

Breast cancer: Literature Review

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This review aims to look at one of the most frequent cancers, breast cancer, and strategies for early detection and diagnosis to reduce breast cancer risk. Breast cancer is the most common malignancy in women and the second leading cause of cancer-related death. At some time in their lives, one out of every eight women will be diagnosed with breast cancer. Many people with breast cancer have no symptoms, which leads to a late diagnosis and treatment complications. As a result, screening is crucial for early detection of cancer, therefore enhancing survival chances (Jiang Li, 2018).

Is mammography screening beneficial: An individual-based stochastic model for breast cancer incidence and mortality

The benefits of mammography screening have been debatable, with several pieces of research yielding contradictory results. The purpose of the article is to determine the role of mammography in diagnosing breast cancer early. The article believes that the value of mammography will be determined by the effectiveness of cancer treatment and the aggressiveness of tumors.

Key Points

Based on the Canadian National Breast Screening Study (CNBSS), the author created a mathematical model of breast cancer incidence and death in a community. Tumor aggressiveness, which describes the growth rate, maximal tumor size, and age, is included in the model. The hazard rate of cancer death is dependent on tumor aggressiveness and identified

tumor size; therefore, the treatment response is individualized to some extent. In the CNBSS, the model accurately predicts cancer incidence and survival. The model was then used to calculate the benefit and harm of mammography screening. The advantage is defined in terms of increased 25-year survival and liability being assessed in terms of increased overdiagnosis.

Assumptions

The author believes that the success of cancer treatment and the aggressiveness of tumors will determine the value of mammography, based on the individual-based mechanistic model for breast cancer incidence and mortality, which follows five stages of breast cancer evolution and takes into account the effects of age on breast cancer incidence and all-cause death. Patients with the fastest-growing or possibly most significant tumors benefit the most from screening and experience the least harm, with age having just a minor impact.

Deficit/Conclusion

Patients who had an undiscovered tumor before the start of the research are overdiagnosed and have lower survival rates due to the treatment's side effects. Patients with the most extensive and most aggressive tumors gain the most from the treatment. Patients who develop cancer over the study's five years have a similar but milder pattern of overdiagnosis. There is no high survival cost of overtreatment of fast-growing but ultimately tiny tumors. From the result of the research, the author's prediction about the benefits of mammography in breast cancer was correct. I accept the authors' line of reasoning.

Second article title here

Here add in a summary of the article. Follow the MEAL paragraph formatting and use Grammarly.com. Be sure to cover all aspects within the rubric. Be sure to use double space and to tab over for your first line of a new paragraph.

Key Points

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Assumptions

Paragraph goes here discussing the assumptions of the article. Follow the MEAL paragraph formatting and use Grammarly.com.

Deficit/Conclusion

Paragraph goes here discussing the conclusion of the article. Follow the MEAL paragraph formatting and use Grammarly.com. Do you accept the authors' line of reasoning? What are the implications for this article? If nursing fails to accept this line of reasoning, what would the implications be?

Third article title here

Here add in a summary of the article. Follow the MEAL paragraph formatting and use Grammarly.com. Be sure to cover all aspects within the rubric. Be sure to use double space and to tab over for your first line of a new paragraph.

Key Points

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Assumptions

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Deficit/Conclusion

Paragraph goes here discussing the conclusion of the article. Follow the MEAL paragraph formatting and use Grammarly.com. Do you accept the authors' line of reasoning? What are the implications for this article? If nursing fails to accept this line of reasoning, what would the implications be?

Conclusion

Write a conclusion here in your overall paper. Follow the MEAL paragraph formatting and use Grammarly.com. Provide a summary/conclusion of the analysis of all three articles.

Discuss how the information can improve:

- Patient outcomes
- Nursing practice
- Evidence-based practice/Quality Improvement efforts
- Healthcare as a whole

References

Jiang, L., Gilbert, J., Langley, H., Moineddin, R., & Groome, P. A. (2018). Breast cancer detection method, diagnostic interval and use of specialized diagnostic assessment units across Ontario, Canada. *Health promotion and chronic disease prevention in Canada : research, policy and practice*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6197611/>.

Le, T. T. T., & Adler, F. R. (2020). Is mammography screening beneficial: An individual-based stochastic model for breast cancer incidence and mortality. *PLOS Computational Biology*.

<https://journals.plos.org/ploscompbiol/article?id=10.1371%2Fjournal.pcbi.1008036#sec007>.

*As you can see the reference is centered and is not bolded. The first line is NOT tabbed over, all other lines are, this is called hanging indentation. All references are double spaced. All sources should be listed in alphabetical order. Be sure to use the APA 7th edition and guide for your reference page.