

Table 3: The median PSA density by age and selected anthropometric measures.

		PSA density				
		Range	Median	Interquartile range	No.	P
1.	Age group (years)					0.13[NS]
	<50	(0.022-0.071)	0.05	(0.034-0.063)	9	
	50-59	(0.002-0.182)	0.032	(0.015-0.05)	30	
	60-69	(0.001-0.182)	0.033	(0.024-0.05)	59	
	70+	(0.001-0.148)	0.05	(0.026-0.06)	27	
	$r = -0.03$ $p = 0.71$ [NS]					
2.	BMI (Kg/m ²)-Categories					< 0.001
	Normal (< 25)	(0.011-0.133)	0.051	(0.029-0.063)	30	
	Overweight (25-29.9)	(0.002-0.182)	0.045	(0.033-0.059)	46	
	Obese (30+)	(0.001-0.182)	0.024	(0.015-0.041)	49	
	$r = -0.47$ $p < 0.001$					
3.	Waist circumference (cm)-Quartiles					< 0.001
	First (lowest) quartile (≤ 86.4)	(0.011-0.182)	0.05	(0.034-0.106)	40	
	Second quartile (86.5-94.0)	(0.015-0.148)	0.04	(0.03-0.05)	23	
	Third quartile (94.1-109.2)	(0.001-0.152)	0.029	(0.015-0.05)	43	
	Fourth (Highest) quartile (109.3+)	(0.001-0.06)	0.024	(0.011-0.035)	19	
	$r = -0.51$ $p < 0.001$					

Table 4: Multiple Linear regression model with serum PSA (prostate specific antigen) as the dependent (outcome) variable and age, prostate size in addition to selected anthropometric measures as the independent (explanatory) variables

	Unstandardized Regression coefficient	Standardized Regression coefficient	Sig.
(Constant)	-7.6		0.10[NS]
Age (years)	0.026	0.114	0.17[NS]
Waist circumference (cm)	-0.041	-0.288	0.002
Prostate size (cm ²)	0.017	0.297	< 0.001
BMI (Kg/m ²)	-0.102	-0.278	0.002

 $R^2 = 0.34$ p (model) < 0.001

Discussion

When we evaluate obese men with prostate enlargement, it may be important to consider that the obesity may lower base line PSA and obese men with early prostate cancer disease are increased risk for having PSA lower than the screening cutoff value ^(10,11,17).

Thus, it is important to examine the influence of obesity and its related factors including PV on PSA in the general screening population. In the present study BMI and WC were negatively associated with PSA and adjusted PSA for prostate volume (PSA density). Therefore, we concluded that PSA is