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LETTER TO THE EDITOR

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Matilda effect: challenges to the visibility and recognition of women in Health Sciences

Efecto Matilda: retos para la visibilidad y reconocimiento de las mujeres en las Ciencias de la Salud

Daliannis Rodríguez*

Universidad UTE, Campus Manabí, Montecristi, Ecuador.

**Corresponding author*

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Dear Editor:

Despite the increase in female participation in training programs and scientific publications, women continue to face structural barriers in accessing funding, securing leadership positions, obtaining lead authorship, and receiving academic recognition. Within the framework of the Sustainable Development Goals (SDGs), particularly SDG 5 on gender equality, it is necessary to highlight the Matilda Effect—a term coined by historian Margaret Rossiter in 1993—which describes how women's scientific contributions have historically been ignored, attributed to men, or minimized within official scientific discourses (Rossiter, 1993). Although progress toward gender equity is undeniable, this phenomenon persists, albeit in subtle ways, especially in fields such as the Health Sciences, where women represent a large proportion of the human talent in training but remain underrepresented in decision-making positions and the recognition of their scientific contributions.

An emblematic example is that of Rosalind Franklin, whose work was essential in elucidating the structure of DNA. Her X-ray diffraction images allowed Watson and Crick to model the double helix, but her contribution was not recognized with the 1962 Nobel Prize (Osman, 2003). In the field of public health, Alice Ball, an African American chemist, developed the first effective treatment for leprosy at the beginning of the 20th century (Núñez et al., 2022); however, her formula was attributed to a male colleague for decades.

More recently, Katalin Karikó, a Hungarian biochemist, was marginalized for years by her colleagues and funding agencies due to her insistence on messenger RNA research, a line of research that ultimately led to the development of the COVID-19 vaccines, for which she received the Nobel Prize in 2023 (Bansal, 2023).

In Latin America, there are also multiple silenced cases. Argentine physician Cecilia Grierson, the first woman to earn a medical degree in her country (1889), faced numerous obstacles in practicing her profession, and her legacy has been vastly underappreciated.

A bibliometric analysis (1920-2023) identified that women participated in ~18,600 of 57,056 publications (≈22%) in Ecuador. Over the last five years, female participation in the national total reached 67.8%; however, it was only 7.8% in STEM fields, indicating a growing commitment, albeit primarily focused on the Humanities, public health, COVID-19, and education (Herrera-Franco et al., 2025). In surgery, a study of 105 Ecuadorian female surgeons revealed that men hold 66.7% of leadership positions; 55.2% reported sexual harassment, and 48.6% reported discrimination (Sarmiento et al., 2021). Furthermore, gender norms impact decisions regarding specialization and career paths (Bedoya-Vaca et al., 2016).

This bias represents an individual injustice; it also impoverishes scientific knowledge by limiting the diversity of perspectives, approaches, and topics. Various studies have shown that diverse scientific teams, in terms of gender, race, or culture, tend to produce more rigorous, innovative, and ethical science. However, women remain less likely to receive funding, hold tenure, be cited, or receive awards, even when they have equal or greater merit.

In this context, we believe that scientific journals—such as the Gregorian Journal of Health Sciences—play a transformative role in the system. Editorial policies that promote equity—such as gender parity on editorial boards and reviewers, promotion of research with a gender perspective, active visibility of female authors in special sections, interviews, or thematic dossiers, and blind peer review to avoid conscious or unconscious bias—are necessary steps toward more ethical and inclusive science. Furthermore, we propose incorporating the monitoring of gender indicators in authorship, funding, and citation as part of editorial quality standards.

We invite the academic community to recognize and question the practices that perpetuate the Matilda Effect in our institutions. Only in this way can we move toward scientific production that reflects the plurality of voices that shape it.

Sincerely,

Daliannis Rodríguez

CONFLICTS OF INTEREST

The author declares that she has no conflicts of interest.

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