

THE IMPACT OF DEPRESSION IN WOMEN ON CARDIOVASCULAR HEALTH: A SYSTEMATIC REVIEW

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Abstract: **Introduction:** Depression, a prevalent mental health condition, goes beyond emotional and psychological impacts, revealing complex connections with cardiovascular health, especially in young women. Therefore, it is necessary to carry out a systematic review, considering the influences of gender, age and psychosocial factors to elucidate the relationship between depression and cardiovascular health in women. **Goal:** To synthesize the relationship between gender, depression and cardiovascular health in existing literature, highlighting the differences in impact on women, in addition to risk factors and underlying mechanisms. **Methodology:** A systematic review was carried out by selecting studies in the MEDLINE-PubMed database (National Library of Medicine, National Institutes of Health) published between the years 2013 and 2023. The descriptors used were “Depression in woman AND Gender AND Cardiovascular health”. 418 studies were found, 5 of which were selected by a critical analysis, including only clinical trials. **Results:** The studies analyzed in this review revealed a close relationship between depression and cardiovascular health, with evidence that depression is associated with a higher prevalence and severity of coronary artery diseases in both sexes. However, recent studies emphasize notable differences in the effects of depression between genders. Young women under the age of 55 face an even higher cardiovascular risk compared to men in the same age group and older women. **Discussion:** It is noted that women have a higher prevalence of depressive symptoms which, consequently, increases the risk of cardiovascular diseases (CVD). This can be explained by hormonal factors, such as variation in estrogen levels that intensify the production of pro-inflammatory cytokines. As a result, the cardiovascular system is compromised due to an increase in inflammatory reactions.

Conclusion: Depression is a relevant risk factor for the development of CVD, especially in women. This biological difference is related to a neuroendocrine discrepancy between males and females, which makes women more susceptible to inflammatory events that are harmful to cardiovascular health. Given the above, it is necessary to develop strategies in Basic Health Care that take into consideration, female individualities in the cardiac and mental spheres, in order to provide them with a better quality of life.

Keywords: Depression; Cardiovascular diseases; Gender.

INTRODUCTION

Depression is a prevalent mental health condition that affects more women than men and has been linked to an increased risk of cardiovascular disease (CVD)¹. This relationship between depression and cardiovascular health is complex and can be attributed to several factors, such as obesity, sedentary lifestyle, dyslipidemia, alcoholism and tobacco use.⁴

This condition affects women twice as often as men and, the earlier the onset of the disease, the more serious the prognosis¹. Around 20 to 25% of women suffer at least one episode of depression in their lifetime, and the recurrence rate of the disease is associated with an increased risk of cardiovascular disease¹.

Patients diagnosed with depression have an increase in cardiovascular risk factors, such as obesity, physical inactivity, dyslipidemia, alcoholism and smoking⁴. These risk factors contribute to the clinical worsening of patients, especially after an acute myocardial infarction³.

Furthermore, depressive symptoms have consequences such as an increased incidence of cardiovascular diseases, coronary disease, heart failure, stroke, increased risk of dialysis complications and reduced quality of life⁵.

Therefore, depression not only affects women's mental and emotional health, but also has significant implications for cardiovascular health.

This condition has a significant impact on women's cardiovascular health, and it is essential to address this relationship to improve quality of life and reduce the risk of cardiovascular diseases.

GOAL

Investigate the relationship between depression and cardiovascular risk in women, highlighting the importance of understanding how these two conditions interact, contributing to a more comprehensive understanding of the clinical implications and opportunities for intervention in a women's health context.

METHODOLOGY

A systematic review of the literature was carried out by selecting studies in the MEDLINE-PubMed database (National Library of Medicine, National Institutes of Health) published between the years 2013 and 2023. 418 studies were found, of which 5 were selected by a critical analysis. Articles published in English and/or Portuguese that addressed the relationship between depression and cardiovascular risk in women and available in full were included in this review. The descriptors used were "Depression in woman AND Gender AND Cardiovascular health". Through the analysis, articles that did not meet the inclusion criteria were excluded, such as animal studies, narrative reviews and studies with mixed samples of men and women.

RESULTS

The studies analyzed in this review revealed a close relationship between depression and cardiovascular health, with evidence that depression is associated with a higher prevalence and severity of coronary artery diseases in both sexes. However, recent studies emphasize notable differences in the effects of depression between genders. Young women under the age of 55 face an even higher cardiovascular risk compared to men in the same age group and older women ⁵.

DISCUSSION

It is noted that women have a higher prevalence of depressive symptoms which, consequently, increases the risk of cardiovascular diseases (CVD). This can be explained by hormonal factors, such as variation in estrogen levels that intensify the production of pro-inflammatory cytokines. As a result, the cardiovascular system is compromised due to an increase in inflammatory reactions.

CONCLUSION

Depression is a relevant risk factor for the development of CVD, especially in women. This biological difference is related to a neuroendocrine discrepancy between males and females, which makes women more susceptible to inflammatory events that are harmful to cardiovascular health. Therefore, depression has a significant impact on women's cardiovascular health, and it is essential to address this relationship to improve quality of life and reduce the risk of cardiovascular disease. It is important that healthcare professionals are aware of depressive symptoms in women and that women are encouraged to report more about their health. Furthermore, it is necessary to promote actions that stimulate mental health and improve the physical health, social, emotional and professional interactions of these individuals. Therefore, more research is needed to better understand the relationship between depression and cardiovascular health in women and to develop effective intervention strategies.

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