

Predictors of health-related quality of life among men diagnosed with prostate cancer in Ghana

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Background

Prostate cancer is the most common cancer among men worldwide and is a significant public health concern in Ghana. While the incidence and mortality rates of prostate cancer are increasing, little is known about the Health-Related Quality of Life (HRQOL) of patients diagnosed with prostate cancer in the Volta Region of Ghana. The study assessed the Health-Related Quality of Life and its predictors among patients diagnosed with prostate cancer in Two Municipalities in the Volta Region of Ghana.

Methods

The study utilized a cross-sectional descriptive study design with a quantitative approach and randomly recruited 205 men with prostate cancer residing in Sogakope and Hohoe municipalities. Data was collected using the Functional Assessment of Cancer Therapy-Prostate (FACT-P) scales version 4 and analyzed with STATA version 21.0. Frequencies, means, and standard deviations were computed and both binary and multivariable logistic regression analysis were performed with the level of significance set at 0.05.

Results

The performance under the individual domains or subscales were 14.8 (± 8.7), 14.1 (± 5.6), 13.7 (± 6.6), 9.6 (± 7.7) and 20.1 (± 9.9) for the PWB, SWB, EWB, FWB and PC subscales respectively. The FACT-TO1 was 44.6 (SD ± 16.2). The FACT-G total score among the study participants was 52.2 (SD ± 15.5). The participants in this study had an overall FACT-P total score of 72 (SD ± 22) an indication of a lower HRQOL performance. The negative predictors of HRQOL in the study participants are older age ($\beta = -0.12$, $p = 0.03$), Erectile dysfunction ($\beta = -0.47$, $p = 0.00$), bowel problems ($\beta = -0.19$, $p = 0.00$), and anxiety ($\beta = -0.18$, $p = 0.00$). The only positive predictor of HRQOL was marriage ($\beta = -0.01$, $p = 0.03$).

Conclusion

The FACT-P scale as an instrument to assess a patient-reported outcome measure, produced considerably lower HRQOL scores among men living with prostate cancer and residing in the two municipalities of the Volta Region of Ghana. Older age, erectile dysfunction, bowel problems and anxiety are factors that significantly lower their HRQOL scores. Marriage has been identified as a positive predictor of HRQOL in the study population.

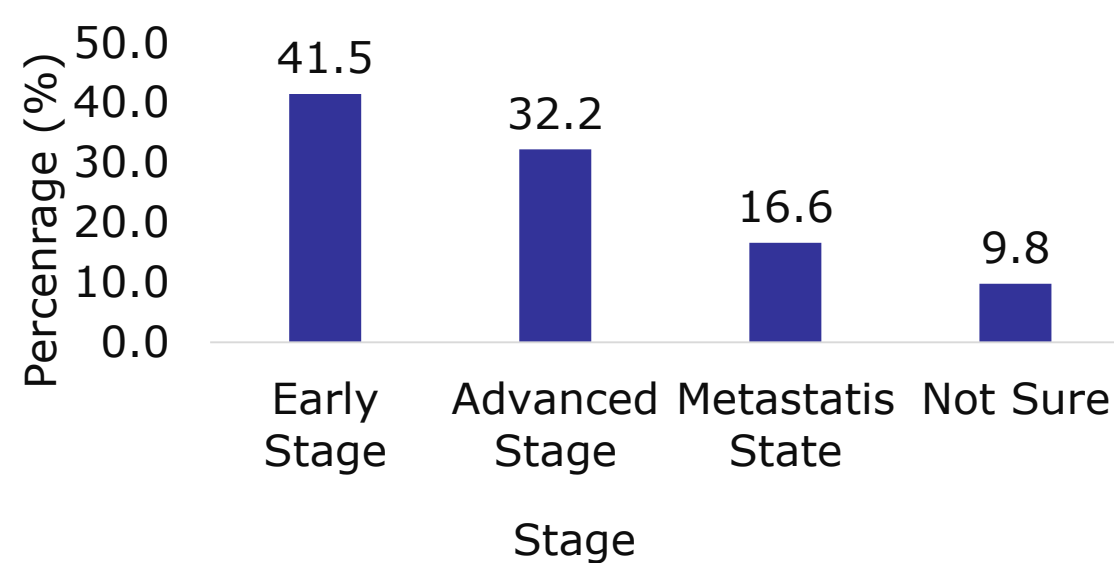


Figure 1: Prostate Cancer stage at Diagnosis

Table 1: Predictors of Overall Quality of Life Among Prostate Cancer Patients

Variable	Beta	SE	95.0% C I for B		P	β
			LL	UL		
Older Age (Yes)	-9.53	4.39	-18.20	-0.87	0.03*	-0.12
Married (Yes)	7.21	2.80	1.69	12.73	0.01*	0.13
Current PCa Treatment (Yes)	5.62	3.31	-0.91	12.15	0.09	-0.11
Side Effect Experience (Yes)	-0.40	3.05	-6.41	5.62	0.90	-0.01
Urinary Incontinence (Yes)	-2.54	2.79	-8.05	2.96	0.36	-0.05
Erectile Dysfunction (Yes)	-26.50	3.41	-33.22	-19.77	0.00*	-0.47
Bowel Problems (Yes)	-9.19	2.79	-14.69	-3.70	0.00*	-0.19
Pain Experience (Yes)	-5.05	2.98	-10.94	-0.83	0.09	-0.11
Anxiety Experience (Yes)	-8.84	2.63	-14.02	-0.366	0.00*	-0.18

C.I.= Confidence Interval, SE= Standard Error, LL-Lower limit, UL-Upper Limit, β = Standardized Coefficient

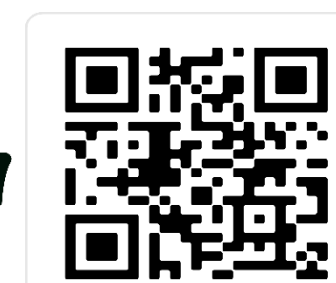
Table 2: Quality of Life Performance Scales among Prostate Cancer Patients

Scales	Mean (SD)	Median	Interquartile Ranges		
			25	50	75
PWB subscale score	14.8(7)	15.0	10.0	15.0	20.0
SWB subscale score	14.1(5.6)	13.0	10.0	13.0	17.0
EWB subscale score	13.7(6.6)	16.0	9.0	16.0	19.0
FWB Subscale score	9.6(7.7)	7.0	3.0	7.0	15.0
PC Subscale score	20.1(9.9)	19.0	13.0	19.0	27.5
FACTP-TOI	44.6(16.2)	44.0	33.0	44.0	55.0
FACT-G Total score	52.2(15.5)	50.0	41.0	50.0	60.5
FACT-P Total score	72.4(22.0)	69.0	57.0	69.0	85.0

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