

# Urogenital Dysfunctions and Emotional Repercussions in Men who Underwent Prostatectomy: Systematic Review Protocol

Disfunções Urogenitais e Repercussões Emocionais em Homens que Realizaram Prostatectomia: Protocolo de Revisão Sistemática

Disfunciones Urogenitales y Repercusiones Emocionales en Hombres Sometidos a Prostatectomía: Protocolo de Revisión Sistemática

## RESUMO:

**Objetivo:** Compreender, na literatura científica, as vivências de disfunções urogenitais e as repercussões físicas, emocionais e sociais em homens submetidos à prostatectomia. **Método:** Protocolo de revisão sistemática elaborado segundo as recomendações do PRISMA e PROSPERO, norteada pela estratégia P.I.Co, que resultou na pergunta: “Quais são as vivências de disfunções urogenitais e repercussões emocionais relatadas por homens submetidos à prostatectomia? A busca ocorreu nas bases PubMed, BVS, Scopus, Periódicos Capes e Scielo (incluindo MEDLINE e LILACS). Foram incluídos artigos originais completos, selecionados por dois revisores via Rayyan, divergências serão resolvidas por um terceiro avaliador. **Resultados:** As informações extraídas compreenderão base de dados, ano, autor, local, periódico, título, objetivo, delineamento, resultados e conclusões. Resultados: Os achados serão apresentados em fluxograma e síntese narrativa, em conformidade com o PRISMA-ScR. **Conclusão:** Este protocolo orientará a revisão, permitindo identificar lacunas, sintetizar o conhecimento e fundamentar estudos futuros.

**DESCRIPTORES:** Disfunção erétil; Prostatectomia; Emoções

## ABSTRACT:

**Objective:** To understand, in the scientific literature, the experiences of urogenital dysfunction and the physical, emotional, and social repercussions in men undergoing prostatectomy. **Method:** Systematic review protocol developed according to PRISMA and PROSPERO recommendations, guided by the P.I.Co strategy, which resulted in the question: “What are the experiences of urogenital dysfunction and emotional repercussions reported by men undergoing prostatectomy? The search was conducted in the PubMed, BVS, Scopus, Capes Journals, and Scielo databases (including MEDLINE and LILACS). Complete original articles were included, selected by two reviewers via Rayyan, with any disagreements resolved by a third evaluator. Results: The information extracted will include database, year, author, location, journal, title, objective, design, results, and conclusions. **Results:** The findings will be presented in a flowchart and narrative summary, in accordance with PRISMA-ScR. **Conclusion:** This protocol will guide the review, allowing us to identify gaps, synthesize knowledge, and inform future studies.

**DESCRIPTORS:** Erectile dysfunction; Prostatectomy; Emotions.

## RESUMEN:

Objetivo: Comprender, en la literatura científica, las experiencias de disfunciones urogenitales y las repercusiones físicas, emocionales y sociales en hombres sometidos a prostatectomía. Método: Protocolo de revisión sistemática elaborado según las recomendaciones de PRISMA y PROSPERO, guiado por la estrategia P.I.Co, que dio lugar a la pregunta: «¿Cuáles son las experiencias de disfunciones urogenitales y las repercusiones emocionales relatadas por los hombres sometidos a prostatectomía? La búsqueda se realizó en las bases de datos PubMed, BVS, Scopus, Periódicos Capes y Scielo (incluidas MEDLINE y LILACS). Se incluyeron artículos originales completos, seleccionados por dos revisores a través de Rayyan; las divergencias serán resueltas por un tercer evaluador. Resultados: La información extraída comprenderá la base de datos, el año, el autor, el lugar, la revista, el título, el objetivo, el diseño, los resultados y las conclusiones. Resultados: Los hallazgos se presentarán en un diagrama de flujo y una síntesis narrativa, de conformidad con PRISMA-ScR. Conclusión: Este protocolo orientará la revisión, permitiendo identificar lagunas, sintetizar el conocimiento y fundamentar futuros estudios.

**DESCRIPTORES:** Disfunción erétil; Prostatectomía; Emociones.

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**INTRODUCTION**

**R**adical prostatectomy (RP) is an oncological surgical procedure that involves removing the prostate and, if necessary, performing pelvic lymphadenectomy. It is the gold standard treatment for localized prostate cancer. This type of cancer is a significant public health problem, considered the second most frequent and a significant cause of cancer-related mortality<sup>(1)</sup>.

According to the National Cancer Institute (INCA), an estimated 71,730 new cases of prostate cancer are expected for the 2023-2025 period, which equates to a rate of 67.86 cases per 100,000 men. The incidence of the disease has been increasing considerably due to the aging of the population, increased access to specific tests and diagnostics and the use of notification systems. In DATASUS, between December 2014 and 2019, there were 4,479 interactions in Brazil for the radical prostatectomy procedure.

After prostatectomy, the most common urogenital disorders are urinary incontinence (UI) and erectile dysfunction (ED), both of which impact the quality of life of these men<sup>(4)</sup>. About 60 to 70% of men suffer from erectile dysfunction, which prevents a satisfactory erection for sexual activity, after radical prostatectomy<sup>(5)</sup>. This is often caused by cavernous nerve injury and postoperative factors such as edema and inflammation<sup>(6)</sup>. Urinary incontinence, characterized by involuntary loss of urine, can persist for months after catheter removal, posing an ongoing concern for patients.

The psychological and emotional

effects of these dysfunctions are profound and complex, involving feelings such as loss, uncertainty about the disease, and stigma. Regarding the emotional impact, many men report feeling unprepared to deal with UI and ED, experiencing a "second shock" after the initial cancer diagnosis. The unexpected persistence of incontinence can be distressing, leading some people to rethink their decision to undergo surgery<sup>(1)</sup>.

On the other hand, the culture of masculinity, which values strength, virility, and performance, makes erection and incontinence an obstacle to male identity. The inability to manage bodily functions challenges the "masculine script" of self-sufficiency, causing significant emotional turmoil. Urogenital disorders can also cause shame and social isolation, affecting social interactions and participation in physical and sexual activities<sup>(8)</sup>.

There is a gap in healthcare in terms of advising men before surgery about the nature and severity of long-term problems, such as incontinence and sexual dysfunction. This leads to feelings of unpreparedness and regret about the choice of treatment<sup>(9)</sup>.

In view of these challenges, this study is academically and socially relevant, as it will enable understanding of the physical and mental sequelae of prostatectomy, as well as how men experience them, considering individual and psychological aspects. It can serve as a guide for welcoming and referring these men to health services and as a basis for public policies focused on men's health.

Therefore, it is essential that health professionals are prepared to provide

these individuals with an empathetic assessment, accurate information, and holistic support. This includes not only the physical treatment of complications, but also addressing the psychological and social implications, encouraging strategies for coping and redefining male identity.

The study used the P.I.Co strategy, defining: P (Population) as *men*, I (Interest) as *urogenital dysfunctions*, and Co (Context) as *prostate removal or prostatectomy*. Thus, descriptors were used that cover both the physiological and emotional aspects of the topic. Based on these components, the following question was formulated: What are the experiences of urogenital dysfunctions reported in men who have undergone prostatectomy? Given this, the objective of this article is to understand, through scientific literature, the experiences reported by men about urogenital dysfunctions undergoing prostatectomy, and the physical, emotional, and social repercussions involved in this process.

**METHODS****Type and characterization of study**

This is a quantitative, bibliographic survey of the literature. One of the Evidence-Based Practice (EBP) research methods known as "systematic review" was used, in accordance with the PRISMA (*Preferred Reporting Items for Systematic Reviews and Meta Analyses*) protocol<sup>(11)</sup>. This review was registered in the International Prospective Register of Systematic Reviews (PROSPERO), with registration number CRD420251126263.

**Research strategies and eligibility criteria**

The search, reading, and tabulation of data from scientific publications took place during the months of April and May 2025. The following inclusion criteria were used in the

search: a) original articles, b) available in full for free *online*, c) written in English, Spanish, and Portuguese, d) no time limit, and e) related to the study topic, indexed in the following databases: *U.S. National Library of Medicine* (PubMed), *Virtual Health Library* (BVS), *Scopus*, *CAPES Journals*, and *Scientific Electronic Library Online* (SciELO), which index the databases of the *Medical Literature Analysis and Retrieval System Online* (MedLine) and the *Latin American and Caribbean Health Sciences Literature*

(LILACS), among others.

The following were excluded: a) theses, dissertations, monographs, event proceedings, experience reports, case reports, review articles; b) non-original studies; c) works not related to the study topic.

For the selection of studies, controlled descriptors available in the "Health Sciences Descriptors (DeCS)" of the VHL and in the "Medical Subject Headings" (MeSH) of PubMed were used in Portuguese, Spanish, and English, which were divided into

four groups: Group 1 (Erectile Dysfunction), Group 2 (Prostatectomy), and Group 3 (Emotions). The search was conducted using the descriptors in Group 1 by language, added to the *Boolean* operator "AND" in order to cross-reference them with the descriptors in Groups 2 and 3. In addition, for synonymous descriptors, the *Boolean* operator "OR" was used between groups. Thus, the references of reviews found were scrutinized for greater breadth (Table 1).

**Table 1. Databases, strategies, and search results. Salvador, BA, Brazil, 2025.**

Language	Database/Library	Search Strategy
English	PUBMED: 103 SciELO: 0 BVS: 43 P. CAPES: 72	((((((((Erectile Dysfunction) OR (Dysfunction, Erectile)) OR (Impotence)) OR (Male Impotence)) OR (Impotence, Male)) OR (Male Sexual Impotence)) OR (Impotence, Male Sexual)) OR (Sexual Impotence, Male)) AND (((((((Prostatectomy) OR (Prostatectomies)) OR (Prostatectomy, Retropubic) OR (Prostatectomies, Retropubic)) OR (Retropubic Prostatectomies)) OR (Retropubic Prostatectomy)) OR (Prostatectomy, Suprapubic)) OR (Prostatectomies, Suprapubic)) OR (Suprapubic Prostatectomies)) OR (Suprapubic Prostatectomy))) AND ((((((Emotions) OR (Emotion)) OR (Feelings)) OR (Feeling)) OR (Regret)) OR (Regrets))
English	WOS: 73	ALL=((((((((Erectile Dysfunction) OR (Dysfunction, Erectile)) OR (Impotence)) OR (Male Impotence)) OR (Impotence, Male)) OR (Male Sexual Impotence)) OR (Impotence, Male Sexual)) OR (Sexual Impotence, Male)) AND (((((((Prostatectomy) OR (Prostatectomies)) OR (Prostatectomy, Retropubic) OR (Prostatectomies, Retropubic)) OR (Retropubic Prostatectomies)) OR (Retropubic Prostatectomy)) OR (Prostatectomy, Suprapubic)) OR (Prostatectomies, Suprapubic)) OR (Suprapubic Prostatectomies)) OR (Suprapubic Prostatectomy))) AND ((((((Emotions) OR (Emotion)) OR (Feelings)) OR (Feeling)) OR (Regret)) OR (Regrets))
English	Scopus: 57	TITLE-ABS-KEY (erectile AND dysfunction OR dysfunction, AND erectile OR impotence OR male AND impotence OR impotence, AND male OR male AND sexual AND impotence OR impotence, AND male AND sexual OR sexual AND impotence, AND male) AND TITLE-ABS-KEY (emotions OR emotion OR feelings OR feeling OR regret OR regrets)
Portuguese	PUBMED: 241 SciELO: 0 BVS: 0 P. CAPES: 0	(((Disfunção Erétil) OR (Impotência)) OR (Impotência Sexual)) AND (((Prostatectomia) OR (Cirurgia de Próstata)) OR (Prostatectomia Retropúbica)) OR (Prostatectomia Suprapúbica))) AND (((Emoções) OR (Arrependimento)) OR (Sentimento)) OR (Sentimentos)) OR (Sentimentos Vivenciados))
Portuguese	WOS: 78	Disfunção Erétil (All Fields) or Impotência (All Fields) or Impotência Sexual (All Fields) and Prostatectomia (All Fields) or Cirurgia de Próstata (All Fields) or Prostatectomia Retropúbica (All Fields) or Prostatectomia Suprapúbica (All Fields) and Emoções (All Fields) or Arrependimento (All Fields) or Sentimento (All Fields) or Sentimentos (All Fields) or Sentimentos Vivenciados (All Fields)
Portuguese	Scopus: 0	TITLE-ABS-KEY (Disfunção Erétil OR Impotência OR Impotência Sexual) AND TITLE-ABS-KEY (Prostatectomia OR Cirurgia de Próstata OR Prostatectomia Retropúbica OR Prostatectomia Suprapúbica) AND TITLE-ABS-KEY (Emoções OR Arrependimento OR Sentimento OR Sentimentos OR Sentimentos Vivenciados)

Spanish	PUBMED: 131 SciELO: 326 BVS: 0 P. CAPES:1	(((((((Disfunción Eréctil) OR (Disfunción Eréctil)) OR (Impotencia) OR (Impotencia Masculina)) OR (Impotencia Masculina) OR (Impotencia Sexual Masculina)) OR (Impotencia, Sexual Masculina)) OR (Impotencia Sexual, Masculino)) AND (((((((Prostatectomía) OR (Prostatectomías)) OR (Prostatectomía Retropúbica)) OR (Prostatectomías Retropúbicas)) OR (Prostatectomías Retropúbicas)) OR (Prostatectomía Retropúbica)) OR (Prostatectomía Suprapúbica)) OR (Prostatectomías Suprapúbicas)) OR (Prostatectomías Suprapúbicas)) OR (Prostatectomías Suprapúbicas)) OR (Sentimientos) OR (Sentimiento) OR (Arrepentimiento) OR (Arrepentimientos)) / (((((Disfunción Eréctil) OR (Disfunción Eréctil)) OR (Impotencia) OR (Impotencia Masculina)) OR (Impotencia Masculina) OR (Impotencia Sexual Masculina)) OR (Impotencia, Sexual Masculina)) OR (Impotencia Sexual, Masculino)) AND ((Prostatectomía) OR (Prostatectomías)) OR (Prostatectomía Retropúbica)) OR (Prostatectomías Retropúbicas)) OR (Prostatectomías Retropúbicas)) OR (Prostatectomías Suprapúbicas)) OR (Prostatectomías Suprapúbicas)) OR (Prostatectomía Suprapúbica)) AND ((((((Emociones) OR (Emoción)) OR (Sentimientos) OR (Sentimiento) OR (Arrepentimiento) OR (Arrepentimientos))))
Spanish	WOS: 3,144	Disfunción eréctil (Topic) or Impotencia sexual (Topic) and Prostatectomía (Topic) or Prostatectomía Retropública (Topic) or Prostatectomía Suprapública (Topic) and Emociones (Topic) or Remordimientos (Topic) or Sentimiento (Topic) or Sentimientos (Topic) and Hombres (Topic) or Chicos (Topic) or Muchachos (Topic) and Preprint Citation Index (Exclude – Database) and Web of Science Core Collection (Database)
Spanish	Scopus: 0	TITLE-ABS-KEY ( Eréctil AND Disfunción OR Disfunción AND Eréctil OR Impotencia sexual OR Impotencia OR Impotencia sexual AND Masculina OR Impotencia sexual AND Masculino OR Impotencia AND Masculina AND sexual OR masculina OR sexual AND impotencia AND masculina ) ) AND TITLE-ABS-KEY ( Emociones OR Emoción OR Sentimientos OR Sentimiento OR Arrepentimiento OR Arrepentimientos )

Source: own work.

### Data extraction and synthesis

To simplify data extraction, a collection instrument was developed that

provides information about the order, database, year, author, study location, journal, title, general objective, research objective, methodological design,

main results, study conclusion, limitation, and level of evidence (Table 2).

**Table 2: Data extraction model. Salvador, BA, Brazil, 2025.**

No.	Database	Year	Author	Study location	Journal	Title	General Objective	Methodological Design	Key Findings	Conclusion of the Study
-	-	-	-	-	-	-	-	-	-	-

Source: own work.

In this process, two researchers will independently search and select databases, screening them using *Rayyan*, developed by the *Qatar Computing Research Institute (QCRI)*<sup>(12)</sup>. Conflicts will be resolved by a third evaluator, adopting a criterion of agreement greater than 70% for inclusion.

After coding, the data will be grouped by similarities and differences, compiled in *Excel for Windows*® (version 2013 or higher) and validated by two reviewers to avoid errors. *Endnote*® will assist in the management, sharing, and control of duplicates, reducing bias.

Data analysis will take place in two phases: in the first phase, DeCS/MESH descriptors were selected, followed by the evaluation of titles and, subsequently, abstracts. In the second phase, the study was read in its entirety and critically evaluated, and the results were presented descriptively in the discussion in order to apply the systematic review.

Consequently, the studies were classified according to the quality of the evidence, as follows: Level I – systematic reviews or meta-analyses of randomized clinical trials; Level II – at least one randomized clinical trial; Level III – trials without randomization;

Level IV – cross-sectional, ecological, cohort, and case-control studies; Level V – systematic review of descriptive/qualitative studies; Level VI – isolated descriptive or qualitative study; Level VII – expert opinions and normative documents<sup>(12)</sup>.

### RESULTS

The results will be presented in a flowchart and narrative summary, according to the PRISMA-ScR guidelines. This protocol will guide the systematic review, allowing us to identify gaps, synthesize available knowledge, and inform future studies.

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