Journal of Biosocial Science (2025), page 1 of 6
doi:10.1017/S0021932025000100

CAMBRIDGE UNIVERSITY PRESS

OPINION

Critical theory and cultural competency in medical QI projects: lessons from Pacific Islander communities

Adam Martorana[1], Sankalp Katta[1], Hanna Huynh[1], Ezgi Ulger[1] and Jeffrey Andrion[2,3]

[1]A.T. Still University - School of Osteopathic Medicine in Arizona, Mesa, AZ, USA, [2]Department of Physical Therapy, A.T. Still University - Arizona School of Health Sciences, Mesa, AZ, USA and [3]Department of Physical Therapy, University of Toronto, Toronto, ON, Canada
Corresponding author: Adam Martorana; Email: sa206116@atsu.edu

(Received 10 July 2024; revised 27 December 2024; accepted 7 January 2025)

Abstract

This reflection explores the transformative power of critical theory through a quality improvement (QI) project creating culturally relevant dietary resources for Pacific Islander communities in Washington State, USA. Food injustice and lack of food sovereignty are examined as manifestations of modern-day colonialism perpetuated by capitalist-driven social structures. The methodology employed critical reflection, defined as the process of examining assumptions and power relations that shape practice, central to critical theory. Iterative group discussions aimed to understand the impact of individual and collective assumptions, power dynamics, and oppression on the project's conceptualization, implementation, and evaluation.

Specific recommendations are integrated into the discussion to aid those replicating similar protocols, emphasizing actionable steps such as engaging with the community at all project stages. The research team, composed of osteopathic medical students and a critical theory expert, engaged in reflexivity to understand how social locations and lived experiences influenced perceptions. Despite the goal of fostering cultural inclusivity, limitations in engaging the Pacific Islander community throughout the project lifecycle highlighted the need for cultural humility and participatory action methodology.

This study underscores the importance of understanding the history and socio-political context of marginalized communities to avoid perpetuating colonial practices and trauma. It emphasizes the necessity for medical schools to incorporate sociological theories into curricula to promote compassionate, culturally appropriate care and research. By critically examining positionality and engaging in transformative learning, the group advocates for systemic changes towards a more equitable global healthcare system.

Through critical reflection, the group has come to understand how lived experiences have shaped perceptions of oppression, which are entrenched within and perpetuated by social institutions. Actionable items from these reflections are presented to help future practitioners and educators apply cultural humility, community empowerment, and critical theory in QI projects.

Keywords: Food sovereignty; colonialism; critical theory

Introduction

Food injustice and the lack of food sovereignty demonstrate the ways in which oppression and modern-day colonialism are maintained and perpetuated by capitalist-driven social structures (Kepkiewicz *et al.*, 2015; Whyte, 2017). Claims that government food policies only reify colonial practices further demonstrate white, settler privileges (Kepkiewicz and Rotz, 2018). At the same

time, food evolution due to migration has contributed to the maintenance of ethnic identities (Frost and Laing, 2016) and in former colonies have been important portrayals of colonial resistance (Mosley, 2004). Medical colonial practices and the domination of Western thinking have also been described as colonial artifacts (Naidu, 2021). Particularly, the tension that exists between evidence-based medicine and Indigenous traditional healing requires a deeper, multi-layer analysis that goes beyond just the biological (Cohen-Fournier *et al.*, 2021). For healthcare providers, understanding the history of colonialism and its modern day remnants requires cultural competency and sensitivity when providing care to ethnic minorities, including the Pacific Islanders (Ghiasuddin *et al.*, 2015).

According to the Washington State Commission on Asian Pacific American Affairs (2024), there are currently 70,000 Pacific Islanders living in the state and are one of the fastest growing ethnic groups in the region. Fitzpatrick-Nietschmann (1983) reported how this group was 'at the mercy of the existing government-subsidized health care facility and its health care workers', a problem that continues to persist (Morisako *et al.*, 2017). This paper explores the transformative power of critical theory to examine a completed quality improvement (QI) project that had the goal of creating culturally relevant dietary resources from a community of Pacific Islanders in Washington State, USA.

Methodology

Critical theory

As a form of inquiry that aims to critique social issues and the underlying oppressive forces that perpetuate them, critical theory (CT) emerged from the earlier works of the Frankfurt School that strongly rejected the positivist, Cartesian approach to knowledge production (Alirangues, 2018). Critical reflection, defined as 'a process of examining assumptions and power relations, and how these assumptions and relations shape practice' (Ng *et al.*, 2019) is central to CT (Brookfield, 2009). As a commonly used pedagogical tool for transformative learning (Wittich *et al.*, 2010), critical reflection has been used in medical education and practice such as in emergency (Bernard *et al.*, 2012) and narrative (Murphy *et al.*, 2018) medicine. In short, it provides structural analysis to hegemonic factors contributing to oppression (Paradis *et al.*, 2020). Methodologically, and socio-politically, CT has also been used in medical education research (Chow *et al.*, 2022) to question the role that powerful medical institutions play in sustaining inequity (Hodges, 2014).

Wittich and colleagues (2010) report the value that critical reflection plays in QI projects, including examining the wider social forces impacting healthcare. At the same time, Allwood and colleagues (2018) argue that while QI work is important, 'improvements to care occur at the front line by a kind of osmosis or, worse still, only through new technologies or "management," without careful ongoing systematic effort of clinical staff'. QI work is further complicated by the challenges faced by junior physicians in their workplace, primarily the lack of training (Zarkali *et al.*, 2016). At the same time, the inconsistent teaching of social medicine across US medical schools (Finnie *et al.*, 2021) can be challenging when QI projects involve the application of sociological theories to further understand clinical phenomena. Through a process of iterative group discussions and critical reflection, this paper aims to answer three research questions:

1. How do individual and collective assumptions and biases influence the design, implementation, and evaluation of community-based QI projects?
2. In what ways do concepts of power, privilege, and oppression shape the outcomes of these projects?
3. What specific, actionable recommendations can be drawn from the team's experiences to inform future QI protocols that emphasize cultural humility and community engagement?

https://doi.org/10.1017/S0021932025000100 Published online by Cambridge University Press

The group's social location and critical reflexivity

The identities of the authors reflect what Glenn (2015) refers to as hybrid, where positionality and values have been shaped by the legacy of coloniality. In particular, the group's collective identities as descendants of colonizers, colonizees, and immigrant settlers have been woven into their education and career. This intersectionality of power, privilege, and oppression are reflected in their approach to this research. As members of racialized and immigrant groups, the group perceives privilege as a double-edged sword: while their Western educational training is crucial to academic and career trajectories, the group is also acutely aware of how this has also caused the relegation of traditional knowledge from their respective cultures.

The first four authors are osteopathic medical students who completed the QI project, while the last author's expertise in critical theory guided this research study. Four members are racialized, with three identifying themselves as second-generation immigrants to the United States and one identifying as a critical ally (Nixon, 2019) with European white background. All researchers acknowledge the power and privilege of their medical education. Reflexivity – the awareness of how individual social location positions oneself – has allowed the group to deeply examine their perceptions on food and colonialism. At the same time, reflexivity compels the group to re-examine the impact of their privilege and actions on the QI project life cycle. The group's exploration into the dynamics of coloniality and its ramifications on their identities as researchers has unearthed profound insights, revealing the interplay between power, privilege, and oppression.

QI project and critical reflections: realizations

The group's QI project provided invaluable opportunities for reflection that prompted interrogation of the impact of their actions on the communities that were served. While the Pacific Islander community was involved in the evaluation and future steps, the limitations of their methodological approach include the failure to incorporate the Pacific Islanders in initial project planning, conceptualization, and implementation, partially due to only engaging with the local religious leader once due to their overall apprehension towards QI work in the community. As an important tenet of participatory action methodology (Sadabadi and Rahimi Rad, 2021), the team should have engaged the local community throughout the QI life cycle, which could have underscored the importance of cultural humility in community projects (CDC, 2022).

The members of the research team described (ethnic) food as 'fusion' or 'blended' and revealed not only the normalization of post-colonial influences but also how food has evolved out of migration and separation (Frost and Laing, 2016). The group reflected how their presence may not have been culturally appropriate given the Pacific Islanders' complex history with food injustice (American Pacific Islander Council, 2021). In hindsight, the group entered their personal, cultural, and social spaces without first addressing their own biases, assumptions, and prejudices and therefore 'a clear-sighted acknowledgment of the multiple and subtle ways in which power and social pathologies are reproduced' (McArthur, 2022).

Similarly, the team's critical reflection further raised concerns about how privilege as Western students may have continued the legacy of coloniality. This privilege has been amplified by the invisible power that is held as future physicians in western medicine. To this end, the team reflected on how medical schools can become anti-colonial allies or perpetrators of neocolonialism. The team agrees with Perkins and colleagues (2023) on the importance of addressing colonialism in global health work or highlighting the efforts of students to address anti-racist practices in medical education (Afolabi *et al.*, 2021). Related to this, the unintentional harms that may have been caused to the Pacific Islander community could have been avoided if a stronger pedagogical focus was placed on teaching decolonization, anti-racist practices, and social medicine prior to the commencement of a QI project. Deeply learning about the effects of

https://doi.org/10.1017/S0021932025000100 Published online by Cambridge University Press

colonization would have been useful to understand the community members' perceptions about the food that they consume and the role that the group as 'outsiders' play. Further, how the team relied heavily on their biomedical training was evident in the various processes and tools that were used throughout the project cycle, without careful consideration on how sociological theories (e.g. Kleinman, 2010) might help inform the work. As the team strives to reevaluate the effects of colonialism and work towards decolonizing their perspectives and approaches to intervention, it is imperative to prioritize a mindful consideration of cultural perspectives.

As the team further reflected on their QI experience, one critical observation was that while the QI project was important, it only addressed a small portion of a larger, systemic problem and the team's focus did not accommodate for the social determinants of health. The determinants, including employment, access to health services, and discrimination (Chelak and Chakole, 2023), profoundly influence the community and a singular intervention may have been perceived as contributing to the perpetuation of health inequality.

Discussion

The team's project allowed reflection on the impact of their footprints within the community. Particularly, critical reflection reminded the group of their vulnerabilities, power, and privilege, and how things could have been done better. For instance, working with a historically underrepresented group underscored the importance of knowing their history. Even though the team's focus was to create more cultural inclusivity, consideration was not taken for how this blending of cuisine could be perceived as a form of colonial practice (Bordirsky and Johnson, 2008) and perpetuation of colonial trauma (McKinley and Jernigan, 2023).

As medical students and professionals, the group is aware of the importance of educating individuals on having balanced diets (Endrizal *et al.*, 2018) but realize that this should have been done in conjunction with understanding the wider socio-political and historical contexts (Pescosolido and Kronenfeld, 1995). In other words, the team failed to first decolonize themselves (Nakagawa, 2021) before attempting to know the community or implementing the project. Through critical reflection and reflexivity, the team has come to understand how their lived experiences have shaped both collective and individual perceptions of food sovereignty and how oppression as entrenched within and perpetuated by social institutions, including medical schools.

Throughout reflection, it became clear to the research team how the influence of colonialism continues to organize medical education and research (Naidu, 2023). Therefore, the team emphasizes the need for medical schools to incorporate sociological theories into the curriculum, recognizing it as a long-term investment towards compassionate care and engaging in culturally appropriate research endeavors. Furthermore, to ensure this reflection is applicable to future QI projects, the researchers have identified several actionable recommendations based on their findings:

1. Community Engagement at All Stages: Involve the community in every phase of the project lifecycle, including planning, implementation, and evaluation. This fosters trust and ensures that interventions align with the community's needs and cultural practices.
2. Learning Local Histories: Understanding the historical and socio-political context of the community being served is crucial. For Pacific Islanders, this involves recognizing the impact of colonialism on food practices and health disparities.
3. Feedback and Reflexivity: Establish continuous feedback loops with community stakeholders and promote reflexivity among practitioners to recognize and mitigate implicit biases.
4. Integration of Sociological Frameworks: Incorporate sociological theories, such as those proposed by Kleinman, to guide QI projects and enhance understanding of systemic inequities.

Critiquing the QI project brought transformative learning and cultural humility, recognizing the influence of power, privilege, and oppression on the team's perspectives and practices. By

https://doi.org/10.1017/S0021932025000100 Published online by Cambridge University Press

acknowledging the impact of colonial legacy on cuisines and identities, the group continues to discover both the rewards and challenges of Western training when addressing issues related to food justice. The researcher's critical reflection emphasizes the need for the medical community to dismantle neocolonialism and promote anti-colonial practices. There is a critical need to integrate principles of cultural humility, community empowerment, and food justice into medical curricula. By teaching students' critical theory and fostering inclusive and participatory approaches to community projects, medical schools can contribute to addressing the impacts of colonialism and promoting health equity. Through these actionable recommendations, the team aims to equip future practitioners with the tools to approach QI projects with cultural humility, ensuring interventions are not only respectful and inclusive but also effective and equitable.

Conclusion

Medical institutions hold an undeniable amount of privilege but at the risk of re-traumatizing marginalized communities. The original QI work educated us about the intricacies of food, colonization, and social justice. This reflection unveiled the profound intersection of power, privilege, and oppression within healthcare systems where medical professionals occupy the center stage. By critically examining positionality and engaging in transformative learning, the team's hope is to advocate for systemic change that can work towards a more equitable and just global healthcare system. Moving forward, the researchers are committed to fostering genuine partnerships with communities, grounded in mutual respect, understanding, and a shared commitment to social justice.

Funding statement. This research received no specific grant from any funding agency, commercial entity, or not-for-profit organization.

Competing interests. The authors have no conflicts of interest to declare.

Ethical standard. Ethical Approval per ATSU IRB: Non-jurisdiction for protocol #2024-122 (not "human research").

References

Afolabi T, Borowsky HM, Cordero DM, Paul Jr DW, Said JT, Sandoval RS, Davis D, Olveczky D and Chatterjee A (2021) Student-led efforts to advance anti-racist medical education. *Academic Medicine* **96**(6), 802–807.

Alirangues M (2018) Regaining the subject: foucault and the frankfurt school on critical subjectivity. *Comparative Literature and Culture* **20**, 9.

Allwood D, Fisher R, Warburton W and Dixon J (2018) Creating space for quality improvement. *BMJ* **361**, k1924.

American Pacific Islanders Council (2021) Food Justice in Turbulent Times. http://apicouncil.org/wp-content/uploads/2022/01/API-Council-Landscape-Report_FINAL-092221-v2.pdf (accessed 2 May 2024).

Bernard AW, Gorgas D, Greenberger S, Jacques A and Khandelwal S (2012) The use of reflection in emergency medicine education. *Academic Emergency Medicine* **19**(8), 978–982.

Bodirsky M and Johnson J (2008) Decolonizing diet: healing by reclaiming traditional indigenous foodways. *Cuizine* **1**(1), 0–0.

Brookfield S (2009) The concept of critical reflection: promises and contradictions. *European Journal of Social Work* **12**(3), 293–304.

Center for Disease Control (2022) Principle 1: embrace cultural humility and community engagement. https://www.cdc.gov/globalhealth/equity/guide/cultural-humility.html (accessed 2 May 2024).

Chelak K and Chakole S (2023) The role of social determinants of health in promoting health equality: a narrative review. *Cureus* **15**(1), 1–8.

Chow CJ, Hirshfield LE and Wyatt TR (2022) Sharpening our tools: conducting medical education research using critical theory. *Teach Learn Med* **34**(3), 285–294.

Cohen-Fournier SM, Brass G and Kinmayer L (2021) Decolonizing health care: challenges of cultural and epistemic pluralism in medical decision-making with Indigenous communities. *Bioethics* **35**, 767–778.

Endrizal CL, Fialkowski MK, Davis J, Yuan S, Novotny R, Delormier TW and Rodriguez B (2018) Dietetics practice in the unique, culturally diverse Pacific Island region. *Hawaii Journal of Medicine and Public Health* **77**(6), 136–143.

https://doi.org/10.1017/S0021932025000100 Published online by Cambridge University Press

Finnie SM, Brach RJ, Dawson CA, Epstein SB, Goyal RK, Lounsbury KM, Eldakar-Hein ST and Lahey T (2021) A new roadmap for social medicine curriculum design based on mixed methods student and faculty evaluations of the preclinical curriculum. *BMC Medical Education* **21**(442), 1–10.

Fitzpatrick-Nietschmann J (1983) Pacific islanders – migration and health. *The Western Journal of Medicine* **139**(6), 848–853.

Frost W and Laing J (2016) Cuisine, migration, colonialism and diasporic identities. In Timothy DJ (ed), *Heritage Cuisines Ch. 3*. London: Routledge, pp. 37–52.

Ghiasuddin A, Wong J and Siu AM (2015) Ethnicity, traditional healing practices, and attitudes towards complementary medicine of a pediatric oncology population receiving healing touch in Hawaii. *Asia-Pacific Journal of Oncology Nursing* **2**(4), 227–231.

Glenn EN (2015) Settler colonialism as structure: a framework for comparative studies of U.S. race and gender formation. *Sociology of Race and Ethnicity* **1**(1), 52–72. https://doi.org/10.1177/2332649214560440

Hodges B (2014) When I say … critical theory. *Medical Education* **48**, 1043–1044.

Kepkiewicz L, Chrobok M, Whetung M, Cahuas M, Gill J, Walker S and Wakefield S (2015) Beyond inclusion: towards an anti-colonial food justice praxis. *Journal of Agriculture, Food Systems, and Community Development* **5**(4), 99–104.

Kepkiewicz L and Rotz S (2018) Toward anti-colonial food policy in Canada? (Im)possibilities within the settler state. *Canadian Food Studies* **5**(2), 13–24.

Kleinman A (2010) Four social theories for global health. *The Lancet* **375**, 1518–1519.

McArthur J (2022) Critical theory in a decolonial age. *Educational Philosophy and Theory*, **54**(10), 1681–1692.

McKinley CE and Jernigan VBB (2023) "I don't remember any of us . . . having diabetes or cancer": how historical oppression undermines Indigenous foodways, health, and wellness. *Food and Foodways* **31**(1), 43–65.

Morisako AK, Tauali'i M, Ambrose AJH and Withy K (2017) Beyond the ability to pay: the health status of Native Hawaiians and other Pacific Islanders in relationship to health insurance. *Hawai' Journal of Medicine & Public Health* **76**(3), 36–41.

Mosley DM (2004) Breaking bread: the roles of taste in colonialism. *Food, Culture, & Society* **7**(2), 49–62.

Murphy JW, Franz BA and Schlaerth C (2018) The role of reflection in narrative medicine. *Journal of Medical Education and Curriculum Development* **5**, 1–5.

Naidu T (2021) Modern medicine is a colonial artifact: introducing decoloniality to medical education research. *Academic Medicine* **96**(115), S9–S12.

Naidu T (2023) Coloniality lives on through medical education. *BMJ* **383**, 1–2.

Nakagawa S (2021) Auto-decolonisation: lifelong education for decolonization. *International Journal of Lifelong Education* **40**(4), 359–371.

Ng SL, Wright SR and Kuper A (2019) The divergence and convergence of critical reflection and critical reflexivity: implications for health professions education. *Acad Med* **94**, 1122–1128.

Nixon SA (2019) The coin model of privilege and critical allyship: implications for health. *BMC Public Health* **19**, 1–13.

Paradis E, Nimmon L, Wondimagegn D and Whitehead CR (2020) Critical theory: broadening our thinking to explore the structural factors at play in health professions education. *Academic Medicine* **95**(6), 842–845.

Perkins S, Nishimura H, Olatunde PF, *et al.* (2023) Educational approaches to teach students to address colonialism in global health: a scoping review. *BMJ Global Health* **8**, e011610.

Pescosolido BA and Kronenfeld JJ (1995) Health, illness, and healing in an uncertain era: challenges from and for medical sociology. *Journal of Health and Social Behavior*, 5–33. https://doi.org/10.2307/2626955.

Sadabadi AA and Rahimi Rad Z (2021) Social innovation participatory action research for empowerment of marginalized people. *Asian Social Work and Policy Review* **15**, 160–172. https://doi.org/10.1111/aswp.12228

Washington State Commission on Asian Pacific American Affairs (2024) Asian Americans and Pacific Islanders in Washington State. https://capaa.wa.gov/resources#:~:text = Washington%20State%20has%20the%20seventh,%2C%20Whitman%2C%20and%20Spokane%20counties (accessed 2 May 2024).

Whyte KP (2017) Food sovereignty, justice and Indigenous peoples: an Essay on settler colonialism and collective continuance. In Barnhill A, Doggett T and Egan A (eds), *Oxford Handbook on Food Ethics*. Oxford: Oxford University Press

Wittich CM, Reed DA, McDonald FS, Varkey P and Beckman TJ (2010) Transformative learning: a framework using critical reflection to link the improvement competencies in graduate medical education. *Academic Medicine* **85**(11), 1790–1793.

Zarkali A, Acquaah F, Donaghy G, Hutton R, McLaughlin L, Ngai J, Parfitt C, Pirkis L and Till A (2016) *Trainees Leading Quality Improvement*. London: Faculty of Medical Leadership and Management.

Cite this article: Martorana A, Katta S, Huynh H, Ulger E, and Andrion J (2025). Critical theory and cultural competency in medical QI projects: lessons from Pacific Islander communities. *Journal of Biosocial Science* 1–6. https://doi.org/10.1017/S0021932025000100