Men’s perceptions of the impact of the physical consequences of radical prostatectomy on their quality of life: a qualitative systematic review protocol

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Review question/objective
The objective of this review is to explore men’s perceptions of the impact of the physical consequences of radical prostatectomy on their quality of life

Background
Prostate cancer is the most common male cancer and second most common cause of cancer death in men in the Western world.¹ The quality of life of men with prostate cancer can be negatively affected by the various treatments available to them.² Radical prostatectomy is the predominant primary treatment approach for prostate cancer in a number of countries including Australia and North America,³,⁴ and involves the complete removal of the prostate, seminal vesicles and surrounding tissues.⁵

Postoperative complications commonly occur and current literature reports issues concerning the bladder, bowel and sexual dysfunction.⁶ Each of these can be categorized as a physical consequence of the surgery and for radical prostatectomy such complications are urinary⁷,⁸ and fecal incontinence⁹ as well as sexual dysfunction.¹ These physical consequences of surgery are intrinsically connected to psychosocial implications for the patient and are associated with significantly reduced quality of life.⁵,¹⁰

Urinary incontinence is a problem for at least 50% of men who undergo radical prostatectomy and this can have a negative effect on their postoperative quality of life.⁷,¹¹ Men can experience negative feelings about dealing with indwelling catheters and urinary incontinence at home, and report anxiety, fear and embarrassment,¹¹ as well as a loss of a sense of control, depression and decreased social interactions.⁸ Fecal incontinence is also reported to have a significant impact on men’s self-confidence, personal image and social life.⁵,⁹
Sexual dysfunction following radical prostatectomy encompasses several physical issues including erectile dysfunction and impotence, which is one of the most common concerns of men post radical prostatectomy. A number of psychological and relationship implications have been highlighted, and many men do not know where to turn to for help. A less common physical issue following radical prostatectomy is penile length shortening. Yoko et al. suggest that, from the viewpoint of society and its preoccupation with penile size, physical reduction in penile length size following radical prostatectomy can negatively affect psychological well-being.

An important clinical implication for understanding men’s perceptions of the physical and psychosocial consequences of radical prostatectomy is that healthcare professionals working with these men can assist them in considering and discussing issues such as masculinity, erectile dysfunction and incontinence pre- and post-treatment, thereby increasing men’s understanding and adaptation postoperatively.

A national survey of cancer patients conducted in the United Kingdom (UK) in 1999/2000 identified that patients with prostate cancer often had a worse experience of supportive care than those diagnosed with and treated for other cancers. A second survey, conducted following the implementation of the NHS Cancer Plan, a program outlining the UK government’s intentions to reform cancer care, was consistent with the results of the 1999/2000 survey and identified only the smallest improvement in the provision of care for patients with prostate cancer. A more recent survey identified improvement in the patient’s perception of their experience of prostate cancer care. Even so, the care of people suffering from prostate cancer fell behind several other cancer groups (breast, lung and colorectal) on multiple elements of the survey, including definitive explanations of the potential side effects of treatment thereby highlighting scope for improvement in care provision. The National Institute for Health and Care Excellence guidelines for prostate cancer emphasizes the pivotal role of communication between healthcare professionals and men with prostate cancer. One of their key priorities is the healthcare professionals’ role in providing evidence-based advice regarding the potential side effects of prostate cancer treatment and subsequent support that takes into account quality of life implications for these men.

Treatment such as radical prostatectomy that has negative physical and psychosocial consequences that potentially impact on men’s quality of life means it is increasingly becoming an important topic. Willener and Hantikainen suggest that improving quality of life should be the ultimate aim of any healthcare treatment or intervention, and the patient’s experience of the treatment is paramount. In order to provide high quality care, healthcare professionals need to improve understanding of the physical and psychosocial implications of radical prostatectomy from the men’s perspective. An improved understanding of the men’s perspective of these physical consequences could potentially enhance the value and impact of support provided.

The underpinning concept in this proposed review is to explore the repercussions on lifestyle and associated psychosocial impact that the outlined physical consequences have on men following radical prostatectomy. By identifying and exploring issues that affect men’s quality of life, opportunities can be created to talk about problems, discuss issues and ultimately improve men’s postoperative experiences. Nurses provide a vital role in ensuring that men are adequately prepared for radical prostatectomy and the potential implications on their postoperative quality of life. Without an in depth knowledge and understanding of men’s experiences post radical prostatectomy, there is a risk that health professionals may be unable to provide the comprehensive support and information that is vital to men postoperatively.
Numerous qualitative studies have been published exploring men’s post radical prostatectomy surgery experiences\textsuperscript{14,15,18,24-28} and also those from the point of view of their spouses.\textsuperscript{6,29,30} Previous qualitative reviews in this area are limited and a search revealed only one narrative review of men’s experiences of urinary incontinence after prostatectomy.\textsuperscript{11} The majority of systematic reviews conducted were quantitative, and they investigated health related quality of life following radical prostatectomy\textsuperscript{5,10} and the effectiveness of psychoeducational interventions on urinary and fecal incontinence and erectile dysfunction in men over 50 years and over after prostatectomy for prostate cancer in comparison to usual care.\textsuperscript{31}

A systematic review exploring the findings of studies that specifically discuss the impact of the physical consequences of radical prostatectomy on their quality of life is essential to assist health care professionals in focusing on this area in future practice. To date no such systematic review has been conducted.

Keywords
radical prostatectomy; prostatectomy; incontinence; masculinity; emotional well-being; continence; erectile dysfunction; men’s health; impotence; sexuality; quality of life; QoL

Inclusion criteria

Types of participants
This review will consider studies that include:

Men of all ages and nationalities who have undergone radical prostatectomy as treatment for prostate cancer.

The following will be excluded:

Studies that focus on men undergoing prostatectomy for reasons other than cancer.

Studies that focus on men receiving treatment other than radical prostatectomy for prostate cancer. This may include but is not exclusive to radiotherapy, hormone therapy and watchful waiting.

Studies that focus only on the perspectives of family members.

Phenomena of interest
This review will consider studies that investigate:

- The physical consequences of radical prostatectomy and its impact on quality of life as identified by the men
- The psychosocial implications of the identified physical consequences of radical prostatectomy as identified by the men.

Types of studies
The review will consider studies that focus on qualitative data including, but not limited to, designs such as phenomenology, grounded theory, ethnography and action research. Studies will be included if they report results relating to one or more of the phenomena of interest.

Studies not written in English will be excluded.
Context

This review will consider all settings where this topic has been addressed with participants meeting the inclusion criteria. This may include, but is not limited to, outpatient clinics, community clinics, men's homes or support group locations.

Search strategy

The search strategy aims to find published and unpublished studies. A three-step search strategy will be utilized in this review. An initial limited search of MEDLINE and CINAHL will be undertaken followed by an analysis of the text words contained in the title and abstract, and of the index terms used to describe the article. A second search using all identified keywords and index terms will then be undertaken across all included databases. Thirdly, the reference list of all identified reports and articles will be searched for additional studies. Studies published in English will be considered for inclusion from inception of databases to the present date will be considered for inclusion in this review. The journals European Journal of Oncology Nursing and Cancer Nursing will be hand searched between 2014 and 2015 to ensure that any relevant papers that may not be indexed in the major databases are located.

The databases to be searched include:

CINAHL
MEDLINE
EMBASE
PsychINFO
British Nursing Index
Web of Science.

Initial keywords to be used will be:

‘radical prostatectomy’; prostatectomy; incontinence; masculinity; ‘emotional well-being’; continence; ‘erectile dysfunction’; ‘men's health’; impotence; sexuality; ‘quality of life’; ‘QoL’; experience*

Assessment of methodological quality

Qualitative papers selected for retrieval will be assessed by two independent reviewers for methodological validity prior to inclusion in the review using standardized critical appraisal instruments from the Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI) (Appendix I). Any disagreements that arise between the reviewers will be resolved through discussion, or with a third reviewer.

Data extraction

Qualitative data will be extracted from papers included in the review using the standardized data extraction tool from JBI-QARI (Appendix II). The data extracted will include specific details about the interventions, populations, study methods and outcomes of significance to the review question and specific objectives.
Data synthesis

Qualitative research findings will, where possible, be pooled using JBI-QARI. This will involve the aggregation or synthesis of findings to generate a set of statements that represent that aggregation, through assembling the findings rated according to their quality, and categorizing these findings on the basis of similarity in meaning. These categories are then subjected to a meta-synthesis in order to produce a single comprehensive set of synthesized findings that can be used as a basis for evidence-based practice. Where textual pooling is not possible the findings will be presented in narrative form.

Conflicts of interest

The authors have no conflicts of interest to declare.
References


Appendix I: Appraisal instrument

QARI appraisal instrument

### JBI QARI Critical Appraisal Checklist for Interpretive & Critical Research

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<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Unclear</th>
<th>Not Applicable</th>
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<td>1. Is there congruity between the stated philosophical perspective and the research methodology?</td>
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<td>2. Is there congruity between the research methodology and the research question or objectives?</td>
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<td>3. Is there congruity between the research methodology and the methods used to collect data?</td>
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<td>4. Is there congruity between the research methodology and the representation and analysis of data?</td>
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<td>5. Is there congruity between the research methodology and the interpretation of results?</td>
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<td>6. Is there a statement locating the researcher culturally or theoretically?</td>
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<td>7. Is the influence of the researcher on the research, and vice versa, addressed?</td>
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<td>8. Are participants, and their voices, adequately represented?</td>
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<td>9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?</td>
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<td>10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?</td>
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Overall appraisal: Include, Exclude, Seek further info.

Comments (including reason for exclusion)

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Appendix II: Data extraction instrument
QARI data extraction instrument

### JBI QARI Data Extraction Form for Interpretive & Critical Research

**Reviewer**  
**Date**

**Author**  
**Year**

**Journal**  
**Record Number**

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### Study Description

**Methodology**

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**Method**

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**Phenomena of interest**

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**Setting**

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**Geographical**

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**Cultural**

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**Participants**

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**Data analysis**

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**Authors Conclusions**

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**Comments**

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Complete  
Yes ☐  
No ☐
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<th>Findings</th>
<th>Illustration from Publication (page number)</th>
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Extraction of findings complete        Yes ☐        No ☐