

# The necessary gender perspective for the analysis of health problems

## *La necesaria perspectiva de género para el análisis de problemas de salud*

Jorge A. Álvarez-Díaz\*

Department of Health Care, Universidad Autónoma Metropolitana. Unidad Xochimilco, Mexico City, Mexico

### Abstract

*This work begins with the difference between sex and gender, then shows that the contrasts in the field of health between men and women can be explained: by the construction of gender of consultants and health service providers, by the structure of the services themselves of health (which also reflects gender constructions), and by the reproduction of gender patterns through education and research. The work shows the need to include a gender perspective in health research.*

**Keywords:** *Perspective of gender. Social sciences. Intersectionality.*

### Resumen

*Este trabajo inicia con la diferencia entre sexo y género, para mostrar que los contrastes en el campo de la salud entre hombres y mujeres pueden explicarse por la construcción de género de consultantes y de proveedores de servicios de salud, por la estructura de los propios servicios de salud (que refleja también construcciones de género) y por la reproducción de patrones de género a través de la educación y la investigación. El trabajo muestra la necesidad de incluir la perspectiva de género en la investigación en salud.*

**Palabras clave:** *Perspectiva de género. Ciencias sociales. Interseccionalidad.*

### Introduction

The first distinction that has to be established is between “sex” and “gender.” Sex corresponds to the set of phenotypic characteristics that express the inherited genotype and that place human beings at some point of a continuum, which has at both opposite ends individuals with complementary reproductive

potential (i.e., males and females of the human species). After sperm and oocyte binding, and the generation of a zygote, the set of sexual gonosomas, consisting of genes, is complemented, in such a way that the phenotypic effect will depend on the presence or absence of some genes that are key for differentiation. Depending on the received genomics, transcriptomics will be expressed, generating proteomics and their metabolomas, in such a way that embryonic

### Correspondence:

\*Jorge A. Álvarez-Díaz

Calzada del Hueso, 1100

Col. Villa Quietud, Del. Coyoacán

C.P. 04960, Ciudad de México, México

E-mail: bioetica\_reproductiva@hotmail.com

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development will gradually express the phenotype through the primitive gonad and the rest of structures of internal and external pelvic sexual organs, synthesis of hormones consequent to differentiation and maturation of the gonad, and thereby the impact on target organs, particularly the brain and musculoskeletal system. This succession of embryonic development events gives rise to genotypic sex (chromosomal and genetic) and phenotypic sex (gonadal, hormonal, encephalic, and morphological). However, these human possibilities have not always been clear. The cultural aspect has been to identify “men” and “women” from the phenotype, assuming that there are only two sexes from the biological point of view; if any phenotype was not entirely clear to the observer, it resulted in an anomaly, a “sexual differentiation disorder,” which placed the phenotype of a human being in an “intersex state.” Under the two sexes logic, the rest of possibilities entailed a problem and were placed “between two sexes,” and hence this nomenclature. Understanding that sexual differentiation processes are diverse, introduces the idea that there are various sexes and not only two.

On the other hand, gender has some problems for being theorized. First, because in the English language, the term gender does not exactly mean the same that is expressed by the Spanish word “*género*.” In English, “gender” refers to both biological and social characteristics. For example, the Oxford dictionary defines gender as follows: “either of the two sexes (male and female), especially when considered with reference to social and cultural differences rather than biological ones. The term is also used more broadly to denote a range of identities that do not correspond to established ideas of male and female”<sup>1</sup>. The development of the concept in the Spanish language has not been in this sense, and “gender” refers to a sociocultural construct that assumes a series of roles and attitudes that males and females should be expected to have, and which are, therefore, imposed and reinforced through different social structures (family, school, work, etc.). Since the traditional view has been based on the existence of two sexes, two possible cultural constructs have been assumed: the male (that which is expected and desirable in roles and attitudes from men) and the female construct (that which is expected and desired in roles and attitudes from women). The division between the masculine and the feminine nature has been fundamentally the exercise of power: while domination corresponds to the masculine nature

(following Pierre Bordieu), captivity corresponds to the feminine nature (following Marcela Lagarde). This view is the simplest regarding gender and has a series of problems. First, if there are not only two sexes, as already clarified, only two constructions cannot be established. Second, dichotomously understanding gender with an asymmetrical distribution of power (through “cisheteropatriarchy” or simply “patriarchy”) makes for some subjects to follow what is expected, desired, or socioculturally imposed, but not for others. Thus, then there would be “masculinities,” a “hegemonic masculinity” (following Antonio Gramsci), and “dissenting masculinities.” Similarly, there would be a “hegemonic femininity” and “dissenting femininities.” Actually, there are many social forms of being a man, as there are many forms of being a woman; in other words, we should simply talk about “masculinities” and “femininities.” There are other ways to explain binary gender positioning, and they may be bigeneric or gender free-flowing, or non-binary forms such as trigenerism or pangerism, and even queer positioning (where no rigid category fits).

We will talk in a dichotomous form about “men and women” and “male and female” hereafter to make the exposition easier. Starting with the distinction between sex and gender is relevant for several reasons. In clinical practice, biology has traditionally been understood as having a correlation or causal relationship with the presence or absence of disease. Therefore, from the epidemiological point of view, a registry has been sought with variables such as sex. Collective health has criticized biomedical model reductionism, highlighting that historical and sociocultural analysis of health practices and institutions shows that there are symbolic, political, socioeconomic, bioethical, etc., dimensions in health/disease processes. Thus, recognizing that there are historical and sociocultural, in addition to biomedical, determinants for health/disease processes, shows how necessary it is to address both sex and gender.

## Gender, medicine, and health

There is specialized literature in the English language that indicates that “gender differences in health result from a complex interaction of basic differences in biology”<sup>2</sup>. However, that will not be the sense when speaking about gender hereafter, but understanding it as a historical and sociocultural

construct. Thus, the differences in the field of health observed between men and women can be explained from different perspectives: by patients' gender construct, by health service providers gender construct, and by the structure of health services themselves, which also reflects constructs with regard to gender. Part of the explanation also lies in the reproduction of gender patterns in education and research.

Differences relative to patients' gender are somewhat more documented. Women interact with health services more often, both for prevention and treatment<sup>3</sup>. Women's life expectancy is generally higher than that for men; in addition, they are more likely to survive than their spouses<sup>4</sup>, they are more prone than men to have functional disabilities at advanced ages<sup>5</sup> and, therefore, they are the main users of long-term follow-up and care, including homes for the elderly<sup>6</sup>. In most indicators, women use more health services<sup>7</sup>. A possible explanation for this greater use of services is the so-called "health-seeking behavior," a behavioral pattern learned in women due to the caring role. According to this explanation, women use more services because they have been socialized to recognize and articulate body signs and symptoms to perceive a greater need for care and seek help from others<sup>8</sup>. Women's socialization for health-seeking behavior may reflect the cultural expectation that women should assume family care responsibilities. If the traditional social caring role has corresponded to women, they would be expected to seek health information more actively and also to be more tenacious for overcoming access barriers. According to reviews carried out since the mid-1980s, the differential risks acquired by gender are closely related to lifestyles and preventive health practices<sup>9</sup>.

There are also differences regarding health service providers gender, somewhat less studied. Various studies have demonstrated that men and women differ in communication styles; possible differences between male and female physicians have shown different types of doctor-patient communication, diagnostic process, and treatment. Female physicians communication style is more patient-oriented than that of male physicians, and male and female physicians differ in the use of additional tests; in particular, intimate examinations (vaginal or rectal examination) are performed less frequently in patients of the opposite sex. Male doctors prescribe medications more often; in particular, sedatives are

most often prescribed by male physicians to women. In addition, male and female medical students socialize differently, and professional socialization does not overcome differences in gender roles. With all this, it can be observed that the professional role of that who practices medicine is not neutral in terms of gender<sup>10</sup>. This is not a mere subjective or comfort issue. Whether gender has an impact on the objective quality of care is starting to be studied, and it appears to be that it does. In a very recent study, the effect of the surgeon's sex on the post-operative results of patients undergoing common surgical procedures was analyzed. Through a retrospective cohort, patients undergoing one of 25 surgical procedures carried out by a female surgeon were paired with patients undergoing the same operation by a male surgeon (by patient age, sex, and comorbidity, by surgeon work volume and age, and by hospital). Mortality, readmissions, and complications were evaluated. Patients treated by female surgeons had lower mortality at 30 days (statistically significant). Patients treated by female surgeons had similar surgical outcomes (length of stay, complications, and readmission) to those treated by male surgeons. These findings support the need for gender perspective inclusion in the training of health-care providers<sup>11</sup>.

There are also gender differences attributed to health services. This type of services, such as any historical and sociocultural structure, also responds to the society they serve. If in traditional social roles, men act as providers and women as caregivers, the role of workers corresponds to men. In many places, the worker status remains associated with being able to have access to health services<sup>12</sup>. This has other consequences as, for example, women using their own financial resources in a higher proportion as a funding source for their health problems. An investigation at the top 50 academic medical centers in the U.S. found that 32% offered specific men oriented health-care services, whereas 98% offered health services for women<sup>13</sup>. To enable providing health services in an equitable manner, there must be a greater understanding of the needs by gender and not only considering sex<sup>14</sup>.

The fact that these gender differences exist in patients, health service providers, and in the structure of services can be partially explained by educational aspects. In study plans and programs, gender perspective is usually absent<sup>15</sup>. In epidemiology, there is usually a systematic control of some variables, such

as age and sex, but it is uncommon for gender considerations to be made<sup>16</sup>. Many times, perhaps due to the influence of the term “gender,” when performing an analysis addressing sex, it is believed that gender-related aspects are being examined.

Max Weber considered that science is and should be neutral. At present, that point of view is unsustainable: every scientist evaluates, whether a social or natural scientist. Evaluations that have to do with gender are also present. It has been studied that when explaining biological processes such as fertilization (which apparently would only have to do with sex and pure biology, and not with gender or socio-cultural issues) considerations are made in which gender stereotypes are reproduced<sup>17</sup>. Considering the oocyte as a “sleeping beauty” (the generic role of captivity), waiting for one sperm among many millions, “the strongest,” to arrive and conquer it after “defeating” the rest (with the generic role of dominance), shows that at least there are metaphors that have gender biases<sup>18</sup>. Systematizing this kind of knowledge, it seems clear that throughout history, and even in the contemporary world, these cultural considerations have been filtered into the very process of science construction, with anthropocentric, ethnocentric, and androcentric biases<sup>19</sup>.

This should also be considered by medicine and other health-related disciplines. Even in the English language, with “gender” being understood as biological categories, it is possible realizing that evidence-based medicine provides little evidence on differences by sex<sup>20,21</sup>. Health data results assessment and analysis have been observed not to be equally performed if the main investigator is a man or a woman<sup>22</sup>.

## Where to head to?

Although studies that attempt to make approaches to health/disease processes with a gender perspective and not merely establishing differences by sex continue to emerge, it is also true that there are other considerations to make about social structures such as, for example, social class. This concept has been almost ignored when addressing medical and health issues<sup>23</sup>. Probably, one of the richest concepts to address this point is a feminist contribution: “intersectionality.” This concept tries to provide frameworks to study mechanisms of discrimination through subordination interactions and not only the relationship between dominance and captivity of the

masculine over the feminine nature in terms of gender but also by addressing aspects such as social class, sex-generic identity, sexual orientation, ethnicity, religion, national origin, and disability.<sup>24,25</sup>. All of this show that health research from a gender perspective must continue to challenge andronormative ethnocentrism by demonstrating differences due to gender issues and revealing the consequences for health/disease processes of gender established power inequalities and other forms of power exercise in which subordination exists<sup>26</sup>.

To close, one example that has been studied (although not enough) is type 2 diabetes mellitus (DM2). Mexico ranks second in Latin America and sixth in the world in terms of DM2 prevalence, with about 11.5 million cases. The most recent genetic epidemiology review evaluated 68 polymorphisms of 41 genes, and 26 of them were associated with DM2 risk (ABCA1, ADRB3, CAPN10, CDC123/CAMK1D, CDKAL1, CDKN2A/2B, CRP, ELMO1, FTO, HHEX, IGF2BP2, IRS1, JCFQ1, KCNQ1, LOC387761, SIRT1, SLC30A8, TCF7L2, and TNF- $\alpha$  genes); overall, 21 of the 41 analyzed genes were associated with DM2 in the Mexican population<sup>27</sup>. However, in genetic studies, an additive effect is observed when variables such as age, education, body mass index, ancestry, and sex<sup>28</sup> are considered. Another work sought evidence in investigations that show inequalities between men and women with DM2 in terms of prevalence, incidence, complications, and mortality, and barely found 22 works, out of which six showed significant difference in prevalence, eight in control and complications, and eight in mortality. In most works, no effects attributable to biological factors were found, which is why they recommend that, to understand the differences, indicators with a gender perspective should be included in investigations<sup>29</sup>.

If we switch from genetic epidemiology to social epidemiology<sup>30</sup>, an approach that is as necessary or more can be obtained in the case of DM2. This is because, in the case of chronic diseases, their onset, development, and outcome are intimately linked to psychosocial aspects<sup>31</sup>. In 2013, the main cause of disability-adjusted life years in Mexico was DM2<sup>32</sup>. According to the last National Health and Nutrition Survey, in 2012, the combined prevalence of overweight and obesity was 71.2% (which entails an increase of 15.2% over the past 12 years), with 73% in women and 69.4% in men; as for obesity alone, the prevalence was 37.5% in women and 26.8% in men<sup>33</sup>. This is correlated with changes in

eating patterns, the analysis of which shows that, between 1961 and 2009, energy originating from grains and legumes was reduced, and energy from sugars, vegetable fats, and animal-origin foods increased at the same time. The socioeconomic deterioration that modified the diet and increased diabetes mortality is considered to be related to the trade opening of the country, a lack of economic growth, increased inequality, increased informal economy, poor support for the agricultural sector, drop of wages relative to the market basket (food and non-food), healthy foods relative price increase versus processed foods, and deregulation of the food market<sup>34</sup>.

The aforementioned intersectionality can be shown with health research. Being a woman is a social determinant for suffering from DM2<sup>35</sup>. In addition, being poor is also a social determinant for suffering from DM2<sup>36</sup>. Being a woman and poor determines a worse prognosis in the course of DM2<sup>37,38</sup>. The most recent (2017) and larger meta-analysis (1.7 million men and women) provides very clear data<sup>39</sup>: low socioeconomic level is one of the strongest indicators of morbidity and premature mortality worldwide. Poverty shortens life to a larger extent than obesity, alcohol, and hypertension. Evidence says that inequality kills. Does the health of the country matter the same, both that of the poor and that of the rich? Does women's health interest the same as that of men?

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## Conflicts of interest

The author declares that there were no conflicts of interest during the preparation of this work.

## Ethical disclosures

**Protection of human and animal subjects.** The authors declare that no experiments have been performed on humans or animals for this research.

**Confidentiality of data.** The authors declare that no patient data appear in this article.

**Right to privacy and informed consent.** The authors declare that no patient data appear in this article.

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