Cardiovascular Care of the Third Gender: Indian Perspective

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Cardiovascular disease (CVD) affects everyone, including the transgender. Unfortunately, a significant disparity exists in the care of the transgender compared to the cisgender population. One of the major causes of this disparity is the societal paradigm where gender is viewed as a binary variable. Of late, there has been a transformation in the societal understanding of gender, where gender is being acknowledged as a spectrum worldwide.

In April 2014, Supreme Court of India recognized transgender people as the “third gender” in a judgment that also observed that this community faces “large and pronounced discrimination” in health care. In India, the transgender population as per the 2011 Census is about 4.9 lakhs and their numbers have probably doubled by now.

CVD Risk Among the Transgender

There is a higher prevalence of the CVD risk factors like tobacco use, lower levels of physical activity, and usage of (gender affirming) hormonal therapy (especially estrogen) among the transgender population. Also, the data from previous studies have revealed that the major social determinants of CVD risk are highly prevalent in them. Higher rates of unemployment, homelessness, low socioeconomic status, psychosocial stress, depression, and suicidal tendencies portend a higher CVD risk among the transgender population.

The novel study conducted by Alzahrani et al using Behavioral Risk Factor Surveillance System data categorizing transgender as a separate gender group, has found that transgender males and females have higher rates of prior myocardial infarction (MI) than cisgender individuals (except when comparing transgender women versus cisgender men). Another study by Streed et al reported that cross-sex hormone therapy in transgender men was associated with the potential of elevated blood pressure, insulin resistance, and dyslipidemia; and with an increased risk for thromboembolism and MI for transgender women. There is paucity of published data about the prevalence of CVD and its risk factors in Indian transgender population, although the 2011 Census did mention the rates of unemployment and socioeconomic status of the transgender population in India and its states.

Although gender-affirming medical interventions have been associated with variable CVD risk, they do confer some benefits for the transgender. They decrease the rates of depression and anxiety along with an improvement in overall psychological function. It decreases the high suicidal tendency present before gender transition. Any analysis of the possible negative effects of hormone therapy on CVD should take into consideration the significant (confounding) benefits of hormone therapy on psychosocial determinants of health resulting in healthier lifestyle choices.

Barriers in Access to Health Care

Multiple barriers prevent the transgender population (trans people) to have better access to the portals of health care. They tend to delay primary care and preventive visits because there is a fear of being treated differently. Many trans people avoid seeking medical care because of prior negative health encounters where they were ill-treated. Transgender people are also reluctant to reveal their bodies, as they are unable to find a culturally competent health care provider, especially if they have not fully transitioned with hormone or surgical treatments. For people undergoing transitions, there are

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hardly any government hospitals that offer medical services in India. As a result of the discrimination they face and in the absence of steps to end this discrimination, many transgender people turn to self-medication, alternative medicine, and even unlicensed doctors.

**Problems Faced by Health Care Professionals**

Health care for transgender people in India is fraught with stigma and misinformation. Transphobia, a dislike of or bias against transgender people, is prevalent in medical professionals too, who remain largely uninformed about gender identity issues. Transphobia in India’s health care system merely reflects broader hostility in society as a whole. Despite government campaigns, doctors still lack awareness about the physical anatomy of the transgender body—which has led to repeated, harmful cases of misgendering trans people and putting them in the wrong wards in hospitals. Health care professionals in India are not well informed about treatments that transgender people undertake to transition to another gender, such as hormone replacement therapy and sex reassignment surgery, leaving them ill-equipped to deal with this group’s particular needs. While government hospitals in India offer free or affordable cardiovascular care, their doctors often are not trained on how to deal with transgender people. The only transgender-focused care government hospitals provide is for sexual health and HIV prevention.

Studies on cardiovascular health and disease do not include trans people as subjects, preventing the provision of evidence-based cardiovascular care to the transgender and there is a dearth of evidence-based guidelines to address their specific health needs. All the CVD risk calculators have gendered (male/female) algorithms and are not patient affirming. The effect of genital surgery on CVD risk is also not included in these algorithms. The laboratory reference ranges are also gendered (e.g., lipid level cutoffs). The management of interactions of hormones in a transgender milieu and their impact on CVD risk is also not outlined in the guidelines/algorithms. These factors make it harder for the physician to practice evidence-based cardiology in trans people.

Advancing the cardiovascular health of trans people requires a multifaceted approach that includes stakeholders from multiple sectors to integrate best practices into health promotion and cardiovascular care of this population. Future research is needed to better understand the complex and multiple levels of psychological and social stressors that can impact the cardiovascular health of trans people and to develop and implement appropriate interventions that support improved cardiovascular health and overall well-being. As a clinician, each one of us should recognize these neglected strata of our society, by acknowledging that gender is non-binary and conduct ourselves and medical research accordingly, to ensure health equity and a better tomorrow for the cardiovascular health of this third gender.

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