

Addressing scientific racism: an initial attempt at curriculum renewal for postgraduate Biomedical Sciences students

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Scientific racism, deeply rooted in colonialism, continues to permeate modern biomedical science and medical practices, perpetuating systemic biases and disparities. However, there is an emerging interest to address this issue as part of a broader process of decolonization of curricula at some medical schools.

The process of decolonization is complex and multifaceted and includes attempts to make curricula more inclusive, and to confront past injustices that occurred with scientific and medical advancements. For example, colonialism contributed to and perpetuated false beliefs about racial hierarchies and differences in physiology based on race. Such ideas historically influenced medical research efforts, education, and practice, resulting in discriminatory treatment of some research subjects and patients. Moreover, attempts to address such issues can be challenging as existing biomedical sciences curricula are rooted in Eurocentric perspectives and historical traditions. As an initial attempt to deal with scientific racism as part of the decolonization of the Department of Biomedical Sciences' BSc (Hons) curriculum at Stellenbosch University's medical school, two (discussive) sessions (forming part of the *Features of Science* module) were introduced regarding scientific racism and decolonization. Student feedback regarding such sessions was assessed by completion of an anonymous survey and a thematic-type analysis (anonymous) of self-reflective journals.

The survey data showed that around two thirds of the class possessed a moderate understanding regarding decolonization in the science and medical context. A thematic analysis of comments revealed that such sessions made students realize the negative impact of colonialism in terms of the development of medical knowledge for e.g. scientific racism, suppression of traditional knowledge, and the exploitation and experimentation on indigenous populations. Furthermore, the students indicated that the inclusion of scientific racism and decolonization sessions may add value to their future careers by enhancing their critical thinking and awareness of social and cultural contexts in science and medicine, and their professional responsibility to ensure inclusivity, fairness, and ethical conduct in their workplace.

These findings show that incorporating conversations on scientific racism and decolonization into the biomedical sciences curriculum can promote students' personal growth and awareness, while also creating opportunities for greater inclusivity by fostering an environment of open discussion and learning in classes. Moreover, it should better equip students with the tools to challenge and mitigate scientific racism in their future careers, and to become advocates for social justice and equity.

Keywords: Biomedical sciences; Curriculum renewal; Scientific racism; Decolonization; Postgraduate students; Inclusivity.