

INCREASING INCIDENCE OF PROSTATE CANCER IN SOUTH AFRICA – 1986 TO 2021

Judith Mwansa-Kambafwile ^{1,2,3}; Carole Metekoua ^{1,4}; & Patricia Kellet¹; Mazvita Muchengeti ^{1,2,5}

¹National Cancer Registry, Johannesburg, South Africa; ²University of the Witwatersrand, Johannesburg, South Africa; ³University of Cape Town, South Africa; ⁴University of Bern, Bern, Switzerland; ⁵Stellenbosch University, Stellenbosch, South Africa

Prostate cancer is the most diagnosed cancer among males in South Africa. The incidence has been increasing over time. Despite black ethnicity being a risk factor for the cancer, there is a relatively low incidence among black males. Under diagnosis due to reduced accessibility is a possible reason for this. Therefore, there is a need for prostate cancer awareness to the general public and clinicians. Sensitization to reduce risk of modifiable risk factors such as obesity need to be implemented. Improved screening and treatment has the potential to reduce the incidence of prostate cancer and increase the survival of those diagnosed with it.

BACKGROUND

Prostate cancer is the top cancer affecting males in South Africa. It is therefore important to understand the burden of this cancer to plan risk reduction and treatment interventions. We aimed to describe prostate cancer epidemiology in South Africa.

METHODS

We conducted a cross-sectional study of pathologically diagnosed prostate cancer cases from 1986 to 2021. Descriptive analyses using proportions, ASIRs using Segi world standard population and midyear population estimates from Statistics South Africa as well as the annual percentage change (APC) using Joinpoint regression were calculated and estimated for prostate cancer.

RESULTS

Of the cancer cases reported among males during the period, 17% (170 649/1 015 566) were diagnosed with prostate cancer. The white and black males were the majority population groups (44% and 41% respectively). The median age at diagnosis was 68 years old (IQR: 61-74) and was similar across population groups. Overall, there were more patients diagnosed in private (60%) than in public (40%) sector. Prostate cancer has increased significantly between 1986 and 2021 (APC=2.66/100000 population; CI: 2.16-3.42) although a small decline was noted in 2021 possibly due to the impact of the COVID

Table 1: Characteristics of Prostate Cancer Patients (1986 - 2021)

Age; years (IQR)	68 (61 - 74)
Population Group; n (%)	
Asian	3 720 (2.2)
Black	69 134 (40.5)
Coloured	18 071 (10.6)
White	74 685 (43.8)
Unknown	5 039 (2.9)
Diagnostic Services; n (%)	
Private	101 756 (59.6)
Public	68 893 (40.4)

RESULTS CONTINUED

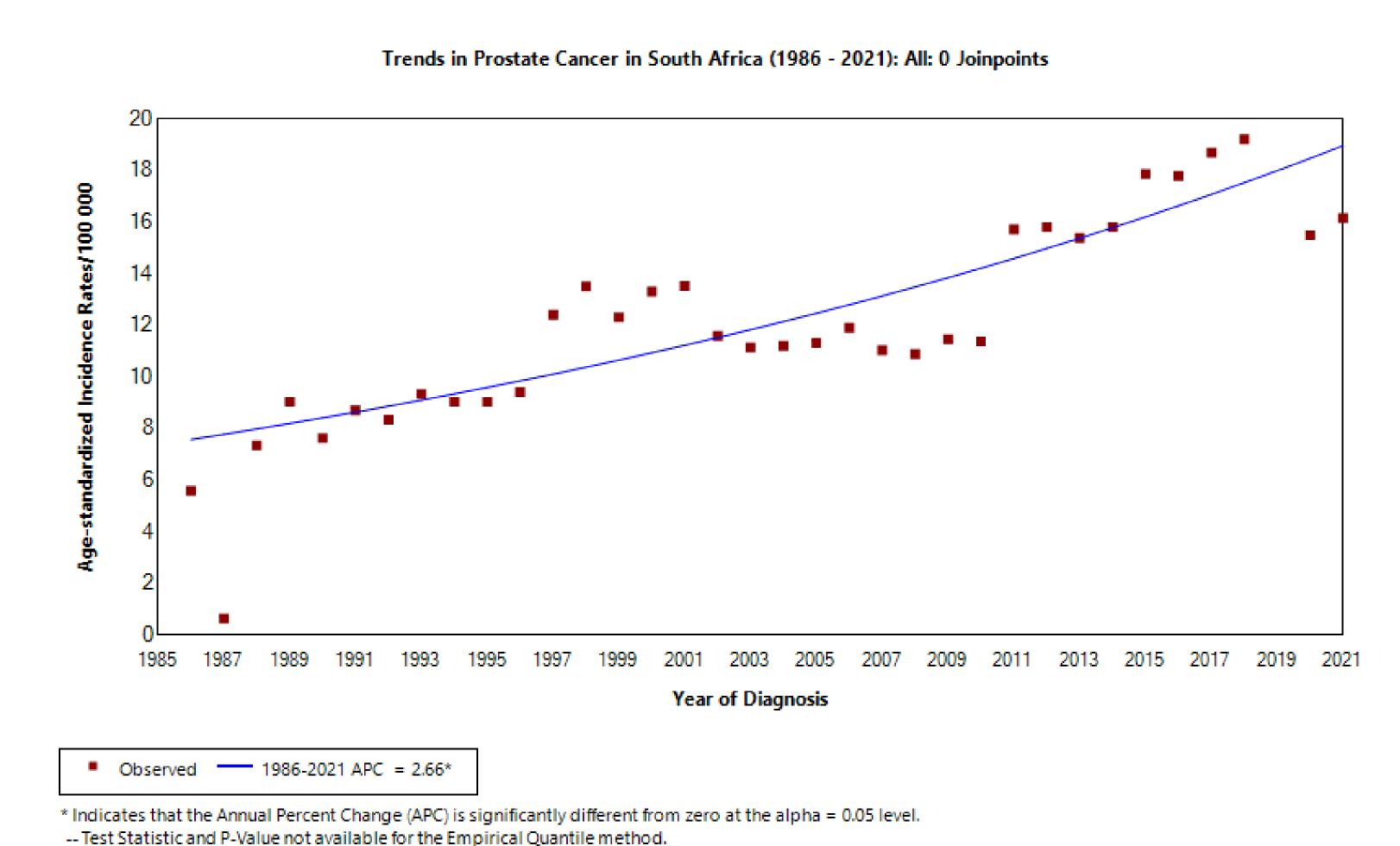


Figure 1: Trends in Prostate Cancer in South Africa (1986 – 2021)

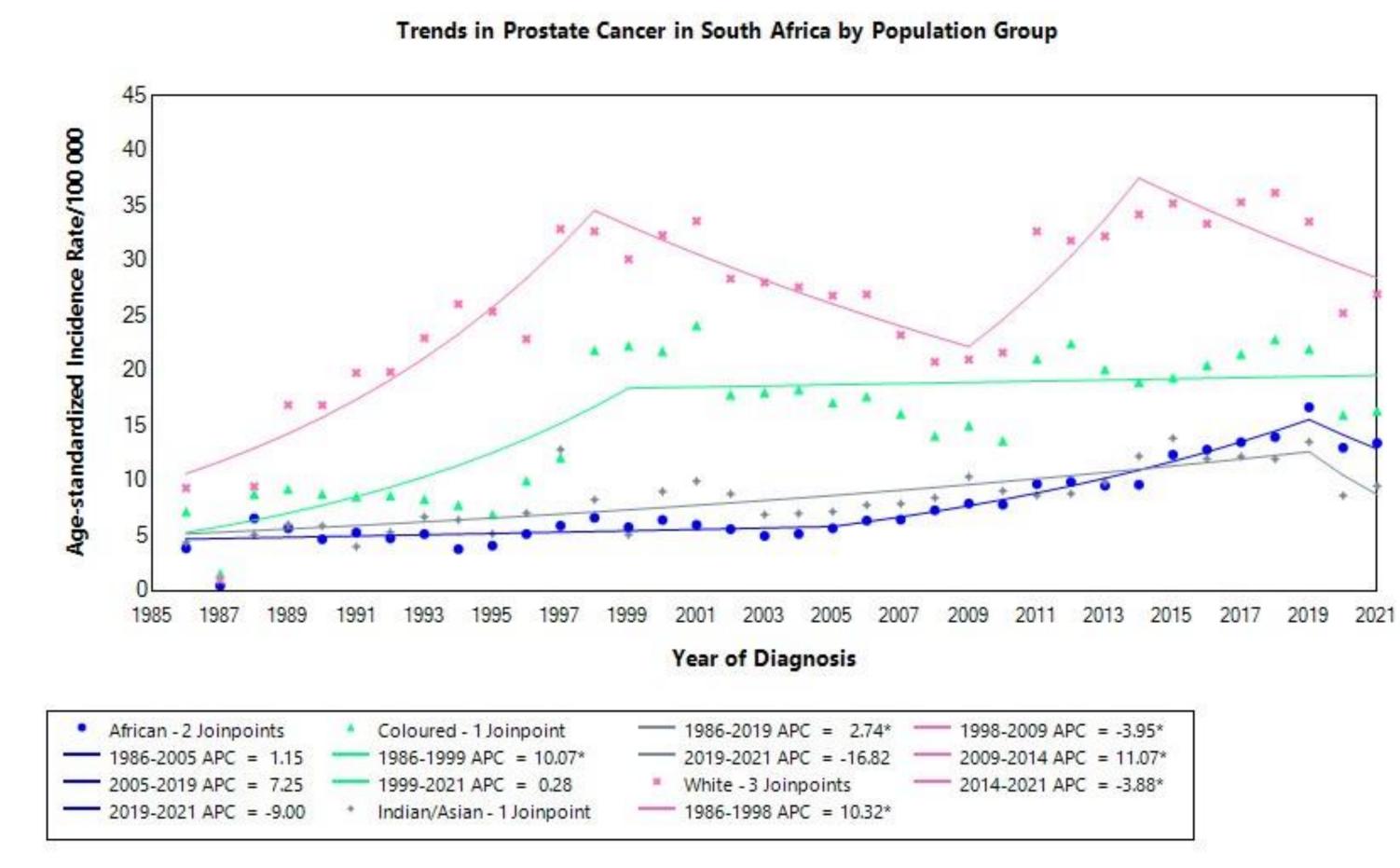


Figure 2: Trends in Prostate Cancer in South Africa By Population Group (1986 – 2021)

CONCLUSION

Final Selected Model: 0 Joinpoints.

Prostate cancer affects the males in South Africa more than any other cancer and the incidence has been increasing over time. The lower incidence in black males points to under diagnosis because black ethnicity is a risk factor for prostate cancer. There is need to improve cancer advocacy to improve screening and treatment, consequently reducing the burden of prostate cancer.

Corresponding Author:

Judith Mwansa-Kambafwile
National Cancer Registry, South

National Cancer Registry, South Africa

Email: judithm@nicd.ac.za

Conflicts of Interest:

The authors declare no conflicts of interest.

Additional Resources:

https://www.nicd.ac.za/centres/national-cancer-registry/cancer-statistics/





Division of the National Health Laboratory Service