

# A prospective longitudinal study exploring the influence of psycho-social factors and self-management behaviours on HRQoL in men living with and beyond prostate cancer

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## 1. Introduction

Prostate cancer is the most prevalent type of cancer in men in developed countries (excluding non-melanoma skin cancer) [1]. Whilst the physical aftermath of prostate cancer and treatment has been well documented [2]; little is known about the influence of psycho-social factors on health related quality of life, anxiety and depression in men affected by this disease [3]. Developing an understanding in this area can help to identify men who are at high risk of inadequate support and suggest directions for appropriately targeted interventions. Moreover, little is known about how men affected by prostate cancer mobilise social support in their self-management behaviours over time [4]. This is the first study to test the effects of coping and social support on HRQoL and emotional outcome, and assessed the self-management behaviours of men affected by prostate cancer overtime.

## 2. Aim

To test the propositions of social support theory (see figure 1) and to detail the actual self-management behaviours of men affected by prostate cancer over time.

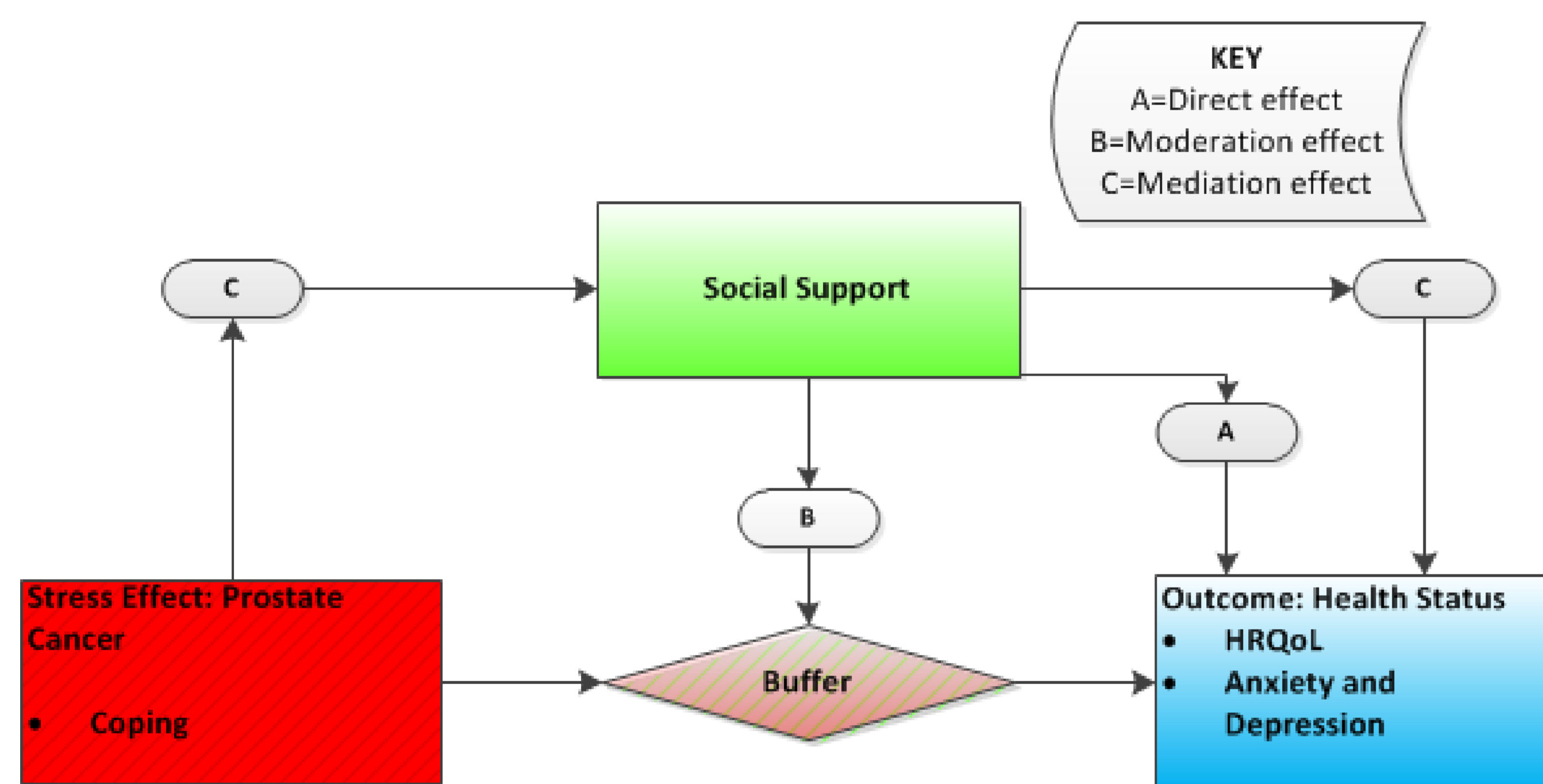


Figure 1. Social Support Theoretical Model

## 3. Methods

A prospective, longitudinal survey recruited men affected by prostate cancer from 2 clinical centres in the UK. Participants completed standardised questionnaires (Prostate Cancer Specific Self-management Log, EORTC C30 and PR25, Self-Efficacy Scale, Mental Adjustment to Cancer Scale, Hospital Anxiety and Depression Scale, Perceived Stress Scale and the Berlin Social Support Scale at time 1 (before commencing treatment) and at time 2 (6 months follow-up) Clinical and demographic data was collected. Statistical analysis was performed in SPSS version 17.0 using parametric tests and non-parametric tests.

### References

- [1] Jemal A, Bray F, Center MM, Ferlay J, Ward E, Forman D. Global cancer statistics. CA: A Cancer Journal for Clinicians. 2011;61:69-90.
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- [3] Paterson C, Jones M, Rattray J, Lauder W. Exploring the relationship between coping, social support and health-related quality of life for prostate cancer survivors: A review of the literature. European Journal of Oncology Nursing. 2013;17:750-9.
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## 4. Findings

109 men newly diagnosed with prostate cancer were invited to take part (n=74 consented [67.9% participation rate]), no statistically significant difference was found for age, clinical stage or treatment modality between the consented and non-consented groups. A significant decline in HRQoL was observed at 6 months post diagnosis (p<0.001). Perceived social support before radical treatment was the most important social support construct that predicted better global quality of life and less depression at six months, explaining approximately 30% of the variance. Despite mens' self-management efforts (see table 1) and use of social support overtime, self-management self-efficacy significantly reduced at six months (p<0.05).

Table 1. Self-Management Behaviours

	Symptoms	Self-management behaviours
Urinary dysfunction	Urinary urgency Urinary incontinence Urinary frequency (during day) Urinary frequency (during the night) Blood in the urine	Took medication, found out information, increased fluid intake, used pads used catheter sheaths, avoided heavy lifting, reduced caffeine intake, shared thoughts and feelings, drank cranberry juice, reduced alcohol, kept a toileting diary, washed incontinence pads, mind over matter strategies
Bowel dysfunction	Constipation Diarrhoea Rectal pain Bleeding from anus	Took medication, took a high fibre diet, took califig/fybogel, applied anusol , changed fluid intake, used pads, shared my thoughts and feelings, changed diet, kept a toileting diary, took exercise
Sexual dysfunction	Impotence	Found out information, shared thoughts and feelings, took medication, limited alcohol intake, reduced stress
Other	Ankle oedema	Went for a walk, took furosamide pill, elevated feet when sitting
Other	Infected surgical wound	Dressed wound, sought help from nurse and doctor, changed and emptied wound drainage bag, took antibiotic tablets
Other	Poor sleeping patterns/problems with relaxation	Increased amitriptyline dosage, took a large whisky before bed
Other	Morning sickness	Took anti-sickness tablets
Other	Radiation burns to abdomen and penis	Applied gel given from doctor, applied savlon and aqueous cream, wiped tip of penis after urinating

## 5. Discussion/Conclusion

These findings are in keeping with the Main Effect Social Support Theory, in that perceived social support at baseline predicted better HRQoL and less depression at 6 months. These findings provide support towards the development of a psycho-social intervention study to improve quality of life, self-management self-efficacy and improve patients' symptom management.

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