LETTERS TO THE EDITOR

Screening for Prostate Cancer: A Randomized Controlled Trial in Men of African Ancestry is Needed

The Editor,

Sir,

In the October issue of the West Indian Medical Journal, Aiken recommended that yearly screening for prostate cancer should be continued for Caribbean men in light of the high prevalence of prostate cancer and poor prognosis in black men (1). This recommendation is in contrast to that of the United States Preventive Services Task Force (USPSTF), which in October 2011 published a draft report recommending against prostate cancer screening using the prostate specific antigen (PSA) test (2). The new draft recommendation reflects the findings of a recently published evidence review for the USPSTF which concluded that PSA based screening resulted in small or no reduction in prostate cancer specific mortality and was associated with harms related to subsequent evaluation and treatment (3). These recommendations were based largely on the findings of two large randomized controlled trials (one in the USA and one in Europe) which reported conflicting results on the benefits of screening for prostate cancer (4, 5). The US trial included almost 77 000 men between the ages of 55–74 years and found no benefit of screening (4). The European trial included 182 000 men and found a 20% relative risk reduction in prostate cancer mortality, but estimated that 1410 men would have to be screened and 48 men treated to prevent one prostate cancer death (5). Of note, only 4.5% of the men in the US study were black (4) while the European study did not specify the proportion of black men included in the study.

Since the publications of the USPSTF evidence review and draft recommendations, a number of reactions to the recommendations have been published (2, 6–8). There has been general agreement with the USPSTF that there is very little evidence to support PSA screening for prostate cancer, but some authors have recommended risk stratification prior to PSA testing or having the patient and clinician make decisions after discussion of the pros and cons of the screening test (2, 7).

Aiken's recommendation for continued screening in the Caribbean is based on a possible greater benefit in black men due to higher incidence and mortality in this group. This position is reasonable in theory, but has to be considered expert opinion, as there are no clinical trial data on the effectiveness of screening in men of African descent. I do agree that in a high prevalence population, as may occur in blacks in the Caribbean, the false positive rate of a screening test is likely to be lower than in whites, thus improving the risk to benefit ratio related to complications of biopsy and treatment. However, in this era of evidence based medicine, the possibility of harm from screening programmes must be settled by getting empirical evidence from randomized control trials. Given the much higher incidence of and mortality from prostate cancer in men of African origin (8, 9), it is inadequate to make recommendations for black men based on the results of studies with predominantly white participants. At the same time, it is also inadequate to make recommendations for screening in the absence of evidence supporting its benefit. In light of the possibility of biases in observational studies, such as lead time bias and length bias, a randomized controlled trial is the best study design for evaluation of the effectiveness of screening programmes (10). We must recall the lessons from studies such as the Women's Health Initiative (11) and the Action to Control Cardiovascular Risk in Diabetes (ACCORD) trial (12) where the perceived benefits seen in observational studies were proved to be incorrect in randomized controlled trials. Whether PSA screening should be continued in the Caribbean, or other black populations, should be determined by conducting a randomized controlled trial. This will require a large, well conducted international collaborative trial, in order to ensure sufficient number of events and provide definitive answers to the risk and benefits of prostate cancer screening in black men.

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Dr Ferguson's letter was passed on to Dr Aiken for a comment. His response follows.