

# “Unwell while Aboriginal”: iatrogenesis in Australian medical education and clinical case management

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**Introduction:** Attention to Aboriginal health has become mandatory in Australian medical education. In parallel, clinical management has increasingly used Aboriginality as an identifier in both decision making and reporting of morbidity and mortality. This focus is applauded in light of the gross inequalities in health outcomes between indigenous people and other Australians.

**Methods:** A purposive survey of relevant Australian and international literature was conducted to map the current state of play and identify concerns with efforts to teach cultural competence with Aboriginal people in medical schools and to provide “culturally appropriate” clinical care. The authors critically analyzed this literature in light of their experiences in teaching Aboriginal studies over six decades in many universities to generate examples of iatrogenic effects and possible responses.

**Results and discussion:** Understanding how to most effectively embed Aboriginal content and perspectives in curriculum and how to best teach and assess these remains contested. This review canvasses these debates, arguing that well-intentioned efforts in medical education and clinical management can have iatrogenic impacts. Given the long history of racialization of Aboriginal people in Australian medicine and the relatively low levels of routine contact with Aboriginal people among students and clinicians, the review urges caution in compounding these iatrogenic effects and proposes strategies to combat or reduce them.

**Conclusion:** Long overdue efforts to recognize gaps and inadequacies in medical education about Aboriginal people and their health and to provide equitable health services and improved health outcomes are needed and welcome. Such efforts need to be critically examined and rigorously evaluated to avoid the reproduction of pathologizing stereotypes and reductionist explanations for persistent poor outcomes for Aboriginal people.

**Keywords:** indigenous health, minority health, implicit bias, equity

## Introduction

Iatrogenesis is broadly defined as the side effects (mostly unwanted or undesirable) of medical interventions and would include a scar from surgery, to the more complicated side effects of complex drug interactions. This article adopts the approach that iatrogenic effects can be broadly and “distally” defined to illuminate the diverse effects of racialized representation in various medical settings.

The health of Aboriginal Australians is significantly worse than that of other Australians despite considerable policy and funding attention in recent decades.<sup>1</sup> This article argues that well-intentioned approaches in the health system to address Australian Aboriginal health have had iatrogenic effects. Canvassing medical education and clinical care, this review

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outlines some of the unforeseen consequences and urges health professionals and academics to critically reflect on, record, and combat the iatrogenic effects of these initiatives.

## Methods

A purposive survey<sup>2,3</sup> of relevant Australian and international literature was conducted to map the current state of play and identify concerns with efforts to teach cultural competence with Aboriginal people in medical schools and to provide “culturally appropriate” clinical care. There have been previous systematic reviews of cultural competence,<sup>4,5</sup> and a purposive review was deemed more appropriate to target the smaller literature of specific reference to the issue of iatrogenesis. The authors collaborated to critically review key aspects of the relevant literature based on their experiences of teaching Aboriginal studies to health professionals, including doctors, nurses, and allied health professionals (occupational therapists, radiologists, physiotherapists, and health promotion workers). Collectively, this experience totals more than six decades in several universities, spanning the earliest efforts to introduce indigenous cultural competence till today, to generate examples of iatrogenic effects and possible responses.

## Results and discussion

The discussion section is divided into two parts. First, we review iatrogenesis in teaching and learning of indigenous health and possible responses to this, drawing upon the purposive review of the literature. Second, we turn our attention to iatrogenesis in hospital and clinical management and responses within that context.

### Iatrogenesis in teaching and learning

Aboriginal health has become increasingly included as an accreditation requirement across the health professions. The most notable and comprehensive approach to the inclusion of Aboriginal health in the accreditation standards and related activity can be seen in medical education.<sup>6,7</sup> Much of the curriculum development response has been to include Aboriginal examples to highlight particular diseases for which the Aboriginal population carries a specific high burden, such as diabetes. This approach was driven in part by the widespread use of problem-based learning (PBL) in medical education, despite serious concerns for its effectiveness in strengthening students' knowledge base and maximizing clinical performance.<sup>8,9</sup> Treloar et al<sup>10</sup> question the effectiveness of PBL for nonmainstream Australian medical students, while other studies document the variability of PBL tutors' confidence in handling cases from racialized groups.<sup>11,12</sup>

Aboriginal PBL cases typically pathologize the Aboriginal person (patient) independent of the disease or body system problem of the week to be solved. Given the hegemony of a scientific, body systems approach, the “Aboriginal case” was logically secondary to the associated burden of disease profile (refer Kai et al<sup>11</sup> for UK examples of racialization of PBL cases). Given Aboriginal people are three to four times more likely to have a diagnosis of diabetes, or heart disease, or several times more likely to smoke,<sup>1</sup> they become prime candidates to become the sociocultural clothes to dress up the skeleton of the diagnosis or problem. Thus, throughout the educational journey to medical practice, Aboriginality is constructed as the problem and pathologized.<sup>13</sup> This problematic representation has a long history in Australia<sup>14–16</sup> and is amplified for medical students who rarely encounter alternative representations in either their medical education or the wider profession.

Given the content of educational material/pedagogy just described, it is highly likely that across the learning arc of an entry to practice medicine professional degree, many graduates will only have “experienced” Aboriginality as a disease and the presumption that the concomitant social determinants of education, housing, access to health services apply.<sup>17</sup> This misrepresentation of Aboriginality as pathology encourages the acceptance of high levels of morbidity and misdirects clinicians away from specific contextual factors. Given the very low numbers (real and relative) of Aboriginal health educators training the health workforce, the examples of Aboriginal people that students experience will overwhelmingly be as “sick” inclusions in the curriculum, or less often, as patients. Rarely will the clinician or professor be Aboriginal. A parallel underrepresentation has been found for African American medical educators.<sup>18</sup> This phenomenon was raised with one of the authors of this article by his Aboriginal students in a medical course, who challenged the curricula, indicating “I don't see myself in any of the curriculum being presented”. This critique echoes the sector-wide problem for Aboriginal participation invoked as “can't be what you can't see”.<sup>19</sup>

### Responses

There are several responses to countering the iatrogenic effect of an overwhelming and essentialized burden of disease approach to curriculum. The first is to consider strength-based approaches to curriculum representation. An example of this would be the inclusion of Aboriginal people in the curriculum, where their identity is separate from their disease. This can be done through several ways, employing formal, informal, and hidden curriculum examples.

The formal curriculum example, in which the students learn in the structured, planned, and documented curriculum, could include representations of doctors being Aboriginal rather than just unwell patients. Another example could be the inclusion of Aboriginal patients in cases that do not explicitly link a burden of disease with a sociocultural identity and that challenge stereotypes. This could include a young Aboriginal patient having a skin cancer scare, due to sun exposure from surfing, and as a university student and an Aboriginal patient as the paper case in preparation for a gerontology discussion. Both these cases challenge stereotypes of Aboriginality, one being young, active, and at university and the other being of an age where gerontology is warranted (as opposed to death at an early age). All Aboriginal content should stress diversity and the intersectionality of race with other aspects of identity, including sex, age, education, sexuality, disability, and geographical location.<sup>20</sup> This important learning will be difficult for many students (and staff) who lack direct experience with Aboriginal people as was found for Ontario medical students despite quality curriculum specifically highlighting diversity.<sup>21</sup> Besides formal curriculum around health disparities for minority populations, medical education needs specific content on various forms of racism and their impact on health,<sup>22,23</sup> and on unrecognized white privilege and stereotyping within health services.<sup>24–28</sup>

The informal curriculum consists of many interpersonal interactions between people who make up the medical education program, including students, teachers, clinicians, and patients. In Australia, non-Aboriginal Australians are over-represented in the health workforce. The implications for this on the informal curriculum have been described previously.<sup>29</sup> An additional approach is to actively work to support and promote Aboriginal academics as senior members of teaching and clinical staff.<sup>12,14</sup>

Hafferty<sup>30</sup> directs us to policy development, evaluation, resource allocation, and institutional slang or nomenclature as key indicators of the hidden curriculum. Studies in American medical schools found that formal, informal, and hidden curricula should be explicitly addressed to raise the consciousness of instructors and students about implicit racial bias.<sup>31</sup> One form of institutional slang or nomenclature is the institutional environment and the naming of building and lecture theatres.<sup>32,33</sup> A medical school may wish to name, or rename, buildings and lecture theatres, which are representatives of the values appropriate for the 21st century, rather than continue to implicitly reify names, which may reflect now debunked, racist, and marginalizing world views. This suggests that a nuanced approach, which strives

for balance, underpinned by reflexivity may be taken when considering the environment in which medical students are trained. Again, the iatrogenic effect of teaching in buildings named after eugenicists, for example, is not so much the stench of a eugenics approach but rather the lingering impact of the keloid scar it leaves, as it continually reminds of the historical “place” of the Aborigine.

## Iatrogenesis in hospital and clinical management

There are many good reasons to collect demographic data for hospital or other health centers, admissions, and occasions of service. Indeed, it is considered mandatory to ask a range of demographic questions upon admission, ranging from age, sex, postcode, and ethnicity. The recording of Aboriginal ethnicity is considered as an important element in collecting data to help determine program and policy priorities (but note the counter argument in Canada).<sup>34,35</sup> Many good initiatives have flowed from this practice, including allocation of resources to support Aboriginal Hospital Liaison Officers and the development of Aboriginal-specific clinics.

However, we also know more about the impact of a clinician’s implicit bias on their decision making.<sup>36–39</sup> There is a significant research documenting iatrogenic effects on the patient whose hospital or clinical records identify her as Aboriginal, either by use of a tick a box or more visually by the placing of an Aboriginal flag on the records.<sup>40–44</sup> Implicit bias and a range of unhelpful stereotypical assumptions may be triggered when the clinician or administrator see a patient record displaying an Aboriginal flag. This may include assumptions about their socioeconomic status, their worthiness to receive treatment, and the extent to which they might be compliant to any treatment or management plan, all of which may affect the clinician’s decision making.<sup>45</sup> Critical reflection offers an improved decision making especially when the clinician is uncertain or with complex conditions as is frequently the situation in dealing with Aboriginal patients.<sup>46</sup> Critical analysis of clinicians’ (in)actions needs to be complemented by more systemic analysis of hospital protocols and procedures to reveal iatrogenic impacts at the structural level. Examples include discharge against medical advice<sup>47</sup> and poor or lack of communication to the Aboriginal patient’s family physician or community clinic.<sup>48</sup>

## Responses

If the implicit and unconscious bias triggers a range of unhelpful responses for the clinician (and thus, for the patient), what parallel activities could a health service

provide to help counter this implicit bias? A recent article<sup>31</sup> demonstrates that exposure to implicit bias testing, used as a training tool, reduced implicit racial bias among medical students in the USA. Research suggests “that educators must be deliberate and skilled in their facilitation of reflection and discussion about UB [unconscious bias] and its relevance to clinical practice”.<sup>38</sup> Such explicit instruction and self-assessment for implicit bias could be extended to hospital orientation procedures for staff development within Continuous Quality Improvement models.<sup>49</sup> The translation of research evidence into policy and training, for example, on hospital admissions and tracking according to patient identity would help staff counter their possible implicit bias, with a view to fundamentally changing its orientation to more neutral over time. New approaches seeking reciprocal accountability between tertiary and primary health care settings, especially community-controlled Aboriginal health services<sup>49,50</sup> and cultural safety audits of hospitals,<sup>51</sup> offer real opportunities to recognize and address these iatrogenic effects.

## Conclusion

This article identifies the iatrogenic effects of well-meaning initiatives in Aboriginal health within medical education and clinical settings. The authors are not arguing that the initiatives are wrong, but that awareness of the iatrogenic impacts is critical, if we are to consider the effects of our actions to ensure that the lives of Aboriginal people and communities are provided the opportunity to fulfill their full potential. In a society that is based on stratified and racialized power and that has operated such that the success of some is based on the oppression of others, we must be vigilant with regard to the unintended consequences of our good intent. The same attention paid to iatrogenic implications from complex drug interactions for an oncology patient needs to be paid to medically induced harm to Aboriginal health also, from current well-intentioned efforts in teaching and learning, and clinical care.

## Disclosure

The authors report no conflicts of interest in this work.

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