Prostate Cancer Screening Still a Contentious Issue

The Editor,

Sir,

In the article “Screening for Prostate Cancer: Throwing Out the Baby with the Bathwater” in a previous issue of the West Indian Medical Journal (1), I suggested that we continue screening Caribbean men for prostate cancer using prostate-specific antigen (PSA) despite the recent United States Preventive Services Task Force’s (USPSTF) recommendation against PSA based prostate cancer screening in all men. In response, Ferguson, in this issue of the Journal, has called for a “large, well conducted, international, collaborative clinical trial” to assess the effectiveness of PSA based prostate cancer screening in black populations. His call should be supported.

The over-reliance on trials done elsewhere with predominantly Caucasian participants to inform local clinical decision-making regarding screening for prostate cancer has serious pitfalls such as a lack of external validity. Absence of evidence of a significant effect of PSA based screening in reducing mortality in these trials must not be interpreted as evidence of absence of an effect, particularly when black men who are most at risk from prostate cancer were under-represented in these trials, thereby limiting their validity in black populations. The Prostate Lung Colorectal and Ovarian (PLCO) trial in which only 4.5% of participants were of African descent (2) cannot therefore be used to make valid inferences in high risk black populations.

It is not clear, however, from Ferguson’s letter what he recommends while we await evidence from appropriate trial data. Caribbean physicians and their patients will still need to make informed decisions regarding whether or not to screen for prostate cancer using PSA. A number of approaches by physicians are possible:

* Actively discourage all men from being screened for prostate cancer based on indiscriminately following the recommendation of the USPSTF.
* Adopt a more nuanced and selective approach to prostate cancer screening based on an appreciation of the available literature and an evaluation of the prostate cancer mortality risk of the individual patient in order to balance risks and maximize benefits, while respecting the values and wishes of patients and highlighting the pros and cons of screening.
* Be non-selective and recommend that all men 40 years and older be screened for prostate cancer regardless of race, family history, life expectancy, medical history or population.
* Exhibit indifference and hope patients will not raise the issue.

I believe the first, third and fourth approaches would be gross errors. The third approach has never been advocated by any medical group or association in Jamaica although we frequently see evidence of this approach being taken.

The current lack of clinical trial evidence in black populations should not deter physicians from making intelligent extrapolations from what is known to guide us in the area of the unknown. Indeed, we have to do this on a daily basis in other areas of medicine and in life generally. Participants in the clinical trials, although coming from high risk populations in Europe and North America, by virtue of being Caucasian, would have been generally at one-third the risk of prostate cancer (3) and at lower risk of dying compared to the risk in black men. In the European trial, in which there was a 20% reduction in prostate cancer mortality, it took 1410 men to be screened to prevent one death from prostate cancer (4). It would be expected that among black men, the numbers needed to screen to prevent one death would be significantly lower.

The trials have demonstrated the significant problem of overtreatment when PSA based screening is used. Active surveillance in which patients with newly diagnosed low risk prostate cancer are carefully monitored over time and deferred treatment given, if evidence of progression occurs, has become a viable management option that is currently practised in Jamaica, and aims to minimize the risk of overtreatment.

In the absence of appropriate clinical trial data that can be validly applied to the Caribbean, advising men on PSA based prostate cancer screening should involve balancing their risks while maximizing benefits. This requires the artful and discerning use of the currently available literature, full knowledge of the patient’s specific circumstances (in order to risk stratify) and respect for his values and wishes. Black men with at least a 15-year life expectancy from populations with high prostate cancer mortality should not be denied PSA based prostate cancer screening on the basis that there is a lack of appropriate clinical trial evidence to support such interventions. To do so would potentially condemn thousands of black men to an early demise while we await the outcome of these studies.

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REFERENCES