

MATERNAL MORTALITY

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In a recent issue of the *Journal of the Royal Institute of Public Health*¹ under the heading 'Maternal Mortality Decreasing' there is a summary of a Report of the World Health Organization which consisted of a statistical review of Maternal Mortality² in 49 countries and territories, giving details which are not otherwise readily available.

At the South African Medical Congress in Durban, (September 1957), Dr. A. J. Wrigley contributed an extremely valuable paper under the title 'A critical review by the Ministry of Health of England and Wales' of the Report on a thousand maternal deaths'.³

With the help of Prof. E. D. Cooper, Medical Officer of Health, Cape Town, who takes a great interest in this subject, I have been able to get statistics of the Maternal Mortality of the City of Cape Town.

It is proposed to review some of the statistics in the articles referred to and to compare them with figures for our own country. *The British Report*

The opening paragraph of Dr. Wrigley's paper will serve well as an introduction: 'Three hundred years ago, in 1660, from in-

formation supplied by Sir James Y. Simpson and E. V. Sieveking, the maternal mortality rate in London was about 1 in 40 births, and one hundred years later only about half the figure. A century ago a distinct improvement had occurred, for only about 1 in 200 women died in childbirth in England and Wales, a rate in modern terminology of 5 per 1,000 live births. We are about to consider a survey of the causes of over 1,000 maternal deaths when the rate over a period of 3 years was slightly over one-tenth of that figure.'

'... 1,410 deaths reviewed in this Report (representing some 80% of all maternal deaths) ... occurred in England and Wales during the 3 years 1952-54; 25 years ago a similar number of deaths would have occurred in 6 months instead of 3 years. It was in spite of this tremendous improvement, and in the belief that still more might be accomplished that the present inquiry was initiated.'

'... The closing note of this Review ... is to give emphasis to what (in my opinion) is the most important lesson to be learned from the Report. The suggestion is made that, as a result of many pointers, of which this ... Report ... is one, consideration should

be given to the advisability of an altered outlook on prenatal care.¹¹

WHO Report

The following are some figures taken from the WHO Vital Statistics Report:

	MATERNAL MORTALITY PER 1,000 LIVE BIRTHS	
	1936-38	1955
Australia	5.1	0.6
Austria	5.5	1.1
Belgium	4.2	0.8
Canada	3.9	0.8
Ceylon	20.5	4.1
Chile	9.2	2.8
Denmark	3.5	0.5
England & Wales ..	3.4	0.7
Finland	5.0	1.0
France	1.4	0.6
Germany	4.7	1.6
Italy	2.7	1.3
Japan	2.5	1.8
Netherlands	2.8	0.6
Norway	2.7	0.7
Portugal	4.1	1.5
Scotland	5.1	0.5
Sweden	2.9	0.5
United States		
White	4.4	0.3
non-White	8.9	1.3

The Editor of the *Lancet* has said, 'The solution of most of the problems of clinical and preventive medicine must ultimately depend on figures,' and he added that, much as statistics are disliked, the best possible use must be made of them.

One or two points in this Report seem to stand out. The most spectacular decrease in maternal mortality is apparent in countries undergoing rapid development. In Ceylon, for instance, the drop has been from 20.5 in 1936 to 4.1 in 1955. The rapid decrease in diseases due to maternity or 'associated' with this condition is remarkable. One of the chief factors causing this almost incredible improvement is the medical care given during pregnancy and at the confinement, and the great advances in treatment.

A number of interesting figures are given in this survey in this connection. In Japan 13% of women are attended by a doctor at childbirth and 82% by a midwife; in Portugal 6% by a doctor and 23% by a midwife; in Italy 3% by a doctor and 86% by a midwife; in Scotland 96% by a doctor and 3% by a midwife.

A section of this WHO Report deals with the important question of maternity hospitals. The percentage of deliveries which are conducted in institutions in certain countries is set out below, together with the maternal mortality as shown in the previous table:

	Deliveries in Institutions	Maternal Mortality
USA (White mothers)	97%	0.3
Sweden	87%	0.5
England & Wales ..	64%	0.7
Italy	22%	1.3
Japan	14%	1.8
Portugal	11%	1.5

These figures appear to indicate that a lower maternal mortality is favoured when deliveries are conducted in maternity hospitals.

Maternal Mortality in South Africa

The following are the maternal mortality figures of Cape Town for the 10 years 1948-57 (kindly supplied by Dr. Cooper).

In making comparisons it must be borne in mind that these figures refer to a single city, whereas those in the WHO report apply to whole countries.

The Cape Town Municipality has a highly organized and successful antenatal department, which must, in part, be responsible for the low maternal mortality rates. These also reflect credit on medical practitioners and midwives in Cape Town, whose work is often carried out under unfavourable conditions. It is remarkable how puerperal sepsis has almost disappeared from the list of causes of death; it practically only proves fatal when associated with abortion.

There is, however, a warning in that some of the figures are too high, especially where non-European mothers are concerned.

CITY OF CAPE TOWN MATERNAL MORTALITY, 10 YEARS 1948-57

5th Revision International List, 1948-53	6th Revision International List 1954-57	Eur.	non-E.	Total
Puerperal septicaemia (including post-abortive infection)	640, 641, 651, 681, 682, 684	6	36	42
	Puerperal septicaemia (including abortion with sepsis)			
Abortion, ectopic gestation and haemorrhages of pregnancy	650	1	46	47
Toxaemias and other diseases and accidents of pregnancy	642, 652, 685, 686	12	51	63
Puerperal haemorrhage	643, 644, 670-672	4	26	30
Other puerperal accidents and diseases	645-649, 673-680, 683, 687-689	3	16	19
Annual Maternal Mortality Rate Per 1,000 Live and Still Births*		0.72	1.65	1.41
Annual Maternal Mortality Rate Excluding Abortion*		0.58	1.15	1.00

* Arithmetic mean of the 10 annual rates. The inclusion of stillbirths in the calculation gives a rate 3 or 4% less than when it is calculated on live births only.

In Cape Town the non-European maternal mortality rate is more than double the European. The figures for the Union of South Africa as given in the last Annual Report of the Department of Health⁴ are as follows:

MATERNAL MORTALITY PER 1,000 LIVE BIRTHS

	Europeans	Asiatics	Mixed & Other Coloured
1949	1.13	1.50	2.41
1950	0.95	3.21	2.65
1951	1.12	2.77	2.49
1952	0.98	3.04	2.67
1953	1.20	3.33	2.24
5 years.. ..	1.08	2.77	2.49

Lack of Maternity Hospital Beds in Cape Town

An important cause of the high mortality rate where non-European mothers are concerned is the fact that sufficient maternity hospital beds are not available. It is the duty of the Provincial Administrations to supply this life-saving protection to all those requiring it. Apart from the many mothers who cannot obtain admission to a maternity hospital, in many cases the mother who has been admitted has to be sent home within a few days of the birth because of the shortage of beds. There may be no hardship or danger in this if it does not imply an early return to crowded slum conditions, and provided also that satisfactory nursing and domestic service are available in the home. It often happens, however, that though no maternal mortality may result, the health of the mother and child is jeopardized by the lack of nursing care and proper feeding owing to poor home conditions.

The solution of the problem of preventible maternal mortality is the provision of an adequate number of maternity hospitals and efficient antenatal care.

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