

Strategies for Cardiovascular Health Promotion and Prevention

Robert Mentz*

Department of Cardiology, Duke University School of Medicine, Durham, North Carolina, USA

Introduction

Cardiovascular disease is a leading cause of mortality worldwide, affecting people of all genders and backgrounds. However, specific healthcare considerations are required for transgender individuals, whose gender identity differs from the sex assigned to them at birth. Transgender individuals may experience unique cardiovascular health risks related to both hormonal therapies and social determinants of health. In this article, we will explore the relationship between cardiovascular disease and transgender individuals, examining the potential risk factors, challenges in healthcare access, and strategies for cardiovascular health promotion and prevention. Transgender individuals, also known as individuals, have a gender identity that differs from the sex assigned to them at birth. For example, a person assigned male at birth who identifies as a woman is a transgender woman. Transgender individuals may undergo gender-affirming hormone therapy or gender-affirming surgeries as part of their transition. These interventions can have various physiological and psychological effects, including implications for cardiovascular health. Transgender women often undergo HRT with estrogen, which can impact cardiovascular health. Estrogen therapy may alter lipid profiles, increasing the risk of venous thromboembolism, and affect cardiovascular risk factors like blood pressure and weight. Hormone Therapy for Transgender Men: Testosterone therapy, commonly used by transgender men can lead to changes in lipid profiles, insulin resistance, and potential weight gain. Transgender individuals may experience chronic stress and discrimination, which can contribute to mental health issues like depression and anxiety. These factors may indirectly impact cardiovascular health by increasing the risk of behaviors such as smoking, unhealthy eating, and physical inactivity.

Description

Many transgender individuals face barriers to accessing healthcare, including cardiovascular care. Discrimination and a lack of culturally competent healthcare providers can discourage seeking medical attention when needed. The high prevalence of mental health issues in transgender individuals, including depression and anxiety, can indirectly affect cardiovascular health by influencing health behaviors and adherence to medical advice. Transgender individuals are more likely to experience economic disparities, including higher rates of unemployment and poverty. Socioeconomic factors can contribute to cardiovascular risk through limited access to healthy food, safe housing, and preventive healthcare. The impact of hormone therapy on cardiovascular risk remains an active area of research. It is essential to recognize that while hormone therapy may influence certain cardiovascular risk factors,

such as lipid profiles and blood pressure, the overall cardiovascular risk in transgender individuals is likely multifactorial and influenced by various individual factors. Estrogen therapy can lead to changes in lipid profiles, including increases in high-density lipoprotein cholesterol and decreases in low-density lipoprotein cholesterol. However, the impact on cardiovascular outcomes is not yet fully understood. Estrogen therapy is associated with a higher risk of venous thromboembolism, which includes deep vein thrombosis and pulmonary embolism. The absolute risk remains relatively low but should be considered when assessing cardiovascular risk. Some transgender women may experience increases in blood pressure while on estrogen therapy. Monitoring blood pressure and managing hypertension risk factors is essential. Testosterone therapy can lead to changes in lipid profiles, including increases in LDL cholesterol and decreases in HDL cholesterol. These changes may contribute to cardiovascular risk [1].

Some transgender men may develop insulin resistance, which can increase the risk of type 2 diabetes and cardiovascular disease. Promoting cardiovascular health and preventing CVD in transgender individuals involves a multidisciplinary approach that addresses both medical and social determinants of health. Transgender individuals should receive gender-affirming care that includes monitoring of hormone therapy and its potential cardiovascular effects. Healthcare providers should also address any concerns related to gender dysphoria. Routine cardiovascular screening, including assessments of blood pressure, lipid profiles, and blood glucose levels, should be part of transgender healthcare. Access to mental health services is crucial, given the high prevalence of mental health issues among transgender individuals. Addressing mental health can indirectly promote cardiovascular well-being. Encourage a balanced diet rich in fruits, vegetables, whole grains, and lean proteins. Address any dietary concerns related to hormone therapy, such as lipid profile changes. Promote regular physical activity, which can help manage weight and reduce cardiovascular risk factors. Support transgender individuals in quitting smoking, as smoking is a significant cardiovascular risk factor. Provide stress-reduction strategies and support to mitigate the impact of chronic stress and discrimination. Healthcare providers should receive training in providing culturally competent care to transgender individuals to reduce discrimination and increase trust. Advocate for policies that improve access to affordable healthcare, as economic disparities can influence cardiovascular health. Develop and disseminate resources that address the unique cardiovascular health needs of transgender individuals. Support and participate in clinical research to better understand the cardiovascular effects of hormone therapy in transgender individuals and identify effective interventions [2].

Educate healthcare providers about transgender health issues, including cardiovascular risk factors and the management of hormone therapy. Cardiovascular disease is a significant concern for transgender individuals, who may experience unique risk factors related to hormone therapy and social determinants of health. Comprehensive healthcare, regular cardiovascular screening, and a focus on lifestyle modifications can help promote cardiovascular health and prevent CVD in this population. Ongoing research and healthcare provider education are essential to addressing the specific cardiovascular needs of transgender individuals and reducing health disparities. Cardiovascular disease is a leading cause of morbidity and mortality worldwide. It encompasses a range of conditions affecting the heart and blood vessels, including coronary artery disease, heart failure, stroke, and hypertension. While CVD affects individuals of all genders, there is emerging evidence suggesting that transgender individuals may face unique

*Address for Correspondence: Robert Mentz, Department of Cardiology, Duke University School of Medicine, Durham, North Carolina, USA, E-mail: Robertmentz5@gmail.com

Copyright: © 2023 Mentz R. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received: 01 September, 2023, Manuscript No. jigc-23-116520; Editor assigned: 04 September, 2023, PreQC No. P-116520; Reviewed: 14 September, 2023, QC No. Q-116520; Revised: 19 September, 2023, Manuscript No. R-116520; Published: 26 September, 2023, DOI: 10.37421/2684-4591.2023.7.212

cardiovascular health challenges. In this article, we will explore the intersection of cardiovascular disease and transgender health, examining the potential risk factors, disparities, and healthcare considerations for this population. Transgender individuals are those whose gender identity differs from the sex assigned to them at birth. For example, a person assigned male at birth who identifies as a woman is a transgender woman. Likewise, a person assigned female at birth who identifies as a man is a transgender man. Some individuals may identify as non-binary, genderqueer, or genderfluid, meaning they do not strictly adhere to the binary concept of male or female gender. Transgender individuals may experience specific cardiovascular risk factors and disparities, which can influence their overall heart health [3].

These risk factors include. Many transgender individuals undergo hormone therapy as part of their gender-affirming care. Hormone therapy can include estrogen or testosterone, and it may influence cardiovascular risk. For example, estrogen therapy may lead to an increased risk of venous thromboembolism while testosterone therapy may be associated with changes in lipid profiles and potential cardiac effects. Transgender individuals may experience higher rates of depression, anxiety, and psychological stress, which can contribute to unhealthy behaviors such as smoking, excessive alcohol use, and poor dietary choices. Discrimination, stigma, and social marginalization can lead to chronic stress and adversely affect cardiovascular health. Transgender individuals may face discrimination in healthcare settings, which can deter them from seeking necessary medical care. Barriers to healthcare access, including financial constraints, lack of insurance coverage, and limited access to culturally competent care, may result in delayed diagnosis and management of cardiovascular risk factors. Some transgender individuals may use tobacco or substances as a coping mechanism, which can increase cardiovascular risk. Hormone therapy, changes in appetite, and other factors may contribute to weight gain and obesity in transgender individuals. Obesity is a well-established risk factor for cardiovascular disease. Mental health concerns, discrimination, and social isolation may contribute to physical inactivity, which is associated with an increased risk of CVD. Emerging research indicates that transgender individuals may face disparities in cardiovascular health when compared to cisgender individuals. Transgender women receiving estrogen therapy may be at an elevated risk of venous thromboembolism, including deep vein thrombosis and pulmonary embolism. Some studies suggest that transgender individuals may have higher rates of hypertension compared to cisgender individuals [4].

This may be related to hormone therapy and other risk factors. Hormone therapy, particularly testosterone, can influence lipid profiles, potentially leading to unfavorable changes such as increased LDL cholesterol levels. Limited data indicate that transgender individuals may experience an increased risk of certain cardiovascular events, such as ischemic stroke. Discrimination and lack of access to transgender-affirming healthcare can result in delayed or inadequate cardiovascular care, contributing to disparities in outcomes. Providing comprehensive and gender-affirming healthcare for transgender individuals is essential to address their unique cardiovascular health needs. Healthcare providers should consider the following when caring for transgender patients. Healthcare providers should receive training in cultural competency to ensure they understand the unique needs and experiences of transgender individuals. Provide access to gender-affirming care, including hormone therapy, mental health support, and surgical options, while addressing the cardiovascular risks associated with these treatments. Conduct thorough cardiovascular risk assessments, including evaluating lipid profiles, blood pressure, and other risk factors, while considering the potential impact of hormone therapy. Offer individualized counseling on cardiovascular risk factors, lifestyle modifications, and the potential risks and benefits of hormone therapy. Recognize the importance of mental health in cardiovascular

risk management and provide appropriate referrals and support for mental health concerns [5].

Conclusion

Eliminate barriers to healthcare access, including addressing insurance coverage disparities and ensuring that transgender individuals have access to welcoming and inclusive healthcare settings. Encourage regular follow-up care to monitor cardiovascular risk factors and overall health. Addressing cardiovascular health in transgender individuals requires further research to better understand the specific risk factors, disparities, and potential interventions in this population. Longitudinal Studies: Conduct longitudinal studies to track cardiovascular outcomes in transgender individuals receiving hormone therapy and other gender-affirming treatments. Investigate the effectiveness of lifestyle interventions, including diet, exercise, and smoking cessation programs, in reducing cardiovascular risk in transgender individuals. Examine the relationship between mental health, psychological stress, and cardiovascular outcomes in transgender individuals. Develop and evaluate models of gender-affirming care that integrate cardiovascular risk assessment and management. Expand healthcare provider training in transgender health to ensure that providers are knowledgeable and culturally competent. Cardiovascular disease is a significant concern for all individuals, including transgender individuals who may face unique cardiovascular risk factors and disparities. Hormone therapy, mental health, social determinants of health, and barriers to healthcare access can all influence cardiovascular health in this population. Providing gender-affirming and culturally competent care, conducting further research and addressing cardiovascular risk factors are essential steps in promoting cardiovascular health and reducing disparities among transgender individuals.

Acknowledgement

None.

Conflict of Interest

None.

References

1. Pruetz, Jay D., Caitlin Carroll, Luca U. Trento and Ruey-Kang Chang, et al. "Outcomes of critical congenital heart disease requiring emergent neonatal cardiac intervention." *Prenat Diagn* 34 (2014): 1127-1132.
2. Dorfman, Aaron T., Bradley S. Marino, Gil Wernovsky and Sarah Tabbutt, et al. "Critical heart disease in the neonate: Presentation and outcome at a tertiary care center." *Pediatr Crit Care Med* 9 (2008): 193-202.
3. Pedra, Carlos AC, Juliana R. Neves, Simone RF Pedra and Carlos R. Ferreira, et al. "New transcatheter techniques for creation or enlargement of atrial septal defects in infants with complex congenital heart disease." *Catheter Cardiovasc Interv* 70 (2007): 731-739.
4. Feltes, Timothy F., Emile Bacha, Robert H. Beekman III and John P. Cheatham, et al. "Indications for cardiac catheterization and intervention in pediatric cardiac disease: A scientific statement from the American Heart Association." *Circulation* 123 (2011): 2607-2652.
5. Aldoss, Osamah and Abhay Divekar. "Modified technique to create diabolo stent configuration." *Pediatr Cardiol* 37 (2016): 728-733.

How to cite this article: Mentz, Robert. "Strategies for Cardiovascular Health Promotion and Prevention." *J Interv Gen Cardiol* 7 (2023): 212.