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Cancer of the Oesophagus in Zimbabwe

T E WATTS

SUMMARY

Data for oesophageal cancers were requested from the Cancer Registry of Zimbabwe for the three years 1986–1988. There were 437 cases notified compared with 783 cases recorded in the Government's Statistical returns. There was a ratio of 6,9 males to one female accounting for 13,2 pc of all reported cancers in males and 1,7 pc of cancers in females.

Prevalence increased with age to a rate of around 83 per hundred thousand in men aged 55 and older and 19 per hundred thousand in women over 65 years old.

Notifications are only received from the Central Hospitals in Harare and Bulawayo. Addresses were not available for 31 pc of patients so that geographical variations could not be determined accurately. However, higher rates occurred in Harare and in the Mashonaland Provinces.

It is recommended that cancer notifications should be obtained from all Government, Mission and Private hospitals in Zimbabwe.

INTRODUCTION

Cancer of the oesophagus is a most distressing condition causing difficulty in swallowing and eventual death by starvation.

The incidence varies considerably in different parts of the world with exceptionally high rates of over 100 per 100 000 people in Lin Xuan in part of Henan Province,^{1,2} Northern China, and in Iran round the Caspian Sea.

There are also foci of high incidence of oesophageal cancer in Africa. In Kenya amongst the Kukuyu and in the West of Kenya near Lake Victoria, amongst the Usukuma in Tanzania, the Ngoni in the East of Zambia and people in the Transkei. the

incidence rate is decreasing in developed countries although it is still relatively high in Scotland (9,2 per 100 000).

Many hypotheses have been put forward to explain the distribution of cancer of the oesophagus. Generally, it is accepted that cancers of the upper third of the oesophagus have a different aetiology from those of the lower oesophagus being more related to industrial causes such as in the vulcanisation industries.

In Lin Xuan, China, where there is a high prevalence of lower oesophageal cancers and chickens are also affected, many variables were considered, from very hot drinks, mouldy or pickled food, silica in the millet staple, the formation of nitrosamines and Vitamin A and B deficiencies.^{1,2,4} The Chinese reported reductions in dysplasia of the oesophagus with Chinese herbs (anti-tumour B) retinol and riboflavin. Deficiencies of molybdenum and zinc have also been proposed but the evidence is weak.²

In Iran, there was a link with low socio-economic status, lack of consumption of green vegetables and the smoking of crude opium.⁶

In Africa, the association appears to be with various locally brewed alcoholic beverages and with smoking, the effects being additive.

In Japan, smoking, drinking spirits and taking hot tea and bracken daily have all been shown to be related to an increase in the relative risk of cancer of the oesophagus.⁸

The Cancer Registry of Zimbabwe has been operational since 1986 although only the major hospitals in Harare and Bulawayo currently report to it. It was hoped that by examining the data on cancer of the oesophagus (which is the most commonly reported cancer of men in Zimbabwe), that the distribution of oesophageal cancers may give some lead to the cause in this country.

RESULTS

From 1986 to 1988, there were 5 915 cancer cases notified and 5 803 were analysed. Oesophageal cancers accounted for 13,2 pc of 2 454 notifications in men and only 1,7 pc of notifications in women.

Age and sex of patients: Of the 437 cases notified, 382 were male giving a ratio of 6,9 males to one female.

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Table I: Rates per 100 000 of cancer of the oesophagus by age and sex 1986-89

	Males					Females				
	Under	Age in Years				Age in Years				
	35	35-	45-	55-	65+over	35-	45-	55-	65 and over	
Number	12	28	93	112	83	6	8	14	29	
Pop ⁿ 1,000 s	415,5	279,2	217,3	134,4	100,2	298,0	190,4	116,7	105,6	
Rate per 100 000	2,89	10,03	42,80	83,33	82,83	2,01	4,20	12,00	18,94	

54 men and seven women of unknown age excluded.

The age was not recorded in 61 (14 pc). Incidence increased with age being maximal in the 55-64 age group in men and women over 65 years. Also men appeared to be affected at a young age (see Table I).

Place of residence of patients: Unfortunately, 120 males and 15 females had their address recorded as one of the central hospitals. The rates for people with Harare or Bulawayo addresses are very high suggesting that some of these may be addresses of convenience. Prevalence rates in all three Mashonaland Provinces are high. Matabeleland North has very low rates, but if considered with Bulawayo, the rate is 3,07 per 100 000 (see Table II).

Table II: Rates per 100 000 of cancer of the oesophagus by province

Province	Popn. 000's	Oesophageal Cancers	Cancer/ 100 000 popn.
Manicaland	1 345,6	13	0,87
Mashonaland C	683,7	25	3,66
Mashonaland E	814,2	29	3,56
Mashonaland W	1 041,2	32	3,07
Masvingo	1 255,0	10	0,80
Matabeleland N	668,0	2	0,30
Matabeleland S	628,2	13	2,07
Midlands	1 324,6	15	1,13
Bulawayo	504,5	34	6,61
Harare	800,0	120	15,00
Chitungwiza	210,4	9	4,28
Bulawayo Hosp.		10	
Harare Hosp.		125	
Total	9 275,7	437	4,71

DISCUSSION

The overall rate of 4,7 per 100 000 is similar to that found in Japan and higher than European countries except Switzerland and Great Britain.

The rates for men over 45 years old are disturbingly high. It is expected that most people with cancer of the oesophagus will seek help when they find that they can no longer swallow food. However, this does not mean that they will be notified to the Cancer Registry as the patient may not be referred from peripheral hospitals (which do not notify cases), to one of the Central Hospitals. Also there is still some hesitancy in notifying patients when no biopsy has been done.

In the Health Statistics Annual report 1988 there were 783 cases of cancer of the oesophagus recorded over a three-year period. This is nearly twice the number reported to the Cancer Registry.

It is difficult to interpret the distribution by Province. Notifications from Mashonaland and the two main cities are higher, but this may only reflect the more ready access to Central Hospitals in these largely commercial farming areas. Addresses, even when given, may be misleading as they may not relate to where the person has spent most of their adult life. For example, a man who has lived and worked in Harare for most of his life may return to a rural home when he becomes ill or is too old to work. Alternatively, a sick elderly relative in the rural areas may be brought to a city to have more ready access to health care.

It is recommended that cancer notification should be requested from all Government, Mission and Private hospitals in Zimbabwe and that tribe as well as usual place of residence be included. Different tribes often have various cultural practices relating to food and drink and this may provide a clue as to the causes of cancer of the oesophagus in Zimbabwe.

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