**In healthcare, biases jeopardize health equity. Education and research are the keys to a fairer system.**

When we're not feeling our best, seeking medical care is a natural step. However, does everyone receive equal treatment within a hospital setting, regardless of differences in gender/sex, ability, or race? Or do specific groups face greater challenges in accessing the treatment they require?

Biases are, to some extent, a part of human nature, but in the context of healthcare, they should be eradicated, as they contribute to worse outcomes for particular populations.

In this article, we will examine three medical biases: gender bias, disability discrimination, and racial bias. It's important to note that these biases aren't the only ones prevalent in the healthcare system. There are additional biases related to factors such as age, education, weight, and more.

**Gender bias**

Women account for more than 50 percent of the world's population. Multiple studies have shown that women are more likely to receive [inadequate pain relief](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10407111/#:~:text=Compared%20to%20men%2C%20women%20receive,prescriptions%20than%20men%20(38).) compared to men and are often prescribed antidepressants or psychotherapy instead. Dismissing women's pain can lead to missed or delayed diagnoses and, consequently, worse outcomes. This is just one example of how the medical system fails women.

[Women also exhibit different symptoms for certain diseases](https://www.webmd.com/a-to-z-guides/ss/slideshow-conditions-affect-men-women-differently) than men, such as heart attacks, strokes, or multiple sclerosis. For a long time, these gender-specific differences went unrecognized, leading to more frequent misdiagnoses of women and premature discharges during life-threatening events. This may also contribute to the reason why women are often [diagnosed later in life](https://www.biotechniques.com/news/women-are-diagnosed-later-than-men/) than men.

Finally, there is also a gender bias in clinical studies. Historically, [pharmaceutical clinical trials](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8812498/) were conducted primarily with male patients and then generalized to females. Even when a [drug's concentration](https://www.prevention.com/health/a20481774/medications-effects-on-women/) is tested separately for the two sexes, the instructions often specify concentration based on factors like weight or age rather than considering sex. This is concerning because some medications cause [more side effects in women](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3644551/#:~:text=Sex%2Ddifferences%20in%20these%20parameters,greater%20for%20men%20than%20women.) and require lower dosages. This effect is linked to the different hormone levels and metabolism in men and women.

**Disability discrimination**

Individuals with disabilities often experience [worse health outcomes](https://www.who.int/news-room/fact-sheets/detail/disability-and-health#:~:text=Some%20persons%20with%20disabilities%20die,disabilities%20face%20many%20health%20inequities.) and receive follow-up appointments less frequently than the general population.

For the [deaf community](https://cbm-global.org/resource/barriers-to-healthcare-access-for-deaf-nigerian-women-and-girls-during-emergencies), this discrepancy can be attributed to limited access to health information and language barriers. Regrettably, obtaining sign language translators is a challenge for many deaf individuals, and numerous hospitals do not provide these services. Additionally, accessing medical care proves more daunting because appointments are typically scheduled via phone, a communication method many deaf people do not utilize.

Furthermore, individuals with mobility challenges may encounter difficulties in reaching clinics and hospitals independently, unless they receive assistance from family members or public support institutions.

Compounding these issues, a substantial number of physicians lack the necessary education to provide accommodations for individuals with disabilities. As a result, many patients with disabilities find themselves [denied the care](https://news.northwestern.edu/stories/2022/10/health-care-discrimination-people-with-disabilities/) they require. These disparities underscore the urgent need for improved accessibility and accommodations within the healthcare system to ensure equitable care for all.

**Racial Bias**

There are many stereotypes about people of color that persist, and in the realm of healthcare, they have far-reaching consequences. In the United States, a troubling 42% of Black individuals and 21% of Hispanic individuals report feeling that they are [treated differently in hospital settings](There%20are%20many%20stereotypes%20about%20people%20of%20color%20that%20persist%2C%20and%20in%20the%20realm%20of%20healthcare%2C%20they%20have%20far-reaching%20consequences.%20In%20the%20United%20States%2C%20a%20troubling%2042%25%20of%20Black%20individuals%20and%2021%25%20of%20Hispanic%20individuals%20report%20feeling%20that%20they%20are%20treated%20differently%20in%20hospital%20settings%2C%20underlining%20the%20stark%20healthcare%20disparities%20experienced%20by%20these%20communities.), underlining the stark healthcare disparities experienced by these communities.

The impact of these disparities goes even further. During the COVID-19 pandemic, when [pulse oximeters](https://www.nature.com/articles/d41586-022-03161-1) were used more frequently to measure blood oxygen levels, many people of color did not receive the treatment they needed. This was due to the oximeters overestimating blood oxygen, resulting in delayed diagnoses and, consequently, delayed oxygen treatment.

Moreover, the maternal mortality rate for women of color in the United States is three times higher than that for white women. This isn't due to genetic [factors or lifestyle choices](https://www.nytimes.com/2023/07/12/health/maternal-deaths-americas-un.html) but, in part, results from healthcare providers' limited exposure to diverse pelvic anatomies in their training and experience. This lack of diversity in their education can lead to unnecessary medical interventions during childbirth. Providers, unfamiliar with the full range of pelvic anatomies, may err on the side of caution, opting for interventions that are not always medically warranted. Additionally, misconceptions about black patients having enhanced blood clotting abilities may cause healthcare providers to react too slowly to cases of severe hemorrhaging after childbirth.

**What know?**

Especially intersecting populations are most vulnerable to medical bias, so it is crucial to protect these groups. To address this issue, the potential of AI in healthcare is promising, as it can provide a more analytical and unbiased approach to medical decision-making. Furthermore, comprehensive education and research on this matter, both for healthcare professionals and the general public, plays a pivotal role in combating bias. By fostering awareness and actively working to eliminate biases, we can strive for a more equitable and inclusive healthcare system.