Auckland University of Technology (AUT), Faculty of Health and Environmental Sciences Research Roadshow 2024

Edited by: Cath Conn, Srishti Sharma

Authors: Cath Conn, Julie Trafford, Daniel Fernandez, Jennifer Nikolai, Mandie Foster, Ayan Said, Tineke Water, Renu Sisodia, Nadia Charania, Lisa Whitehead, Therese O'Sullivan, Julie Hill, Evalotte Morelius, Shoba Nayar

AUT's Faculty of Health and Environmental Sciences Research Roadshow is an annual event showcasing the diversity of research undertaken by faculty researchers, and postgraduate students. The 2024 faculty research roadshow was held on Thursday 12 September at AUT's North Campus. The AUT Child and Youth Health Research Centre investigates the impact of illness and disability, home and family, health services, nutrition, physical activity and the wider environment on young people. We're committed to providing a space for young people's voices. CYHRC presented members' research abstracts.

The theme of the roadshow was 'Partnerships for Impact' which for CYHRC projects incorporates –

- Youth as participants and coresearchers Researchers in this field aim for meaningful youth engagement throughout the research process, from design, through recruitment and fieldwork, to dissemination. All-important are efforts to create inclusive environments, providing appropriate support for youth, and demonstrating a willingness to share decision-making power. For example, in two projects refugee youth were coresearchers helping to shape decision-making related to their health.
- **Increasing the visibility of youth and the challenges they face** By focusing on a range of tools and activities, young participants and researchers, including postgraduate students, can significantly enhance their impact, visibility, and contributions to their fields. Building a strong research profile takes time and persistence, but ongoing effort will yield long-term benefits for research careers and the wider society.
- Partnering with organizations and actors interested in youth health Such partnerships can contribute to youth health and empowerment and significantly increase the impact of research on youth voicelessness by application of key strategies and ensuring that organisations foster appropriate cultures and mindsets within their own and other organisations. By fostering partnerships, researchers

can create a more robust ecosystem for addressing youth voicelessness. This collaborative approach ensures that research is not only more comprehensive and relevant but also more likely to lead to tangible improvements in young people's lives and opportunities for their voices to be heard.

- Challenges of partnering with youth given issues of voicelessness
These include adult-centric perspectives and organisations, power
imbalances, and communications difficulties. While there are many
challenges, the potential for improved research impact makes youth
engagement a valuable indeed imperative approach, especially for those
focused on youth issues, such as youth health and wellbeing.

Planetary Health and university curricula in Aotearoa New Zealand: Challenges, Opportunities and Strategies

Julie Trafford, Cath Conn, Shoba Nayar

School of Public Health and Interdisciplinary Studies, Auckland University of Technology

Corresponding author: julie.trafford@aut.ac.nz

Abstract

Planetary Health, a relatively new concept in health science, addresses impacts of human society on earth's natural systems, with its ongoing effects on human health. Given its global significance and holistic approach, we endorse an imperative for undergraduate and postgraduate health science education to prioritise planetary health.

Teachers of interdisciplinary public and environmental health at Auckland University of Technology have incorporated planetary health as a key topic into four undergraduate and postgraduate modules since 2021. These four contexts, building on our research in food environments and security, cover a broad range of health sciences with emphasis on health systems, public and environmental health, global health, healthy cities, and indigenous health.

We argue for planetary health to be a core, cross-cutting element of curricula in interdisciplinary public health. We would like to be part of the growing knowledge and skills base, encouraging students to debate and explore for themselves, drawing on and contributing to examples and stories for education, being creative, student-centred, project-oriented, involving academics from outside health, and contributing to education for a future planetary health workforce.

Challenges persist for us as planetary health educators. We lack material and real-world examples in planetary health for existing health systems to draw on. Nonetheless, the dire state of planetary health, and urgency for action, pressures us to promote planetary health, and can leave students feeling overwhelmed or hopeless. We are concerned about placing the burden of action on young people, when this is a society-wide issue. Students may be ambivalent, unfamiliar with planetary health ideas, examples and career pathways.

Opportunities abound to develop planetary health education; to be early adopters and contributors. There is appreciation by all stakeholders, with strong interest from some students, that planetary health forms the basis of skills development for a future health system. Furthermore, in Aotearoa New Zealand strong indigenous knowledge and values, such as Kaitiakitanga or guardianship, provide a unique holistic health perspective to draw on. We foresee many roles in planetary health in future health systems.

Keywords: planetary health; university education; Aotearoa New Zealand

How can an adaptable lesson plan help teachers or adult facilitators to create a space for children to become co-designers in oral health?

Daniel Fernandez¹, Cath Conn², Jennifer Nikolai³

¹Oral Health Department, School of Health Sciences, Faculty of Health and Environmental Sciences, Auckland University of Technology

²School of Public Health and Interdisciplinary Studies, Auckland University of Technology

³School of Sport and Recreation, Auckland University of Technology

Corresponding author: Daniel.Fernandez@aut.ac.nz

Abstract

Introduction

Children have the capacity to become prosumers of oral health through codesigning oral health games to prevent dental caries. New tools and opportunities are opening up in the digital world context, including the applicability of serious games in oral health. Serious games are a new development in Internet-based tools for purposes other than entertainment, such as influencing people to learn and change behaviours. Children are great users of the Internet, which offers many opportunities for them to co-design their toothbrushing game as a serious game and share it with others through digital social platforms. This study aimed to explore tools based on adult facilitators' ideas for creating a space for children to create their own toothbrushing game. The findings provided ideas, and guidance to create an adaptable lesson plan that reflects the adult facilitators' concepts.

Methods

Participatory Action Research (PAR) methods were used in this research with a child-centred focus. Seven young adult participants from different disciplines interested in working with children participated in this research. Participants engaged in participatory workshop discussions to explore ideas for creating a space for children to co-design a toothbrushing game.

Results / discussion

The findings from this research project supported the creation of an adaptable lesson plan to promote children's voices and co-design practices. The adaptable lesson plan has the possibility of multiple adaptations in teaching. The adaptable lesson plan is proposed to be used by teachers, or adult facilitators, to guide children in creating an innovative space for children to co-design oral health games in a child-centred environment.

Conclusion

As a teaching tool, an adaptable lesson plan opens possibilities to support teachers and adult facilitators to collaborate with children in a child-centred environment to co-design a toothbrushing game. Collaborating with children in partnership provides opportunities for children to become prosumers of oral health with the possibility and potential to challenge oral health policymakers. Child-centred approaches, where children participate in partnership as co-researchers and express their views and voices in oral health programmes, require further exploration.

Keywords: serious games, Internet, prosumers, lesson plan, child-centred

A Child-Centred Research Checklist to Improve the Design and Reporting of Paediatric Research Studies: A Descriptive Mixed Methods Study

Mandie Foster^{1,2}, Lisa Whitehead^{2,3}, Therese O'Sullivan⁴, Julie Hill⁴, Evalotte Morelius^{2,5}

- ¹ Auckland University of Technology, School of Clinical Sciences, New Zealand
- ² Edith Cowan University, School of Nursing and Midwifery, Joondalup, Western Australia, Australia
- ³ Centre for Postgraduate Nursing Studies, University of Otago, Christchurch, New Zealand
- ⁴ Nutrition & Health Innovation Research Institute, School of Health and Medical Science, Edith Cowan University, Joondalup, Western Australia, Australia
- ⁵ Department of Health, Medicine and Caring Sciences, Linköping University, Linköping, Sweden

Corresponding author: mandie.foster@aut.ac.nz

Abstract

No internationally developed child-centred research checklist is currently available to enhance the quality and transparency of the development, reporting and evaluation of research undertaken with children.

Purpose: To develop an internationally relevant, expert informed child-centred research checklist.

Design: A descriptive mixed methods study was undertaken in five sequential phases, including a Delphi component.

Setting(s): Academic/international context.

Funding: This work was supported by an Early Career Research Grant, Edith Cowan University [number G1004710].

Methods: Five sequential stages:

1. Literature review using four databases (CINAHL, MEDLINE, Scopus, PsycINFO) and analysis to identify key themes in child-centred research (January 2020).

- **2.** Generate a questionnaire based on the key themes for international experts in child research to provide their opinions on what should be included in a child-centred research checklist (March 2020)
- **3.** Inductive thematic analysis of the experts' responses to generate the initial draft checklist (June 2020)
- **4.** The checklist progressed through three rounds of Delphi study for a wider range of experts to provide their consensus on what a child-centred research checklist should contain (August 2020-February 2021)
- **5.** Refinement of the child-centred research checklist based on the Delphi study (March 2021- November 2022).

Results: A total of 160 articles met the inclusion criteria for review and were considered in the development of a 10-item open-ended questionnaire, adapted for four age-brackets (0-1yrs, 2-4yrs, 5-10yrs, >11yrs). Responses from 14 experts across 10 countries generated 205 generic statements and 76 examples to inform a child-centred research checklist. Following this, 158 experts from eleven disciplines across 18 countries participated in the three round Delphi study (38% retention rate over the three rounds). The final checklist includes 11 statements, and 24 examples represented under three categories of "informed child-parent consent, assent and dissent", "code of conduct" and "child focused methods".

Conclusion: The child-centred research checklist was generated from a mixed methods study undertaken in five sequential phases, with input by 172 experts from 11 disciplines across 19 countries. The child-centred research checklist is the first international, expert informed tool to support good quality and transparent child-centred research. We call on researchers, clinicians, journal editors, organisations, and ethics committees to use this checklist for future research with children. The next phase of this project is engagement with children and their families to refine the checklist.

Tweetable abstract: New checklist to support good quality child research practices @IFNAorg

Keywords: children; checklist; Delphi Technique; ethics; interdisciplinary research; Paediatric; research

Mobilising voices & agency of children & youth for planetary health: examples from Aotearoa & Sri Lanka

Julie Trafford

School of Public Health and Interdisciplinary Studies, Auckland University of Technology

Corresponding author: <u>julie.trafford@aut.ac.nz</u>

Abstract

Introduction

Planetary health is a solutions-seeking, transdisciplinary, trans-national, and holistic approach to the health and well-being of people and the planet. My focus as an academic working to promote planetary health is on projects where I create spaces in both Aotearoa New Zealand and Sri Lanka for children and youth to act locally and act now to mobilise their voices and agency for planetary health.

Method

This collection of ongoing projects involves me positioning myself as a codesigner who creates spaces that enable child and youth-led participatory approaches to mobilize their voices and agency for planetary health. Opportunities for me to create these spaces have emerged from Covid-19 lockdowns, school-, university-, and community-based workshops, and fieldtrips, and reframing from problems-based to solutions-seeking.

Results

The range of participatory approaches chosen by these young people have included photovoice, mapping, drawing and art therapy, "I spy with my little eye," "I hear with my little ear," rubbish audits, eating healthy food to reduce footprints, growing and knowing what they eat, using their seven senses - including intuition and feelings -, talking trees, and tour guide children and undergraduates as co-researchers and co-authors.

The participatory approaches have successfully engaged children and youth in activities that both educate them about and promote planetary health. These activities have mobilised them to act locally and act now to make a difference to their own health, the health of other people, and the health of the natural environment within their communities and beyond.

Conclusion

Acting now and locally can make a significant impact on planetary health, with improvements shown to be both immediate and sustained over time. By creating spaces for children and youth to drive their own participatory approaches, their voices and agency are mobilized, contributing to the overall health and well-being of people and the planet.

Keywords: planetary health; children and youth voices; Sri Lanka

Creating Space for Tribal Sahariya Youth to improve access to safe water in rural Rajasthan, India.

Renu Sisodia¹, Cath Conn¹, Nadia Charania¹, Jennifer Nikolai²

¹School of Public Health and Interdisciplinary Studies, Auckland University of Technology

²School of Sport and Recreation, Auckland University of Technology

Corresponding author: renu.sisodia@aut.ac.nz

Abstract

Introduction: Access to safe water is a fundamental human right, yet Indigenous communities like the Sahariya in Rajasthan, India, face significant challenges in securing this vital resource. This study explores the obstacles the Sahariya community faces within the broader context of the global water crisis, exacerbated by pollution, inadequate governance, and climate change. Despite efforts like the Jal Jeevan Mission to improve water supply in rural India, these issues persist, particularly in remote tribal areas.

The Sahariya's struggle for water access is further complicated by systemic discrimination based on caste, gender, and ethnicity. Government schemes often favour upper castes, resulting in unequal access. Sahariya women and girls are particularly burdened with long-distance water collection, which negatively impacts their education, health, and economic opportunities.

Method: Using a critical research paradigm and participatory action research (PAR) methodology, this study incorporated a participatory video project cocreated by Sahariya youth. The film (video) documents the daily challenges and resilience of the Sahariya people. It highlights the realities of water scarcity and its effects on community well-being. The project's strategic use of film ensures that Sahariya's authentic voices and experiences are at the forefront of the narrative.

Discussion: The findings emphasise the need for inclusive policies that address structural discrimination in water management and advocate for equitable resource distribution. Robust support from government and non-government organisations is crucial to ensure the Sahariya's rights to safe water are recognised and equitable water access is achieved.

Keywords: Sahariya; India; safe water access; participatory video

The challenges of developing African methodologies illustrated with Dhaqan Inquiry based methods

Ayan Said¹, Cath Conn¹, Michael Neufeld², Tineke Water³

¹School of Public Health and Interdisciplinary Studies, Auckland University of Technology

²School of Clinical Studies, Auckland University of Technology

³Child and Youth Health Research Centre, Auckland University of Technology

Corresponding author: ayan.said@aut.ac.nz

Abstract

Indigenous knowledge is complicated because it includes many different systems that control how indigenous people live. It offers a distinctive method of understanding and, at its core, a method that is appropriate for the local area to comprehend problems that affect indigenous populations. According to this concept, it is possible for marginalised Somali women to speak about their experiences in their own words and for a societal understanding to develop. Frameworks based on indigenous knowledge are essential for conceptualising and promoting social change. The term Dhaqan; refers to the deeply ingrained cultural and traditional way of life that unites the homogeneous Somali people. The four fundamental tenets of Somali Dhaqan are being Somali, having a family history, speaking Somali, and having ancestors. All these elements interact and inform one another to create the Somali Dhaqan worldview, which is an embodiment of Somali existence.

Indigenous knowledge is the information that a society uses to decide which activities, including education and agriculture, are suitable for their way of life. All Somali people, especially those from the diaspora, adhere to the distinct Somali Dhaqan philosophy. The philosophy of Somali Dhaqan can be used as a body of knowledge to comprehend problems affecting Somali people and help them make sense of their own realities. The strategy or point of view

that directs the researcher is known as methodology. A type of social science called qualitative research relates to how people interpret their experiences and the environment in which they live. The social meaning that people attach to their experiences, events, and situations is what qualitative researchers are looking for. The purpose of qualitative research is to derive meaning from the compiled data.

Indigenous wisdom, along with information derived from the creation of development solutions that are acceptable to the society being assisted on a cultural level. A study located in Aotearoa New Zealand set out to explore the possibilities of using Dhaqan Inquiry to underpin conversations with young Somali women diaspora on sexual and reproductive health. It was chosen to provide a more indigenous and authentic framework for their voices and for the data analysis.

Keywords: Somali diaspora; young women; sexual and reproductive health; Dhaqan Inquiry