolegal autopsies showed that there were more deaths from homicide listed in the autopsy records (343 in autopsies; 188 in the register) suggesting that homicide may be underregistered as a cause of death in the city death register. In the city register for 1990, only 72 deaths were due to homicide (13). In medicolegal autopsy records, deaths from homicides rose from 176 in 1990 (Maputo Central Hospital Medicolegal Department data) to 343 in 1994 (this study). The large proportion of deaths from injuries, especially in young men, shows the heavy toll of violence in Maputo City (Table 1 and Table 5). Ironically, post-war peace in Mozambique has been associated with a rise in violent crime in the capital.

Implications for policy makers

Maputo City has higher coverage and utilization rates of preventive and curative health services than the rest of Mozambique and yet perinatal disorders and infectious diseases are still the leading causes of death. The study also draws attention to the burden from injuries, which has previously been ignored in public health policy-making.

The information is also useful for programme managers and shows the importance of including deaths as an indicator of programme success or failure. Malaria, diarrhoeal diseases, and tuberculosis are all included in vertical disease-control programmes in Maputo City and programme indicators had suggested that they had been successful. Yet this study shows that these diseases all remain leading causes of death. The continuing burden from malaria and tuberculosis, and the emergence of epidemic diseases such as shigella, meningitis, and AIDS, also paint a less optimistic picture about the future decline of communicable diseases than that suggested by the GBD study (14). Mortality rates are already high in Maputo City, and unfortunately we can expect that the premature mortality rate will continue to rise and the disease pattern will change as the AIDS epidemic takes hold. ■

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Conflicts of interest: none declared.

Résumé

La charge de morbidité à Maputo (Mozambique) : enregistrement et autopsie des personnes décédées en 1994

Objectif Classer les causes de décès à Maputo (Mozambique) au moyen des méthodes exposées dans l'étude sur la charge de morbidité dans le monde, pour pouvoir proposer des informations aux décideurs de la

santé publique et obtenir des données de référence qui serviront dans les études réalisées ultérieurement à Maputo et dans les capitales provinciales.

Métodes Les données ont été recueillies dans les registres de décès et les rapports d'autopsie de Maputo pour l'année 1994.

Résultats Un total de 9011 décès figuraient dans les registres, ce qui représente une couverture d'environ 86 %. Des causes avaient été attribuées à 8114 de ces décès (soit 92 %). Les maladies transmissibles et les affections maternelles, périnatales et nutritionnelles représentaient 5319 décès, les maladies non transmissibles 1834 décès et les traumatismes 961 décès. Les 10 principales causes de décès enregistrées étaient les affections périnatales (1643), le paludisme (928), les maladies diarrhéiques (814), la tuberculose (456), les infections respiratoires basses (416), les accidents de la

route (371), l'anémie (269), les maladies cérébrovasculaires (269), les homicides (188) et la méningite bactérienne (178).

Conclusion Les maladies infectieuses quelles qu'elles soient, les traumatismes et les maladies cérébrovasculaires sont les causes majeures de décès, d'après les rapports d'autopsie comme d'après les statistiques de décès. Il existe une sous-déclaration des décès liés au SIDA. Avec le développement rapide de l'infection par le VIH, le SIDA viendra alourdir à Maputo le poids déjà élevé des maladies infectieuses et de la mortalité prématurée. D'après cette étude, la cause de décès est un indicateur de résultat utile pour juger des programmes de lutte contre les maladies.

Resumen

La carga de morbilidad en Maputo (Mozambique), según los registros de defunciones y autopsias de 1994

Objetivo Clasificar las causas de defunción en Maputo (Mozambique) empleando los métodos del estudio sobre la Carga Mundial de Morbilidad, a fin de facilitar información a los formuladores de políticas sanitarias y de obtener valores basales para llevar a cabo futuros estudios en Maputo y en capitales de provincia del país.

Método Se utilizaron datos extraídos del registro de defunciones y los registros de autopsias de Maputo correspondientes a 1994.

Resultados En el registro de defunciones se habían consignado en total 9011 fallecimientos, lo que representaba una cobertura de aproximadamente el 86%. De esas defunciones, 8114 (92%) estaban clasificadas por causas. Los trastornos transmisibles, maternos, perinatales y nutricionales, eran la causa de 5319 muertes; las enfermedades no transmisibles, de 1834; y los traumatismos, de 961. Las diez causas principales de las defunciones registradas fueron los

trastornos perinatales (1643 defunciones); el paludismo (928); las enfermedades diarreicas (814); la tuberculosis (456); las infecciones respiratorias inferiores (416); los accidentes de carretera/tráfico (371); la anemia (269); las enfermedades cerebrovasculares (269); los homicidios (188); y las meningitis bacterianas (178).

Conclusión Las enfermedades infecciosas de todo tipo, los traumatismos y las enfermedades cerebrovasculares eran las causas principales de defunción, según demostraban tanto los registros de autopsia como el registro de defunciones de la ciudad. Las muertes relacionadas con el SIDA estaban subnotificadas. Dada la rápida propagación de la infección por el VIH, el SIDA se añadirá a la ya alta carga de enfermedades infecciosas y mortalidad prematura que registra Maputo. Los resultados del estudio indican que la causa de defunción es un valioso indicador de los resultados para los programas de lucha contra las enfermedades.

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