

Table 1: "Testosterone Boosters"- Most Common Components Compared with RDA

Component	Percent supplements containing the component (n=45)	RDA	Upper Tolerable Limit	Range amount found	Median amount found	Percent component found compared with RDA (versus median)
Vitamins & Minerals						
Zinc	60%	15 mg	40 mg	1.05 mg to 50 mg	30 mg	200%
Vitamin B6	40%	2 mg	none	2 mg to 50 mg	10.5 mg	525%
Magnesium	35.5%	400 mg	none	9 mg to 450 mg	450 mg	112%
Boron	26.7%	-	none	-	-	-
D-Aspartic Acid	20%	-	none	-	-	-
Vitamin D	15.5%	400 IU	4000 IU	400 IU to 2000 IU	1000 IU	250%
Vitamin B12	13.3%	6 mcg	none	6 mcg to 500 mcg	50 mcg	833%
Herbal Supplements						
Fenugreek Extract	49%	-	-	-	-	-
Tribulus Terrestris	42.2%	-	-	-	-	-
Eurycoma Longifolia Extract	24.4%	-	-	-	-	-
Maca Extract	22.2%	-	-	-	-	-
Diindolemethane	22.2%	-	-	-	-	-
Shilajit	11%	-	-	-	-	-

Source of Funding: none

Prostate Cancer: Detection & Screening VI

Podium 35

Saturday, May 4, 2019

3:30 PM-5:30 PM

PD35-01

INCREASED DETECTION RATES OF INTERMEDIATE AND HIGH-GRADE PROSTATE CANCER IN AFRICAN-AMERICAN MEN AFTER 2012 USPSTF RECOMMENDATION AGAINST PSA SCREENING

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INTRODUCTION AND OBJECTIVES: In 2012, the USPSTF recommended to exclude prostate specific antigen (PSA) screening from routine primary care for all patients. The Brooklyn VA Hospital serves ~50% African-American patients, who are more likely to develop and die from prostate cancer (PCa) than the general population. We compared the impact of the 2012 USPSTF recommendation on PCa detection rates and biopsy patterns in African-American patients and Caucasian patients.

METHODS: Demographics, PSA, transrectal ultrasonography (TRUS) volume, and pathologic data were collected on patients who underwent their first prostate biopsy at the Brooklyn VA Hospital between January 2007 and June 2018. The period from January 2007 to May 2012 was considered pre-guideline, and the period from June 2012 to June 2018 was considered post-guideline. PCa detection rates and biopsy patterns were compared using Chi-square testing.

RESULTS: 609 biopsies were analyzed pre-guideline (113 per year), and 487 were analyzed post-guideline (81 per year), indicating a 28% decline in biopsy rate. There was no significant difference in the detection rates of low, intermediate, or high grade PCa in Caucasians. In contrast, African-Americans were significantly more likely to be diagnosed with PCa in the post-guideline group (56% vs. 66%, $p=0.016$), and significantly more likely to be diagnosed with intermediate-high grade PCa (38% vs. 47%, $p=0.038$). Before the 2012 USPSTF recommendation, African-American and Caucasian patients undergoing their first biopsy were equally likely to be diagnosed with high-grade PCa (11% AA vs. 11% CA). After the

2012 decision, we found that African-Americans were 50% more likely than Caucasians to be diagnosed with high-grade PCa on first biopsy (10% AA vs. 15% CA, $p=0.008$).

CONCLUSIONS: Our study demonstrates that African-American patients have been disproportionately impacted by the 2012 USPSTF recommendation against PCa screening. In the 6 years following the recommendation, detection rates of intermediate-high risk disease remained unchanged for Caucasian patients but have increased significantly for African-Americans. Whether these observations reflect improved selection of patients to biopsy or an increased number of undiagnosed patients remains unclear. The results of our study strongly support the role of routine PSA screening, particularly in higher risk patients.

Source of Funding: None

PD35-02

IMPACT OF 2012 UNITED STATES PREVENTIVE SERVICES TASK FORCE STATEMENT ON PROSTATE CANCER SCREENING, DETECTION AND PRESENTATION IN MEN UNDER THE AGE OF 70 AT KAISER PERMANENTE NORTHERN CALIFORNIA

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INTRODUCTION AND OBJECTIVES: To determine how the 2012 United States Preventive Services Task Force (USPSTF) Prostate Cancer Screening recommendations altered the rates of PSA screening, prostate biopsy, incident prostate cancer detection, and stage IV at presentation in screen-eligible men in Kaiser Permanente Northern California (KPNC).

METHODS: This is a retrospective study spanning the years 2010 to 2015, in screen-eligible (over 400,000) KPNC members (African American men ages 45-69 and all other men ages 50-69) with no prior history of prostate cancer. We compared the annual rates of PSA testing, prostate biopsy, age and race adjusted incident prostate cancer detection, and age and race adjusted stage IV cancer at presentation between the pre-guideline period, 2010 and 2011; and the post-guideline period, 2014 and 2015.

RESULTS: Following the 2012 USPSTF statement, relative screening rates declined 23.4% (95% CI 23.0-23.8%), biopsy rates declined 64.3% (95% CI 62.9-65.6%), incident prostate cancer detection rates declined 53.5% (95% CI 50.1-56.7%) resulting in 1871 fewer incident cancers detected, and metastatic cancer rates increased 36.9% (95% CI 9.5%-71.0%) resulting in 75 more incident stage IV cancers detected.

CONCLUSIONS: Following the USPSTF 2012 Statement, PSA screening, biopsy and incident prostate cancer detection rates significantly decreased while rates of metastatic disease significantly increased in men under the age of 70.

Year	Screen-eligible N	PSA-screened N (%)	Screen rate (per 1000 person-years)	Biopsied	Biopsy rate (per 1000 person-years)
2010	403,931	170,025 (42.1%)	448.6	4,889 (1.21%)	12.90
2011	412,602	173,274 (42.0%)	446.6	4,638 (1.12%)	11.95
2012	423,348	156,859 (37.1%)	393.8	4,436 (1.05%)	11.14
2013	431,583	152,297 (35.3%)	375.1	3,831 (0.89%)	9.44
2014	456,938	150,706 (33.0%)	352.3	1,813 (0.40%)	4.24
2015	483,286	151,609 (31.4%)	334.0	2,097 (0.43%)	4.62

Year	Incident prostate cancer	Age and race adjusted cancer rates (95% CI)	Incident stage IV prostate cancer	Age and race adjusted stage IV cancer rates (95% CI)
2010	2063	5.48 (5.17-5.79)	57	0.15 (0.12-0.19)
2011	1968	5.07 (4.78-5.37)	69	0.18 (0.14-0.22)
2012	1840	4.57 (4.30-4.85)	53	0.13 (0.10-0.16)
2013	1710	4.17 (3.90-4.43)	68	0.16 (0.13-0.20)
2014	994	2.31 (2.12-2.50)	104	0.24 (0.20-0.28)
2015	1166	2.58 (2.39-2.78)	97	0.21 (0.17-0.25)

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