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## Cardiac risk of transgender, let us take it seriously

## Riesgo cardiaco de los transexuales, tomémoslo en serio

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The cardiovascular community must face human rights regarding gender identity that demands specific knowledge and skills for cardiac disease prevention, diagnosis, and multidisciplinary interaction.

We are not discussing genetic and phenotypic sexual determination at birth, but the personal perception of a non-originally assigned gender, called transgender, in which someone seeks for medical interventions to alter the body to change from the born gender through the self-perceived one, on two conditions:

Transgender men, transmen, female-tomen, or FTM. The born women switch or want to change to men.

Transgender women, transwomen, male-tofemale, or MTF. The born men switch or want to change to women.<sup>1</sup>

To anticipate how often a person will need professional attention, let us look at the Mexican national statistics, considering that these concepts are relatively new and may exclude older people who feel uncomfortable declaring their gender identity. The National Institute of Statistics and Geography (INEGI from *Instituto Nacional de Estadística y Geografía*) estimates 0.9% transgender from the Mexican population that may seek medical services in all public institutes and private practice.<sup>2</sup> This information brought a recently published Mexican cardiology opinion.<sup>3</sup>

The current evidence points towards a myocardial infarction risk increase of over two-fold in FTM compared to cisgender men and four-fold compared to cisgender women. Contrarily, MTF has over two-fold risk against

cisgender women, suggesting FTM receives a significant risk impact.<sup>4</sup> This problem was mentioned in the Mexican Consensus on Chronic Ischemic Heart Disease. Non-invasive diagnosis, classification, and stratification. Mexican College of Interventional Cardiology and Endovascular Therapy (COMECITE).<sup>5</sup>

Hormonal basics in cisgenders indicate a progressive increase in cardiovascular risk in men. In contrast, there is a rapid rise in women after menopause, especially in early menopause, either natural or surgical.<sup>6</sup> The gender-affirming hormone therapy may be responsible for the risk mentioned above but also associates to double the risk for ischemic stroke on MTF against cisgender men, especially in prolonged hormonal therapy for more than six years. On prolonged oral hormone therapy, the same group has 20 to 40 times the risk for thromboembolic complications.<sup>7,8</sup>

Different publications render conflicting results regarding cardiovascular risk factors. Nonetheless, transgender people may have more incidence of smoking, increased body weight, alcohol and other substance abuse, sedentarism, inadequate nutrition (more fastfood preference), dyslipidemia, and especially HIV infection. The relationship between these risk factors and cardiac events is unclear, except for HIV infection, which unequivocally gives evident high risk.<sup>9</sup>

Minority stress deserves particular attention, yet being transgender is not easy but quite difficult and stressful due to the self-perception of rejection caused by transphobia, which leads to physical and psychological violence and isolation from society. The latter may be the

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more significant problem that this population face, provoking a higher tendency towards discrimination, depression, addictions, suicidal ideas and acts, poverty, margination from professional, family, and recreative activities, underemployment, self-medication and possible involvement in illegal activities. <sup>10-12</sup>

Finally, the more interesting issue concerns transgender people's medical service, which is unequal, delayed, less efficient, and not inclusive due to fear of mistreatment from the subjects and rejection from clinical staff, including physicians and other patients. This phenomenon creates a vicious circle that perpetuates and aggravates mental and physical morbidities.<sup>13</sup>

Concerning the so-called conscientious objection of medical and health personnel, recognized and protected by the Political Constitution of the United Mexican States, The Supreme Court warned (unconstitutionality action 54/2018) of the superlative risk that the absolute and unlimited exercise of this right could entail, especially against the sexual and reproductive rights of women and people of sexual and gender diversity, from the problematic situation in which they find themselves and their historical discrimination. It states that the objection must be compatible and not sacrifice the rights of the beneficiaries of health services. Consequently, the Supreme Court invalidated the article of the General Health Law that authorized the conscientious objection of medical and nursing personnel. That means that, as of today, Mexican law does not protect conscientious objection and that denying health service for reasons of conscience could lead to administrative, civil, or even criminal liability. Besides, refusing health services to sexually/gender diverse people puts their lives at risk by not addressing their high health risks. 14

Based on these concepts, our professional community should have a substantial change in transgender care, as follows:

Transgender is real, not fiction.

Transgender people need and seek medical attention for mental and physical morbidities.

They do not need our opinion regarding sexual genetic considerations.

Medical care must be inclusive and egalitarian.

Cardiologists should interact in the prevention of cardiovascular deterioration.

Mexican law does not currently protect conscientious objection.

This historical moment is a time for adaptation and interdisciplinary construction to improve transgender people's smooth and easy life.

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