

Prevalence and Characteristics of Prostate Cancer Among Participants of Community-Based Screening in Lagos, Nigeria

Introduction and Objective: Prostate cancer (CaP) is the most commonly diagnosed cancer among Nigerian men but CaP screening is not a common practice. The true burden of the disease in Nigeria is not known. The study was aimed at studying the community burden of CaP in Lagos.

Materials and Methods: CaP screening was carried out in the community for men aged ≥ 40 years in 10 local government areas of Lagos by subjecting them to serum total PSA (tPSA) test and digital rectal examination (DRE). Participants were recruited by public service announcement, flyers and radio and television jingles. Those with abnormal DRE or tPSA >95 th percentile of the cohort or both were selected for transrectal biopsy of the prostate (TRPB).

Results: There were 3191 men screened and complete data was available for 3141 (98.4%). The mean age was 61.6 years. DRE was abnormal in 312 men and was significantly correlated with the age of the patient and tPSA ($p < 0.001$). The tPSA ranged from 0 to $180 \mu\text{g/L}$ with a median, mean and 95th percentile of 1.6, 2.6 and $10.0 \mu\text{g/L}$ respectively. There were 207 out of the 342 men selected subjected to TRBP. Twenty-nine men had histological diagnosis of CaP, giving an estimated prevalence rate of at least 0.923% or 923 per 100,000 men of age ≥ 40 . Only 7 (24%) had organ-confined disease while 12 (41.4%) had locally advanced disease and 10 (34.5%) men had metastatic disease. The majority of the men, 22 (75.9%) were reported to have Gleason's score of ≥ 7 .

Conclusion: The prevalence rate of CaP among men aged ≥ 40 years in the community in Lagos is high and much greater than previously reported in a hospital-based study. Majority of the subjects have advanced and high-grade disease.