

Is the preservation of sexual function an important factor in the treatment decision for prostate cancer in Singaporean males?

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INTRODUCTION

Prostate cancer is the 3rd most common cancer in Singaporean men. The oncological treatment option for organ-confined prostate cancer in middle-aged men involves radical treatment—in the form of prostatectomy or radiation therapy. However, radical treatment is associated with increased risk of erectile dysfunction (ED). Active surveillance may also be suggested as an option for patients who wish to avoid the associated morbidities of radical treatment. The recent advent of focal therapy (FT) has provided a viable alternative to reduce the risk of sexual dysfunction, albeit with a higher risk of recurrence. Thus, our study aims to explore the importance of sexual function and also determine if the preservation of their sexual function is an important factor which may influence their choice of therapy.

OBJECTIVES

- To assess the importance of their sexual function
- To determine factors that may affect patient's choice of therapy for prostate cancer

STUDY DESIGN

Inclusion Criteria

Singaporean/Permanent residents, Male, Age 40-75

Exclusion Criteria

Physically or mentally unable to complete survey, ECOG < 4

Method

Outpatient-based questionnaire in a Singapore tertiary hospital to assess

- Demographical data
- Baseline level of sexual activity
- Erectile function (IIEF score)
- Time trade-off (TTO) for ED
- Preferred prostate cancer treatment modality

Statistical Analysis

Two sample *t*-test and ANOVA was used for comparison of mean values. Chi-square test was used to compare categorical variables. Spearman's correlation test were used to for continuous variables.

RESULTS

A total of 272 Singaporean/PR men, aged 40 to 75 were recruited:

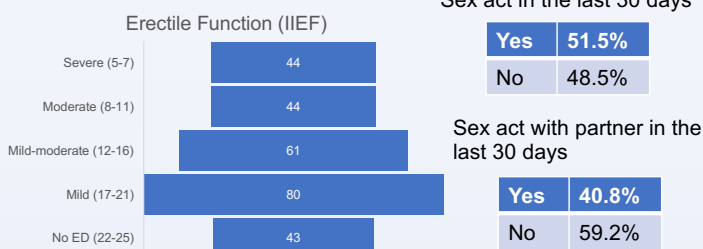
Demographical Data

Age: Mean = 63, Median 65

| Ethnicity | (n) | % | Marital Status | (n) | % |
|-----------|-----|------|----------------|-----|------|
| Chinese | 214 | 78.7 | Married | 239 | 87.9 |
| Malay | 18 | 6.6 | Single | 16 | 5.9 |
| Indian | 32 | 11.8 | Divorced | 13 | 4.8 |
| Others | 8 | 2.9 | Widow | 4 | 1.5 |

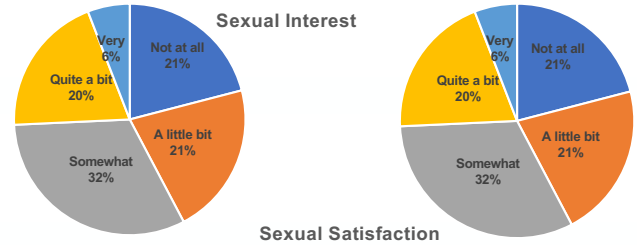
| Housing | (n) | % | Education | (n) | % |
|----------|-----|------|------------|-----|------|
| HDB | 115 | 42.3 | Primary | 58 | 21.3 |
| EC/Condo | 127 | 46.7 | Secondary | 88 | 32.4 |
| Landed | 29 | 10.7 | College | 55 | 20.2 |
| Others | 1 | 0.4 | University | 71 | 26.1 |

Sexual Function and Activity

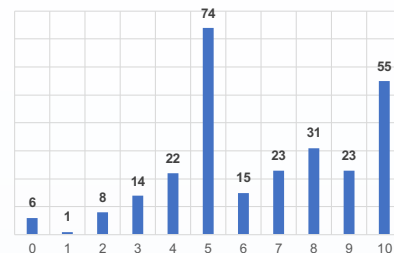


RESULTS

Sexual Interest and Satisfaction



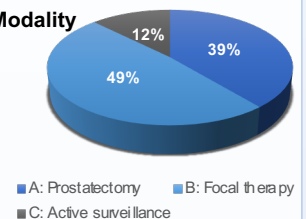
Time Trade-off (TTO) for ED



The time trade-off for ED (i.e. importance of sexual function) was assessed by asking participants the number of years they are willing to sacrifice in return for full sexual function. The mean TTO was 0.66 (SE 0.26).

Preferred Prostate Cancer Treatment Modality

When given a choice of treatment for stage 1 prostate cancer, a majority 49% men choose FT, 39% chose radical surveillance and 12% chose active surveillance as ideal treatment options.



ANALYSIS

Factors affecting TTO of ED

The following factors correlates with a lower reported TTO for ED.

- Sexually active (0.62) vs not sexually active (0.68) ($p = 0.03$)
- Higher sexual interest ($p < 0.01$)
- Higher satisfaction scores ($p < 0.01$)
- Younger population ($p = 0.02$)
- Higher IIEF score ($p = 0.03$)

The age, race, marital status, education and housing did not influence the TTO of ED.

Factors affecting Treatment Choice

- Patients who reported lower ED TTO were more likely to consider sexual preservation over oncological outcomes ($p < 0.01$). This does imply that for those who regards their sexual function as important, they are more likely to choose a less radical therapy.
- The education level also negatively correlates with the treatment choice ($p = 0.05$). Participants who are more educated are more keen to consider radical treatment.
- Age, race, marital status and housing has no implication on the choice of prostate cancer treatment.

DISCUSSION/ CONCLUSION

- Sexual function is important to Singaporean men, particularly those who are sexually active, are younger, have higher sexual function, interests and satisfaction scores.
- Majority of men are willing to consider focal therapy as a treatment option for prostate cancer.
- The preservation of sexual function is thus an important factor that may influence the treatment decision for prostate cancer
- The introduction of focal therapy may provide a suitable alternative for patients who desire to maintain their sexual function.