

# BLUE NOVEMBER: WHY SCREENING FOR PROSTATE CANCER?

NOVEMBRO AZUL: POR QUE RASTREAR O CÂNCER DE PRÓSTATA?

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## ABSTRACT

This narrative review aimed to explore studies that addressed the importance of the integrality of the health of men, focusing on the prevalence and screening of prostate cancer. National and international full-text studies from the last ten years were randomly selected using the descriptors “Blue November”, “prostate cancer”, “screening”, “epidemiological data”, and “Ministry of Health” in the following databases: the Ministry of Health website, SciELO, and Google Scholar. After analytical, selective, and interpretive reading of the information, 32 studies were selected; 11 were included due to the delimitation and relevance of the theme, and 21 were excluded because they did not present enough data. The actions developed by the Blue November, from its essence to the present day, aimed to ensure the integrality of health of the men and became an important strategy for prostate cancer screening.

**Keywords:** Blue November; Prostate cancer; Screening; Epidemiological data; Ministry of Health.

## RESUMO

Trata-se de uma revisão narrativa da literatura, que objetivou explorar estudos que abordem a importância da integralidade da saúde do homem, dando foco referente à prevalência e rastreamento ao câncer de próstata. Artigos nacionais e internacionais com seus textos completos dos últimos dez anos, foram selecionados aleatoriamente através dos descritores “novembro azul”, “câncer de próstata”, “rastreamento”, “dados epidemiológicos” e “ministério da saúde”, nas seguintes bases de dados: site do Ministério da Saúde, SciELO (Scientific Electronic Library Online) e Google Acadêmico. Após leitura analítica, seletiva e interpretativa das informações buscando a melhor qualidade e relevância do assunto abordado para a construção da revisão, foram selecionados 32 artigos dos quais 11 foram incluídos pela delimitação e pertinência do tema e 21 foram excluídos, pois não apresentavam dados suficientes para o contexto. As ações desenvolvidas pelo movimento Novembro Azul, desde a sua essência até os dias atuais, visam garantir a integralidade da saúde do homem e se tornaram uma importante estratégia para o rastreio do câncer de próstata.

**Palavras-chave:** Novembro Azul; Câncer de próstata; Rastreamento; Dados epidemiológicos; Ministério da saúde.

## INTRODUCTION

In 1999, some USA entities mobilized to promote awareness for combating prostate cancer, with the government establishing the month of September as “National Prostate Cancer Awareness Month” in 2001<sup>1</sup>.

The “Blue November”, although with another connotation and another name, began in 2003 with a group of Australian friends who gathered in a bar and realized that the use of mustaches was the only fashion of the Seventies that had not yet returned to the male public. For fun, they decided to start the following

month with only the mustache grown; they would have a themed party at the end of the month to reward the best and the worst mustache. As it was in November, the game was called *Movember*, by the union of the words “mo”, referring to an Australian slang for mustache, and November. Therefore, “Blue November” came up with a proposal other than the one referred to today<sup>2</sup>.

Global campaigns against breast cancer inspired the revival of the joke in the following year when they decided that *Movember* could help raise awareness about prostate cancer. This movement gained popularity and began fundraising for an organization dedicated to

## EPIDEMIOLOGICAL DATA

Cancer surveillance seeks to manage non-communicable diseases and relies on morbidity and mortality information obtained from the Population-Based Cancer Records (RCBP), Hospital Cancer Records (RHC), and the Mortality Information System (SIM) of the Department of Informatics of the Unified Health System (DATASUS). This information provides subsidies for managers to monitor and coordinate cancer control, as well as the direction of research related to the disease.

The most recent global estimate from 2018 indicates the incidence of 18 million new cancer cases worldwide (17 million excluding non-melanoma skin cancers) and 9.6 million deaths (9.5 million excluding non-melanoma skin cancers). Lung cancer is the most common cancer (2.1 million), followed by breast cancer (2.1 million), colon and rectum cancer (1.8 million), and prostate cancer (1.3 million). Among men, the incidence of 9.5 million cases accounts for 53% of new cases, while women have 8.6 million new cases (47.0%). The leading cancers in men include lung (14.5%), prostate (13.5%), colon and rectum (10.9%), stomach (7.2%), and liver (6.3%). For women, the most common cancers are breast (24.2%), colon and rectum (9.5%), lung (8.4%), and cervical cancer (6.6%). In Brazil, an estimated 65,840 new prostate cancer cases are projected each year for the 2020-2022 triennium. This value corresponds to an estimated risk of 62.95 new cases per 100,000 men<sup>4</sup>.

Excluding non-melanoma skin cancers, prostate cancer ranks as the most prevalent across all Brazilian regions, with an estimated risk of 72.35 per 100,000 in the Northeast, 65.29 per 100,000 in the Midwest, 63.94 per 100,000 in the Southeast, 62.00 per 100,000 in the South, and 29.39 per 100,000 in the North region.

According to global estimates, prostate cancer is the second most common cancer among men worldwide. About 1,280,000 new cases are expected, accounting for 7.1% of all cancer diagnoses. This value corresponds to an estimated risk of 33.1/100 thousand. The highest incidence rates of prostate cancer are

treating this type of cancer, expanding each year in Australia and reaching supporters in other countries. In 2008, Brazil launched a campaign to raise awareness of the disease, initially promoted by the *Instituto Lado a Lado Pela Vida* (ILLPV), a non-profit organization. The campaign was originally named "One Touch, One Dribble" and was later renamed to "Blue November" in 2012<sup>3</sup>. To this day, the movement continues to occur as an engaging strategy for prostate cancer screening.

Cancer is the leading public health problem worldwide and is already among the top four causes of premature death (before the age of 70) in most countries. The incidence and mortality due to cancer have been increasing globally, partly due to aging, population growth, as well as the change in the distribution and prevalence of cancer risk factors, especially those associated with socioeconomic development. A transition of the main types of cancer occurred in developing countries: the types of cancer associated with infections reduced and those associated with improved socioeconomic conditions increased; the latter is related to the incorporation of habits and attitudes associated with urbanization (e.g., sedentary lifestyle and inadequate diet).

This literature review aimed to explore studies that addressed the importance of the integrality of human health, focusing on the prevalence and screening of prostate cancer.

## MATERIAL AND METHODS

This study provided a narrative review of studies that used descriptive and qualitative data, updated using bibliographic research. National and international full-text studies available *online* from the past decade were randomly selected from the Ministry of Health website, SciELO, and Google Scholar databases. Key descriptors used were blue November, prostate cancer, screening, epidemiological data, and Ministry of Health. An analytical, selective, and interpretive reading of the information was conducted to ensure the high quality and relevance of the theme. Out of the 32 studies reviewed, 11 were included based on their relevance, while 21 were excluded for lacking sufficient contextual data.

found in Australia, New Zealand, and European countries (North and East)<sup>7,12</sup>.

In the United Kingdom, Japan, Costa Rica, and Thailand, the influence of the prostate-specific antigen (PSA) blood test on the trend of prostate cancer incidence rates is still being determined. Conversely, in the United States, this incidence has been decreasing since the 2000s due to reduced PSA screening. From 2011 to 2015, the rate decreased by around 7% per year<sup>6,7,12</sup>.

In Brazil, prostate cancer was responsible for 15,391 deaths in 2017, translating to a risk of 15.25 per 100,000 men<sup>8</sup>. The main risk factor is age, with the incidence rising 50 years onwards<sup>9</sup>. Regarding the etiology, despite being a very common cancer, its causes remain poorly understood<sup>11,13</sup>. Additional risk factors include a family history of the disease, inherited genetic factors (e.g., Lynch syndrome and mutations in BRCA1 and BRCA2)<sup>6</sup>, smoking, excess body fat<sup>10</sup>, and exposure to aromatic amines, arsenic, and petroleum products.

### **STRATEGIES FOR EARLY DETECTION OF PROSTATE CANCER**

Early cancer detection is a strategy aimed at identifying tumors at their earliest stages, increasing the likelihood of successful treatment. Detection can be achieved via clinical, laboratory, or radiological exams for individuals exhibiting signs and symptoms of the disease (early diagnosis), or via periodic exams in those without signs or symptoms (screening) but belonging to higher-risk groups. These assessments involve a rectal examination and a blood test to evaluate PSA dosage<sup>14</sup>.

The literature is not clear whether prostate cancer screening offers more benefits than risks. Therefore, the National Cancer Institute (INCA) does not recommend routine tests for this purpose. If men actively seek screening for this type of tumor, the Institute also recommends that they should be informed about the risks and possible absence of benefits of routine tests<sup>14</sup>.

Early diagnosis of prostate cancer enables better treatment results and should be sought by investigating signs and symptoms, such as difficulty urinating, decreased urine

output, the need to urinate more often during the day or at night, and blood in the urine<sup>14</sup>. Although these symptoms are not caused by cancer in most cases, they need to be investigated by a physician<sup>14</sup>.

Based on the National Policy for Comprehensive Care in Men's Health (PNAISH)<sup>15</sup>, which aims to promote health initiatives for men aged 20 to 59, the Ministry of Health advises that organized activities occur not just in November but year-round. These activities should cover violence and accident prevention, access and support services, and health matters like sexual and reproductive health, diabetes, and hypertension, among others.

### **FINAL CONSIDERATIONS**

The Blue November movement became an emblematic movement in many countries, focusing on various actions to ensure the integrity of the health of men, especially prostate cancer. Even now, the movement remains a compelling strategy for prostate cancer screening.

This literature review confirmed that, excluding non-melanoma skin cancer, prostate cancer is the leading cancer across all Brazilian regions, and the global estimate points to prostate cancer as the second most common among men, highlighting the need for proactive measures in prevention and early treatment.

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