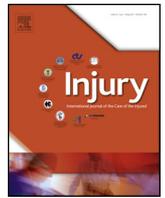




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Editorial

Implicit racial or ethnic bias in trauma care



“Health equity means that everyone has a fair and just opportunity to be as healthy as possible [1].” This requires us all to be actively involved in eliminating obstacles to health including poverty, discrimination and their consequences as well as ensuring equitable access to the social determinants of health including safe environments and health care. In spite of this, globally health disparities are well documented, especially those between people of different ethnicities [2–6]. Health care services and health care workers are complicit in these inequitable outcomes and in order to achieve equity of health outcomes, we must be actively engaged in their elimination [4,7]. Government legislative and strategic approaches are important pillars in this task. Health organisation leadership is also critical ensuring that there is an explicit organisational commitment to delivering high-quality health care that ensures health equity [3]. Finally, health practitioners also play a pivotal role in ensuring that health care is focused on achieving health equity. This includes committing to ensuring the collection of high-quality ethnicity data; auditing, monitoring and evaluating health impact and outcome data; critically analysing organisational practices that maintain health care disparities; and building meaningful partnerships with patients to develop solutions [3].

Healthcare professional’s attitudes and behaviours have been identified as factors that contribute to health disparities [3,8]. Our biases, both explicit and implicit can play out in our professional roles. These biases may be associated with age, gender, socio-economic status and race, however the most compelling and consistent gaps focus on race or ethnicity. In order to be fit for practise, health professional regulatory bodies commonly require health professionals to demonstrate cultural safety and competence. However, there is evidence of both explicit and implicit (also known as unconscious) racial or ethnic bias impacting on care among disadvantaged populations who are already vulnerable [9]. A systematic review of implicit bias among health care professionals by Hall et al. found low to moderate levels of implicit racial or ethnic bias were present in all but one of the 15 studies reviewed [8]. A study by Haider et al. investigating whether implicit class and race bias was an issue among acute care or trauma surgeons, found that 74% had an implicit preference for white patients [10]. A study using similar methodology but set in a multicultural city in the US found a lower preference for white patients (49%) [11]. Further a study of final year medical

students in New Zealand, also showed the presence of bias with implicit greater than explicit [12].

There are numerous examples of implicit racial bias in trauma care. A US study by Shafi et al. analysed data from over 58,000 cases of blunt traumatic brain injury (TBI) and found that patients from ethnic minorities were 15% less likely to be discharged into rehabilitation than their non-Hispanic white counterparts (OR 0.85, 95% CI 0.8,0.9). [13] Studies investigating long-term functional outcomes following TBI have reported disparities in functional outcomes among ethnic minorities [14,15]. In the paediatric population, children from ethnic minorities are disproportionately injured and experience worse outcomes than their white counterparts [16,17]. Among adults in the US, Black-white disparities in trauma mortality among moderately injured patients are evident (OR 1.40, 95% CI 1.18, 1.66) [18].

Implicit attitudes often exist outside of conscious awareness, and as such can be difficult to consciously acknowledge and control [8]. Devine et al. argue that in order for an individual to be motivated to eliminate or reduce their implicit bias they must be *aware* of their biases and be *concerned* about the consequences of them [19]. They developed a multi-faceted prejudice habit-breaking intervention which incorporated six strategies to reduce implicit bias: stereotype replacement (adjusting the stereotype response); counter-stereotypic imaging (imagining the patient as the opposite stereotype); individuation (seeing the patient as an individual as opposed to a stereotype); perspective taking (placing yourself in their shoes); increasing opportunities for contact with people from different groups; and partnership building (reframing patient interactions as occurring between collaborating equals) [20]. In a 12-week longitudinal study of the intervention, people who received the intervention showed dramatic reductions in implicit race bias.

Implicit bias training assists with self-reflection and identifying personal biases, but it is only part of the solution [21]. As trauma care health professionals we need not only the ability to recognize prejudice and discrimination but we need to speak up when we witness it, and change the systems around us that support it. This includes ensuring health professional curriculums surface unconscious race (and other) biases; promoting evidence-based best-practice guidelines to guide care rather than clinician preference; and ensuring ethnic diversity in training programmes, research teams, staff, and even editorial boards.

References

- [1] Braveman PA. Swimming against the tide: challenges in pursuing health equity today. *Acad Med* 2019;94(2):170–1, doi:http://dx.doi.org/10.1097/acm.0000000000002529 [published Online First: 2018/11/16].
- [2] Anderson M, Lavalley B. The development of the First Nations, Inuit and Metis medical workforce. *Med J Aust* 2007;186(10):539–40.
- [3] Hostetter M, Klein S. Transforming care: reducing racial disparities in health care by confronting racism? Washington: The Commonwealth Fund; 2018.
- [4] Wyatt R, Laderman M, Botwinick L, et al. Achieving health equity: a guide for health care organizations. IHI White Paper Cambridge, Massachusetts: Institute for Healthcare Improvement; 2016.
- [5] Koea J. Indigenous trauma: a New Zealand perspective. *Injury* 2008;39:S11–8, doi:http://dx.doi.org/10.1016/S0020-1383(08)70024-X.
- [6] Smedley B, Smith A, Nelson A. Unequal treatment: confronting racial and ethnic disparities in health care. Washington (DC): National Academy Press; 2002.
- [7] Ministry of Health. Equity of health care for māori: a framework. Wellington: Ministry of Health; 2014.
- [8] Hall WJ, Chapman MV, Lee KM, et al. Implicit racial/ethnic bias among health care professionals and its influence on health care outcomes: a systematic review. *Am J Public Health* 2015;105(12):e60–76, doi:http://dx.doi.org/10.2105/ajph.2015.302903 [published Online First: 2015/10/16].
- [9] FitzGerald C, Hurst S. Implicit bias in healthcare professionals: a systematic review. *BMC Med Ethics* 2017;18(1):19, doi:http://dx.doi.org/10.1186/s12910-017-0179-8.
- [10] Haider AH, Schneider EB, Sriram N, et al. Unconscious race and class bias: its association with decision making by trauma and acute care surgeons. *J Trauma Acute Care Surg* 2014;77(3):409–16, doi:http://dx.doi.org/10.1097/ta.0000000000000392 [published Online First: 2014/08/28].
- [11] Zebib L, Strong B, Moore G, et al. Association of racial and socioeconomic diversity with implicit bias in acute care surgery association of diversity with implicit bias in acute care surgery. *JAMA Surg* 2019;2019(Febuary), doi:http://dx.doi.org/10.1001/jamasurg.2018.5855 (Epub ahead of print).
- [12] Harris R, Cormack D, Stanley J, et al. Ethnic bias and clinical decision-making among New Zealand medical students: an observational study. *BMC Med Educ* 2018;18(1):18, doi:http://dx.doi.org/10.1186/s12909-018-1120-7 [published Online First: 2018/01/25].
- [13] Shafi S, de la Plata CM, Diaz-Arrastia R, et al. Ethnic disparities exist in trauma care. *J Trauma* 2007;63(5):1138–42, doi:http://dx.doi.org/10.1097/TA.0b013e3181568cd4 [published Online First: 2007/11/13].
- [14] Shafi S, Marquez de la Plata C, Diaz-Arrastia R, et al. Racial disparities in long-term functional outcome after traumatic brain injury. *J Trauma* 2007;63(6):1263–8, doi:http://dx.doi.org/10.1097/TA.0b013e31815b8f00 discussion 68–70 [published Online First: 2008/01/24].
- [15] Staudenmayer KL, Diaz-Arrastia R, de Oliveira A, et al. Ethnic disparities in long-term functional outcomes after traumatic brain injury. *J Trauma* 2007;63(6):1364–9, doi:http://dx.doi.org/10.1097/TA.0b013e31815b897b [published Online First: 2008/01/24].
- [16] Brown R. Epidemiology of injury and the impact of health disparities. *Curr Opin Pediatr* 2010;22(3):321–5.
- [17] Haider AH, Efron DT, Haut ER, et al. Black children experience worse clinical and functional outcomes after traumatic brain injury: an analysis of the National Pediatric Trauma Registry. *J Trauma* 2007;62(5):1259–62, doi:http://dx.doi.org/10.1097/TA.0b013e31803c760e [published Online First: 2007/05/15].
- [18] Arthur M, Hedges JR, Newgard CD, et al. Racial disparities in mortality among adults hospitalized after injury. *Med Care* 2008;46(2):192–9, doi:http://dx.doi.org/10.1097/MLR.0b013e31815b9d8e [published Online First: 2008/01/26].
- [19] Devine P, Monteith M, Zuwerink J, et al. Prejudice with and without compunction. *J Pers Soc Psychol* 1991;60:817–30.
- [20] Devine P, Forscher P, Austin A, et al. Long-term reduction in implicit race bias: a prejudice habit-breaking intervention. *J Exp Soc Psychol* 2012;48(6):1267–78, doi:http://dx.doi.org/10.1016/j.jesp.2012.06.003.
- [21] Acosta D, Ackerman-Barger K. Breaking the silence. *Acad Med* 2017;92(3):285–8.

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