Eur J Cancer, Vol. 28A, No. 6/7, p. 1298, 1992.
Printed in Great Britain
0964–1947/92 $5.00 + 0.00

Sociocultural Habits and Urological Malignancies in Ibadan, Nigeria

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THERE are wide differences in cancer incidence and mortality between different populations and especially between the West and the Third World [1]. Less well appreciated are the differences in the frequencies of some cancers between similar populations in different regions. Elucidating the geographical, environmental and sociocultural variations prevalent in these zones may help to identify the major aetiological or predisposing factors in the genesis of these cancers.

A review of the pattern of histologically confirmed, urological malignancies seen in the University College Hospital (UCH), Ibadan, Nigeria, over 30 years showed that prostatic carcinoma is the most frequent (Table 1). In contrast, a similar hospital-based study from Zambia revealed that bladder, prostate and penile carcinomas represented 50.0, 26.2 and 17.9% of urological malignancies, respectively [2]. In Uganda, penile cancer is the commonest malignancy in men [3], whilst it constitutes less than 2.5% of urological malignancies in Nigeria. This high frequency of penile carcinoma in East Africans has been related in part to lack of childhood circumcision [2], a sociocultural habit practised nationwide in Nigeria.

Table 2 shows the incidence of some urological tumours from Ibadan and other selected registries. The incidence of testicular cancers is generally lower among blacks than whites. Prostatic carcinoma occurs more frequently in blacks than in whites [4]. This report shows a high frequency of prostatic cancers relative to other urological tumours in Ibadan, compared with reports from Zambia or Uganda. Unfortunately, little or no comparative data are available on incidence of occult, latent and clinical prostatic cancers in these areas. However, Jackson *et al.* [5] observed a higher frequency of the tumour among American blacks than Nigerian blacks. It would therefore appear that the occurrence of prostatic cancer varies between black populations with different sociocultural habits in different geographical zones. The reason for this is unknown.

Bladder carcinoma, in particular squamous cell carcinoma, is the commonest urological cancer in Zambia. This reversal of the pattern compared with Nigeria may be related to the degree of schistosomal endemicity in the different areas and in both populations, though earlier reports have also documented a preponderance of squamous cell carcinoma in Ibadan [6]. This cannot, however, completely explain the differences, and possible influencing sociocultural and environmental factors must therefore be sought.

Table 1. Histologically confirmed urological malignancies over 30 years in UCH, Ibadan and average age of occurrence

Site	No. of cases (%)	Average age (years)
Prostate	966 (55.5)	65
Bladder	355 (20.4)	53
Kidney	293 (16.8)	—
Wilms' tumour	160	4
Adenocarcinoma	133	43
Testis	72 (4.1)	29
Seminoma	27	35
Scrotum and penis	43 (2.5)	51
Urethra	12 (0.7)	48

Table 2. Average annual age-standardised incidence per 100,000 of prostatic, testicular and penile cancers from selected registries [1]

Registry	Prostate	Testis	Penis
Ibadan	10.0	0.1	0.2
Zimbabwe	32.3	0.0	6.6
USA			
Alameda			
White	40.4	4.8	0.6
Black	75.0	0.6	1.2
Detroit			
White	36.1	3.5	0.7
Black	76.1	1.0	1.6
India	8.0	0.9	1.9
Japan	2.7	0.8	0.7
Singapore	4.8	0.3	0.1
UK (Liverpool)	17.5	2.4	0.8
Norway	33.1	4.4	0.6

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Received and accepted 9 Jan. 1992.

1. Waterhouse J, Muir C, Corree P, Powell J. *Cancer Incidence in Five Continents*, Lyon, IARC Scientific Publications, 1976,Vol. III.
2. Elem S, Patil PS. Pattern of urological malignancy in Zambia. A hospital-based histopathological study. *Br J Urol* 1991, **67**, 37–39.
3. Olweny CM. Cancer patterns in Nigeria and Uganda. In: Solanke TF, Williams CKO, Agboola O, Osunkoya BO, eds. *Cancer in Nigeria*. Ibadan, Ibadan University Press, 1983, 239–249.
4. Zeridza DG, Boyle P, Smans M. International trends in prostatic carcinoma. *Int J Cancer* 1984, **33**, 223–230.
5. Jackson MA, Ahluwalia BS, Attah EB, *et al.* Characterisation of prostatic carcinoma amongst blacks; a preliminary report. *Cancer Chemother Rep* 1975, **59**, 3–15.
6. Attah EB. Nkposong EO. Schistosomiasis and critical appraisal of causal relationship. *Trop Geogr Med* 1976, **28**, 268–272.