

Re: Prostate Cancer Incidence in Jamaica before and after the Introduction of Prostate-specific Antigen:

The Editor,

Sir,

We refer to the Letter to the Editor entitled “Prostate Cancer Incidence in Jamaica before and after the Introduction of Prostate-specific Antigen”, authored by WD Aiken, and published in this issue of the West Indian Medical Journal.

The author has taken issue with two consecutive statements from our publication entitled “Thirty-year Trends in Incidence and Age-distribution of Prostate Cancer in Kingston and St Andrew, Jamaica, 1978–2007”. These statements are: “There has been a steady rise in the incidence of prostate cancer in Jamaican men since the 1983–1987 reporting period. This may be partially due to the effect of prostate specific antigen (PSA) testing, as serum testing for PSA first became available in Jamaica in 1983.”

Aiken has made three major comments on these statements as follows:

- (1) It was not until 1989 that PSA was introduced into Jamaica. The effect of PSA testing being introduced in 1989 in Jamaica was to cause an already rising prostate cancer incidence curve to become steeper.
- (2) Unfortunately, not taking secular trends in prostate cancer incidence before and after PSA is introduced into consideration may lead to the false conclusion that rising prostate cancer incidence is solely driven by PSA testing.
- (3) It is clear that factors other than PSA testing are driving the increasing incidence of prostate cancer in Jamaica.

We respond as follows:

The Jamaica Cancer Registry began reporting age-standardized rates (ASRs), which allow for international comparisons of incidence rates, in the 1973–1977 reporting period. The ASR for prostate cancer in Jamaican males declined from the 1973/1977 reporting period [28.6 per 100 000] (1) to the 1978/1982 period [26.5 per 100 000] (2), and again from 1978/1982 to 1983/1987 [20.7 per 100 000] (3). The first increase in prostate cancer ASR was that seen from the 1983/1987 period to the 1988/1992 period [36 per 100 000] (4). This increase is a reflection of cases collected in the 1988–1992 five-year period, and occurred following the introduction of PSA testing in Jamaica, regardless of which year between 1983 and 1989 this testing actually commenced. The ASR has continued to increase since that time.

It would be unwise to attribute such a phenomenon to one factor, and indeed, we did not. It is unclear how our statement that the increase in incidence “**may be partially** due to the effect of PSA testing” could lead readers to believe

that “rising prostate cancer incidence is solely driven by PSA testing”:

- (1) The use of the word “may” indicates that we are suggesting that PSA could be a contributor. Indeed, it has been repeatedly documented (5–9) that the introduction of screening results in an increase in incidence of the cancer being screened, and the case has been no different for prostate cancer (7–9).
- (2) The use of “partially” indicates that we believe that the increase seen in Jamaican men is likely to be multifactorial.

Regardless of the exact year of the decade of the eighties in which PSA testing became accessible to Jamaican men, the messages of our article remain valid:

- (1) The incidence of prostate cancer in Kingston and St Andrew, Jamaica has been increasing over the last several years
- (2) The percentage increases were lower in the later years of the study (16.1–19.2%), compared to the earlier years (56.7–73.9%)
- (3) The pattern of increase described in “(2)” above (*ie* smaller percentage increases with time) has been observed elsewhere, where it has been attributed to increasing use of PSA testing (9, 10)
- (4) PSA testing likely contributes to the increasing incidence of prostate cancer in Jamaica.

*From: TN Gibson, B Hanchard, N Waugh, D McNaughton
Jamaica Cancer Registry, Department of Pathology, The University of the West Indies, Kingston 7, Jamaica, West Indies.*

Correspondence: Dr TN Gibson, Department of Pathology, The University of the West Indies, Kingston 7, Jamaica, West Indies. E-mail: tracey.gibson@uwimona.edu.jm

REFERENCES

1. Brooks SEH. Cancer incidence in Jamaica, Kingston and St. Andrew, 1973–1977. In: Waterhouse J, Muir C, Shanmugaratnam K, Powell J, eds. Cancer incidence in five continents, volume IV. Lyon: IARC Scientific Publications; 1982: 266–9.
2. Brooks SEH, Wolff C. Age-specific incidence of cancer in Kingston and St. Andrew, Jamaica. Part I: 1978–1982. *West Indian Med J* 1991; **40**: 127–8.
3. Brooks SEH, Wolff C. Age-specific incidence of cancer in Kingston and St. Andrew, Jamaica. Part II: 1983–1987. *West Indian Med J* 1991; **40**: 128–9.
4. Brooks SEH, Hanchard B, Wolff C, Samuels E, Allen J. Age-specific incidence of cancer in Kingston and St. Andrew, Jamaica, 1988–1992. *West Indian Med J* 1995; **44**: 102–5.
5. Garne JP, Aspegren K, Balldin G, Ranstam J. Increasing incidence of and declining mortality from breast carcinoma. *Trends in Malmo, Sweden, 1961–1992. Cancer* 1997; **79**: 69–74.
6. Richardson A, Cox B, Brown T, Smale P. The impact of breast cancer screening on breast cancer registrations in New Zealand. *N Z Med J* 2005; **118**: U1291.

7. Potosky AL, Miller BA, Albertsen PC, Kramer BS. The role of increasing detection in the rising incidence of prostate cancer. *JAMA* 1995; **273**: 548–52.
8. Pashayan N, Powles J, Brown C, Duffy SW. Incidence trends of prostate cancer in East Anglia, before and during the era of PSA diagnostic testing. *Br J Cancer* 2006; **95**: 398–400.
9. Jacobsen SJ, Katusic SK, Bergstralh EJ, Oesterling JE, Ohrt D, Klee GG et al. Incidence of prostate cancer diagnosis in the eras before and after serum prostate-specific antigen testing. *JAMA* 1995; **274**: 1445–9.
10. Legler JM, Feuer EJ, Potosky AL, Merrill RM, Kramer BS. The role of prostate-specific antigen (PSA) testing patterns in the recent prostate cancer incidence decline in the United States. *Cancer Causes Control* 1998; **9**: 519–27.