

Recommendation 5 Evidence Profiles

Recommendation Question: Should undergraduate education for nurses and the interprofessional team (IP) and/or continuing professional development for health workers on Indigenous health be recommended?

Recommendation 5: It is recommended that academic settings integrate compulsory Indigenous health and Indigenous cultural safety content into college and university educational curricula for all students entering health professions.

Population: Undergraduate nurses/interprofessional team members and health workers

Intervention: Professional development and/or undergraduate education regarding Indigenous health

Comparison: No professional development and/or undergraduate education regarding Indigenous health

Outcomes: Student cultural safety, student knowledge, student attitude (not found within this literature), student change in practice (not found within this literature)

Setting: Academic institutions and health service organizations

Bibliography: 57, 136, 198, 599, 1202, 1433

Quality assessment							Study details		No. of participants		Reported effects/outcomes	Certainty	Reference
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Country	Intervention	Intervention	Control			
Nursing/IP student knowledge: measured with (Indigenous health team-created bank of questions on perceived knowledge (5 questions) of cultural/emotional responses (3 questions) to cultural safety.													
1	Systematic review	Not serious	Not serious	Not serious	Serious ^a	None	198: Australia, New Zealand, Canada and the U.S.	198: The review examined the implementation and impact of cultural competency and Indigenous health curricula into undergraduate health student programming.	198: 10/23 studies reported on health service student knowledge. The studies were single-arm, pre/post test design. Most of these studies reported Indigenous health as a	N/A	198: Six studies reported a positive direction of effect in students' knowledge of Indigenous health following delivery of Indigenous Health education content.	⊕⊕⊕○ Moderate	198: Pitama et al. (2018)

Quality assessment							Study details		No. of participants		Certainty	Reference
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Country	Intervention	Intervention	Control		
							1202: Canada	<p>The content included Indigenous cultural protocols and practices, health disparities and inequities, health status and communication skills and health literacy. A variety of learning methods were used in the studies.</p> <p>Additional studies identified:</p> <p>1202: First-year Masters of Occupational Therapy (OT) students were introduced to the Aboriginal</p>	compulsory core curriculum.	N/A	<p>1202: The majority of the participants demonstrated a perceived increase in Indigenous health knowledge, indicating a positive change after</p> <p>One additional primary study was identified, and reported a positive effect of an Indigenous health education intervention on student knowledge.</p>	1202: Jamieson, Chen, Murphy, Maracle, Mofina & Hill (2016)

Quality assessment							Study details		No. of participants		Certainty	Reference
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Country	Intervention	Intervention	Control		
								Cultural Safety Initiative (ACSI) learning modules in the course OT 841 Socio-Cultural Determinants of Occupation. Modules were offered by an Indigenous educator from an Aboriginal student centre with AHT (Anishnawbe Health Toronto) training. The format included didactic teaching, sharing of personal and community stories and traditions, Modules were offered by an Indigenous educator from an Aboriginal student centre with AHT (Anishnawbe Health Toronto) training. The	suggesting improvements in perceived knowledge of indigenous health between pretest and post test. The greatest change in perceived knowledge was for the item 'aboriginal cultures generally' where 92.6% of participants showed increases in scores.		completing the OT 841 course.	

Quality assessment							Study details		No. of participants		Certainty	Reference	
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Country	Intervention	Intervention	Control			Reported effects/outcomes
								format included didactic teaching, sharing of personal and community stories and traditions, interactive activities, and reflective discussions.					
<p>Nursing/IP student cultural safety: measured with Adapted White Racial Identity Attitude Scale (WRIAS); Achievement of cultural safety outcomes survey; Cultural Capability Measurement Tool (CCMT)^m; a customized survey was developed to measure power differentials, the relationships between culture and health, the importance of service delivery that is culturally sensitive and the level of confidence in providing culturally safe services.</p>													
4	Single-arm	Serious ^b	Serious ^c	Not serious	Not serious	None	136: United States	136: A 1-week Cultural Immersion Service Learning (CISL)	136: n=32 Twenty-five of the 32 participants	NA	Summary: 4 studies reported a positive direction of effect and improved scores on nursing/IP health student cultural safety measures following the participation in Indigenous health and cultural safety educational interventions. 136: Following the 1-week CISL intervention, nursing student scores on the	Very Low ⊕○○○	136: Alexander-Ruff & Kinion (2019)

Quality assessment							Study details		No. of participants		Certainty	Reference
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Country	Intervention	Intervention	Control		
							599: Australia	experience for undergraduate nursing students who traveled to a rural Indigenous community where the students lived and worked for 1 week. The nursing students were immersed in the community 12 to 14 hours per day, participating in cultural events such as discussions with Elders, beading, arrow making, archery, horseback riding, and meal sharing. 599: Before immersion: two prerequisite lectures: 1. culture from an	demonstrated more than a 10-point difference between their pretest and posttest adapted and validated White Racial Identity Attitude Scale (WRIAS) scores. 599: n=271 Medical students were from:	NA	modified WRIAS improved. Effect size of the CISL intervention: 1.902. 599: Only post immersion scores are presented, but authors reported an	599: Smith, Wolfe, Springer, martin &

Quality assessment							Study details		No. of participants		Certainty	Reference	
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Country	Intervention	Intervention	Control			Reported effects/outcomes
								international perspective and then compared an Australian perspective and 2. On health status, exploring the social determinants of Aboriginal and Torres Strait Islander health using a storytelling approach. Immersion: attended a 1.5 day overnight cultural immersion to a rainforest retreat, Koonjearre, at Springbrook in the rural Gold Coast (Queensland). The curriculum included a variety of educational methods such as history maps and the talking circle, as well	Australia, and also India, Pakistan, Iran, Asia, South Africa and New Zealand by birth/descent. Post immersion scores: range from 3.91 to 4.26 out of 5.		improvement in attitudes and improved cognitive links between the immersion activity and the students' comprehension of the social determinants of health.		Tongo (2015)

Quality assessment							Study details		No. of participants		Certainty	Reference
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Country	Intervention	Intervention	Control		
							1433: Australia	as the students drawing and discussing their own culture. outcomes. 1433: The semester-long (12 weeks), mandatory First Peoples' Health course for undergraduate health professional students was offered via a mixed mode, using 5×3-hour face to face workshops and approximately 10 hours of self-directed learning using online mini lectures and resources. All members of the core teaching team were First Peoples academics.	1433: n=297 There was a significant increase in Cultural Capability Measurement Tool (CCMT) mean scores following the semester long Indigenous Health from baseline (M=92.4, SD=8.9) to post-course (M=103.25, SD=9.6).	NA	1433: Students cultural capability scores improved following the 12-week First Peoples' Health course for undergraduate health professional students reflect improved student understanding of factors influencing First Peoples' health and the students' sense of cultural capability.	1433: West, Mills, Rowland & Creedy (2019)

Quality assessment							Study details		No. of participants		Certainty	Reference
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Country	Intervention	Intervention	Control		
							57: Australia	57: Final year University of Newcastle undergraduate podiatry students attending a culturally safe Aboriginal and Torres Strait Islander student clinic at Wyong Hospital. The clinic is led by an Aboriginal Podiatrist, supported by an Aboriginal Health Worker, and provides student immersion placements that include cultural capability learning. The clinic focuses on holistic and culturally safe care and understanding lived experiences and history.	57: n= 58 Domain (number of questions, max score) [Pre/post are median scores] 1 (3, 15): Pre: 13 Post: 14 Score change (% of pre-placement score): 1.00 (7.69%) 2 (5, 25): Pre: 19 Post: 22 Score change: 3.00 (15.79%) 3 (5, 25): Pre: 23 Post: 24 Score change: 1.00 (4.35%) 4 (4, 20): Pre: 11 Post: 17 Score change: 6.00 (54.55%)	NA	57: A positive direction of effect is reported for all cultural safety domains. This study found that podiatry students, who participated in an immersive placement at a culturally safe podiatry clinic, had significant improvements in their understanding of, and confidence with, providing culturally appropriate care to Aboriginal and Torres Strait Islander Peoples.	57: West et al. (2021)

Quality assessment							Study details		No. of participants		Reported effects/outcomes	Certainty	Reference
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Country	Intervention	Intervention	Control			

Explanations

^aThe total number of participants across the relevant studies in the systematic review was < 400. We downgraded by 0.5.

^bAcross the 4 studies there were serious concerns about methodological limitations in how the studies were conducted using the ROBINS-tool. We downgraded by 1.0.

^cAcross the 4 studies there were concerns around regarding the consistency of how cultural concepts were defined and the differing tools used to measure the cultural outcomes. We downgraded by 1.0.

CERQual Evidence Profile

Recommendation Question: Should undergraduate education for nurses and the interprofessional team and/or continuing professional development for health workers on Indigenous health be recommended?

Recommendation 5: It is recommended that academic settings integrate compulsory Indigenous health and Indigenous cultural safety content into college and university educational curricula for all students entering health professions.

Aim: To explore the experiences of participating in Indigenous health education as an undergraduate health service student.

Bibliography: 41, 64, 111, 136, 323, 542, 566

Finding: Students reported that immersion experiences and engaging in critical reflexivity supported their capacity to provide culturally safe care and brought about greater awareness in regards to social determinants of health and their impact on indigenous health disparities.							
Studies contributing to the Finding	Included study designs	CERQual Assessment				Overall CERQual Assessment of Confidence	Explanation of Judgement
		Assessment of Methodological Limitations	Assessment of Relevance	Assessment of Coherence	Assessment of Adequacy of Data		
Individual studies: 41: Withall et al. (2020) 64: Thackrah, Wood & Thompson (2020) 111: Oosman et al. (2019) 136: Alexander-Ruff & Kinion (2019) 323: Askew et al. (2017) 566: Benson et al. (2015)	6 individual studies and 1 dissertation: 41: semi-structured interviews and thematic analysis 64: semi-structured interviews and thematic analysis 111: semi-structured interviews and descriptive phenomenology 136: focus groups, reflective writing assignment and	Serious concerns (Some individual studies did not consider researcher reflexivity or participant confidentiality)	Minor concerns (The study populations included medical, nursing and midwifery students)	Moderate concerns (Moderate concerns about the coherence of how cultural safety is defined across the studies)	Minor concerns (6 individual studies and 1 dissertation offered moderately rich data)	⊕⊕○○ Low confidence	The finding was graded as low confidence due to serious concerns over methodological limitations of the individual studies, and moderate concerns about the coherence of the cultural safety concept.

<p>542 (dissertation): Alexander-Ruff (2016)</p>	<p>thematic analysis</p> <p>323: semi-structured interviews and thematic analysis</p> <p>566: written reflective notes and phenomenology</p> <p>542: reflective writing and observation. Constant comparative method, grounded theory.</p>						
<p>Finding: Student reported an improvement in their knowledge about indigenous health issues.</p>							
<p>323: Askew et al. (2017)</p>	<p>323: semi-structured interviews and thematic analysis</p>	<p>Serious concerns^c (Researcher reflexivity not considered)</p>	<p>Minor concerns (The study population included medical students)</p>	<p>Minor concerns (Concerns about the coherence of how cultural safety is defined)</p>	<p>Serious concerns^d (Moderate concerns related data richness)</p>	<p>⊕○○○ Very low confidence</p>	<p>The finding was graded as confidence due to serious concerns over methodological limitations of the individual study and review and moderate concerns over adequacy of data.</p>