The effect of vitamin d supplementation on breast cancer risk

Health & Medicine, Cancer



The impact of vitamin D supplementation on breast cancer prevention and diminishment has become a matter of sustained debate. This study proposes to utilize a combination Post-Positivism approach to assess the practice. With emerging studies both upholding and decrying the efficacy of Vitamin D in relation to breast cancer, there is a need to pursue this study in order to clarify the potential.

1. Introduction

Breast Cancer and vitamin D supplementation have become a substantial topic of debate as a drive to find a solution continues. This study fills a gap in existing research by assessing what impact the addition of Vitamin D has on the prevention and diminishment of Breast Cancer.

1.1 Background

The efficacy of Vitamin D supplementation in order to prevent or diminish Breast Cancer has become a matter of sustained debate. The Mohr, Gorham and Alcaraz study argues that there is a direct benefit to the reduction of breast cancer by adding Vitamin D both before and after a cancer diagnosis. Others cite the impact of Vitamin D on Breast Cancer as only negligible. Still, others cite the early stage of research as an obstacle to fully embracing the value of Vitamin D. Yet, further studies link Vitamin D and the method of ingestion as a pivotal issue. The goal of this study would be to further determine the role of Vitamin D in relation to breast cancer in women.

1. 2 Aims and Objectives

In this section, the research aims, objectives, and research questions will be outlined.

The following research objectives have been determined: What is the effect of vitamin D supplementation on breast cancer risk. What is the vitamin D status, determined by 25-OH vitamin D levels, among women diagnosed with breast cancer

1.3 Research Questions

The research question is: What are the known associations with Vitamin D supplementation and breast cancer

What are the key factors that have been impacted by the Vitamin D supplementation of cancer? Does the means of Vitamin D ingestion have an impact on the effectiveness? What is the potential for emerging research teaching?

2. 1 Factors that contribute to Breast Cancer

Deficiencies in all forms have long been credited with increasing the probability of cancer of all varieties. Factors including the lack of Vitamin D have been linked to breast cancer diagnosis in women. With lifestyle choices and long-term habits playing a pivotal role in a cancer diagnosis, the impact of a single element is debatable. Diseases including Rickets and osteomalacia are directly tied to vitamin D deficiency, making a breast cancer link plausible. The presence of or lack of vitamins is argued to impact a breast cancer diagnosis.

2. 2 Vitamin D and Breast Cancer supplementation in Women

A wide array of professionals ranging across clinical applications, autoimmunity, cardiology, and cancer fields agree that Vitamin D supplementation is a benefit to the effort to increase breast prevention efforts. Yet, Prentice et al (2013), while maintaining the moderate value of the supplementation practice, argue that the reduction in breast cancer occurs due to this factor is only suggestive, not conclusive.

2. 3 Vitamin D and Breast Cancer Prevention Option

Wolff and Guiliano (2011) have found that Vitamin D as a supplement is superior to dietary intake of vitamin D. This study charts a correlation between the incidents of breast cancer prevention and the dietary method of vitamin intake. It is insufficient to rely on any single indicator as a prevention mechanism. Further, the benefits of vitamin D are only at the observational stage and cannot be fully accredited (Ibid).

2.4Trends

The combination of Calcium/Vitamin D is providing an avenue for research towards a diminished rate of breast cancer. Conversely, Brunner, Wactawski-Wende, and Cann (2011) illustrate that there is no substantial reduction in breast cancer among their studies participants employing this combination.

3. Methodology

The methodology focuses on an explanation of the approaches considered: What is the effect of vitamin D supplementation on breast cancer risk? What

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is the vitamin D status, determined by 25-OH vitamin D levels, among women diagnosed with breast cancer?

3.1 Approach

Positivism, a quantitative method, provides solutions resting in math, producing empirical data. Interpretivism or qualitative uses the interpretive approach utilizing instruments like coding. Post-Positivism, a combination of the two is best suited to determine the impact of Vitamin D supplementation on breast cancer in women. Both inductive and deductive approaches were considered. Bryan et al (2007) view both approaches as ' connected' with distinct elements, but the connection is not fixed. Therefore settled the use of a mixed-method or post-positivism method was chosen as the best approach.

3. 2 Research Strategy

This study will collect and analyze empirical data. The utilization of bothprimary and secondaryresearch material will provide depth and fundamental clarity to the study. The empirical research in this study deals with an in-depth review of breast cancer cases, survivors, and relevant medical professionals. Primary data will be accumulated through the creation and utilization of a survey directly transmitted to breast cancer survivors and oncological professionals. Prior and existing case studies will be evaluated utilizing secondary sources alongside the application of a primary source survey issued to the breast cancer survivors and members of the oncologist community. This research strategy is best suited to facilitate a well-rounded evaluation of issues that promote various perspectives in order to gain a comprehensive understanding of the link between Vitamin D supplementation and breast cancer.

3. 4 Data Collection Methods and Instruments

The collection methods used in this study were: Primary data using Surveys from survivors and medical professionals. Secondary breast cancer data via journal and peer-reviewed article. The primary disadvantages rest in the limited capacity to check answers or develop further details. Further, obtaining primary data may be very high.

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