

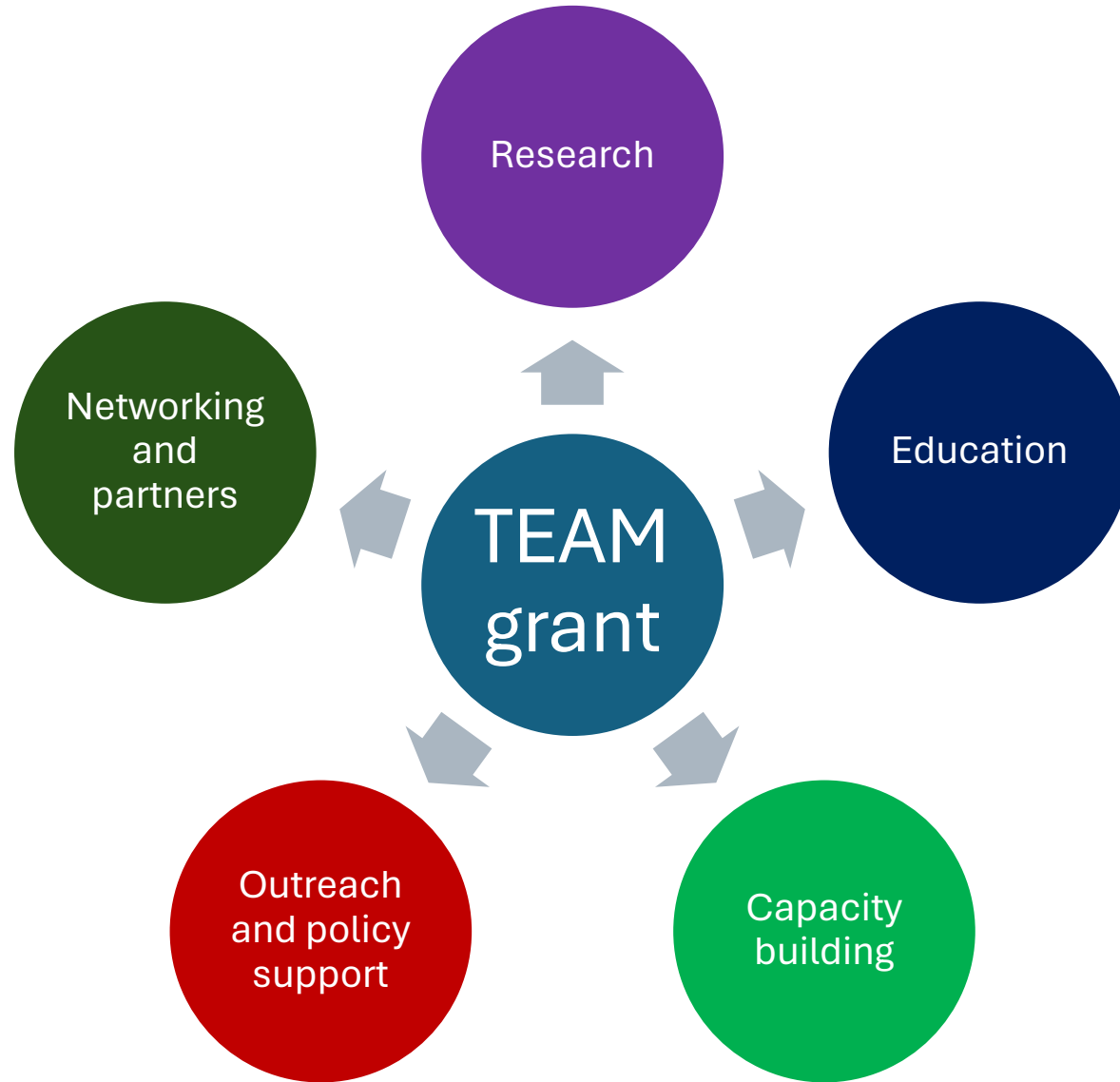
# Fostering the development of planetary health research and education in Africa towards climate-resilient primary health care

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Ilse Ruyssen and Charlotte Scheerens, CliMigHealth network and University of Ghent, Belgium

TEAM Grant from VLIRUOS







Research

# Scoping review on climate change and primary health care in Africa



Contents lists available at [ScienceDirect](#)

The Journal of Climate Change and Health

journal homepage: [www.elsevier.com/joclim](http://www.elsevier.com/joclim)



Review

## Climate change and primary health care in Africa: A scoping review

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<https://doi.org/10.1016/j.joclim.2023.100229>



# 10 key research questions







1. To what extent does PHC policy in Africa incorporate climate change into its future considerations, strategies and plans?
2. What do PHC providers and managers need to know about building climate-resilient facilities and services, and how should these learning needs be addressed?
3. How can PHC providers identify the specific climate-related vulnerabilities of communities in their catchment areas and how can they respond to them?
4. What additional indicators need to be collected in the health information system to monitor risks and give PHC early warning of extreme weather events?
5. What are the priority PHC research questions that address health and climate change?
6. How can PHC infrastructure be more resilient to ensure services continue in the face of climate-related risks and extreme events?
7. How can multisectoral collaboration at a community and PHC level take action on the environmental determinants of health?
8. What changes do health programs need to make to ensure services continue despite climate-related risks and challenges?
9. How can we measure the emergency preparedness of PHC facilities and services to respond to and recover from climate events?
10. What adjustments to PHC financing are needed to prepare for and respond to the effects of climate change?

# Scoping review on migration and primary health care in Africa

## Migration and primary healthcare in sub-Saharan Africa: A scoping review



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**Background:** Migration in Africa is increasing and driven by a variety of inter-related socio-economic, conflict and climate-related causes. Primary healthcare (PHC) services will be in the forefront of responding to the associated health issues.

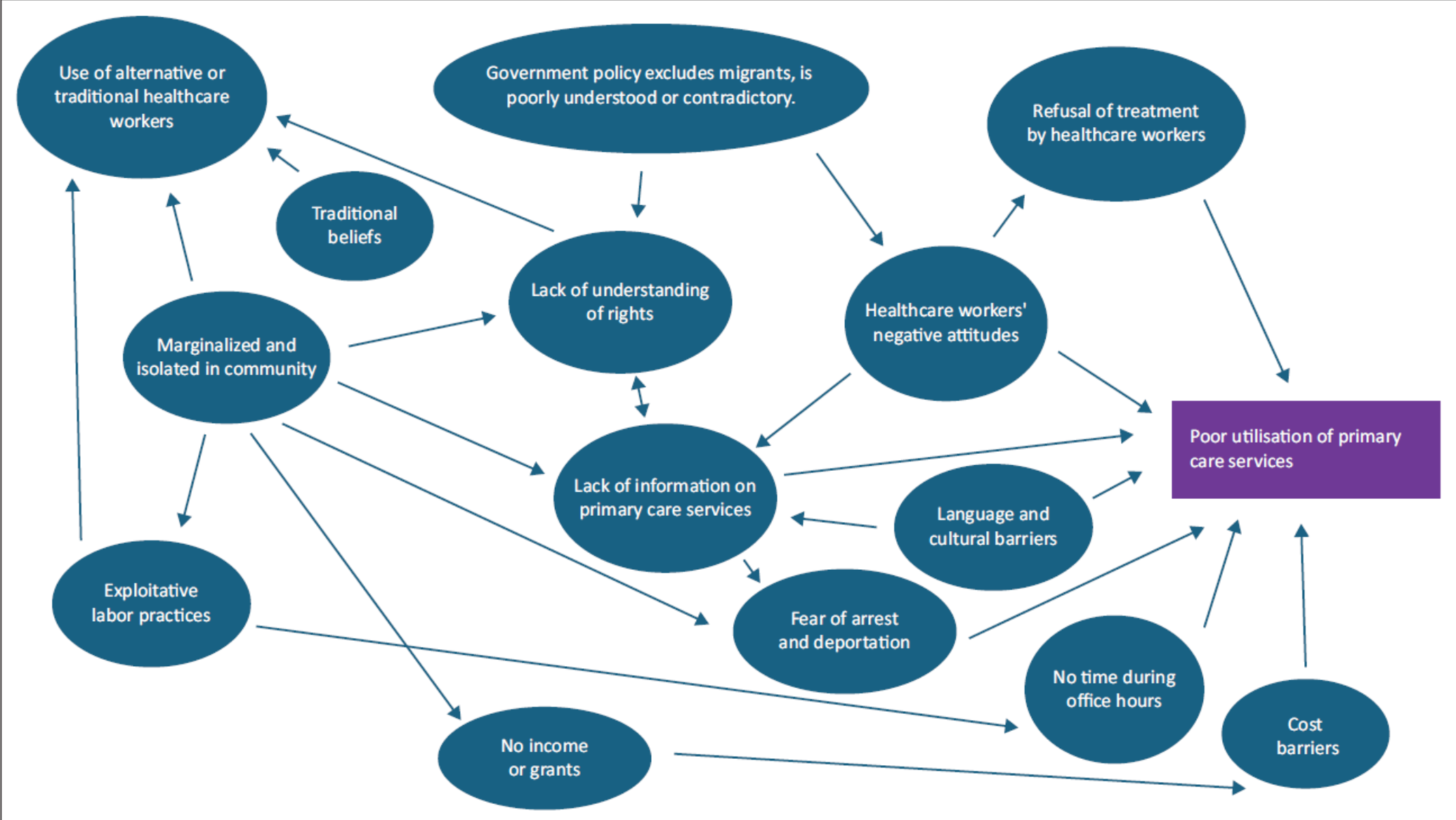
**Aim:** This study aimed to review the literature on the effect of migration of PHC service delivery in Africa and the challenges facing migrants in accessing PHC.

### Setting:

**Methods:** A systematic approach (Preferred Reporting Items for Systematic Reviews and Meta-analysis extension for Scoping Reviews) was applied across six databases and grey literature from African universities (2010 to 2021). Data were extracted and analysed quantitatively and qualitatively.

**Results:** A total of 3628 studies were identified and 50 were included. Most studies were descriptive or used mixed methods. Publications came from 25 countries, with 52% of studies from South Africa, Uganda and Kenya. Most migrants originated from Zimbabwe, the

[AQ1]



# Evaluating the climate-resilience of primary health care facilities and services in the Western Cape.



## HEALTH FACILITY LEVEL CLIMATE VULNERABILITY AND CAPACITY ASSESSMENT

A method to identify climate change vulnerabilities, risks, and solutions at the health facility level<sup>1</sup>

(v 1.0 Field test version)





# Cederberg subdistrict

Citrusdal cut off from the rest of the world after heavy floods wash away part of the R303



The Sinkhole on the R303 close to the Olifants River in Citrusdal. Picture: Tracey Adams/ ANA

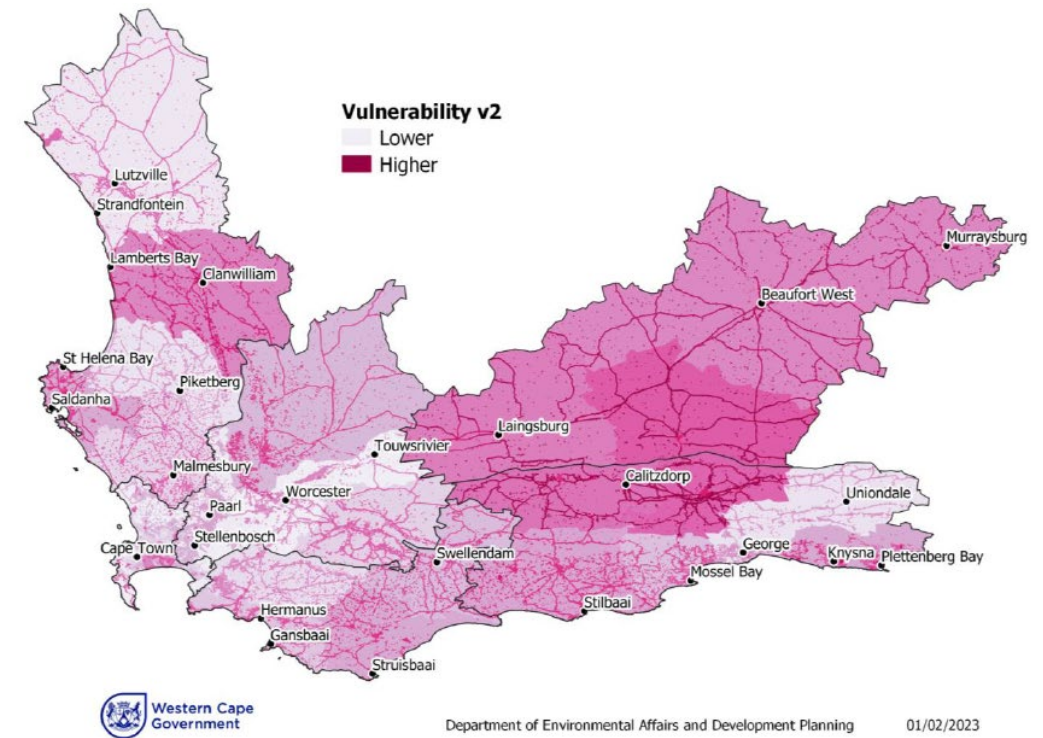
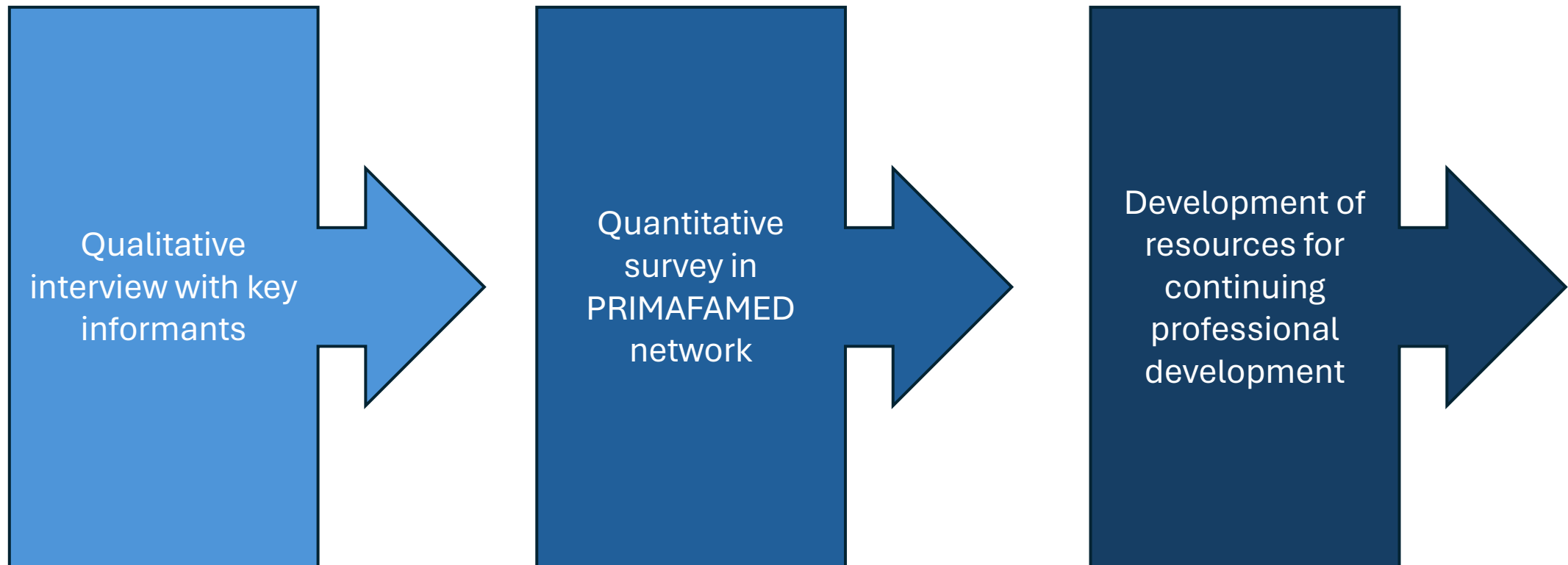


Figure 4: Vulnerability to environmental threats in the Western Cape (combining socio-economic and governance indicators)

Source: Bhuta S (2023) IOL, <https://www.iol.co.za/news/south-africa/western-cape/citrusdal-cut-off-from-the-rest-of-the-world-after-heavy-floods-wash-away-part-of-the-r303-53e6910b-626d-49a8-b47b-cd39cd819041>, 27 May 2024

What do primary health care providers need to know about building climate-resilient facilities and services, and how should these learning needs be addressed?



# Future projects

- To what extent does PHC policy in Africa incorporate climate change into its future considerations, strategies and plans?
- How can community-orientated primary care address the environmental determinants of health?



# Capacity building



# Five MPhil in Family Medicine research projects and bursaries

- Beatrice Muhu (Kenya): The effect of climate change on child health in Northern Kenya
- Tumi Thulo (South Africa): The ability of migrants to access primary care in Gauteng
- Mandisa Tenego (Botswana): Capacities and vulnerabilities of Matsaudi community against the effects of climate change in Okavango Delta.
- Itah Matipa (Zambia): The current health care waste management practices amongst district hospitals in Lusaka
- One more to come 2025

# Christian Lokotola – post doctoral development

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- Postgraduate supervision
- Co-investigator
- Teaching in the health professions course (SU)
- Planetary health for family doctors course (WONCA)
- Collaborative research with PRIMAFAMED members





# PRIMAFAMED

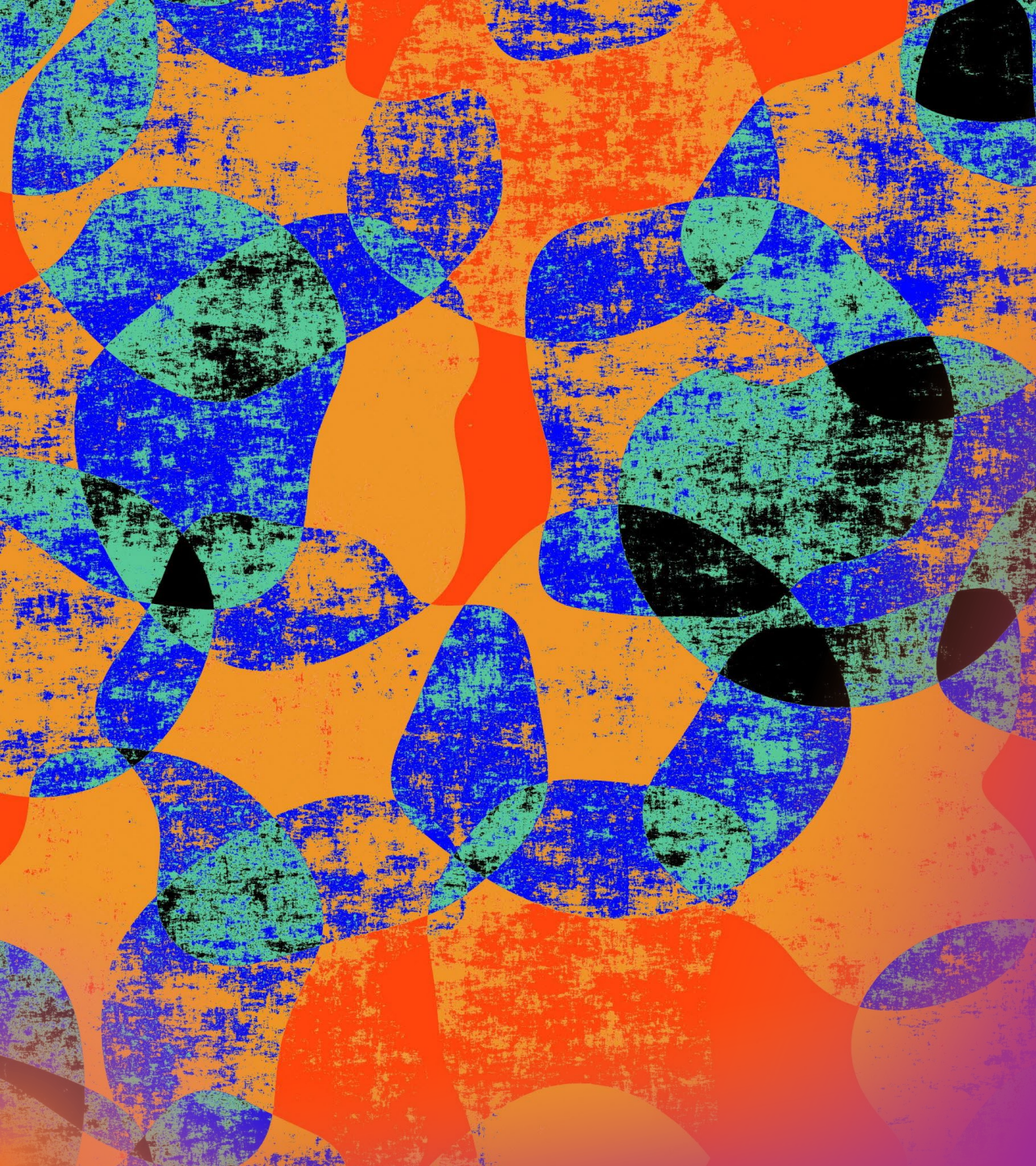
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- Collaborative research opportunities
- Scoping reviews
- Educational project
- Policy research





Education





# Embedding and innovating planetary health education

- New MBCHB curriculum at Stellenbosch University
- UG Physiotherapy
- MMed programme in Family Medicine at Stellenbosch University
- PG Nursing
- Future CPD resources



## 2024 PHRC RESULTS MEDICINE


### SOUTH AFRICA

(Click the school name to read their full report)

		Overall	Planetary Health Curriculum	Interdisciplinary Research	Community Outreach & Advocacy	Support for Student-led Initiatives	Campus Sustainability
1.	<b>Stellenbosch University</b>	B	B	B-	B-	B	B+
2.	<b>University of Witwaterstrand</b>	D+	F+	B	C	C-	D+
3.	<b>University of KwaZulu Natal</b>	D-	D	D+	D	F	F-

80-100% = A, 60-79% = B, 40-59% = C, 20-39% = D, 0-19% = F

Scores within top or bottom 5% awarded + or -, respectively

 = Overall score improved from 2022-2023 to 2023-2024

[Home - PHRC \(phreportcard.org\)](https://phreportcard.org)

# MBCHB curriculum years 1-3

## Being and becoming

What is planetary health  
Environmental stewardship

## Form and Function

How planetary ecosystems support human health

## Health and wellness

The co-benefits of healthy lifestyle and environmental sustainability

## Dysfunction

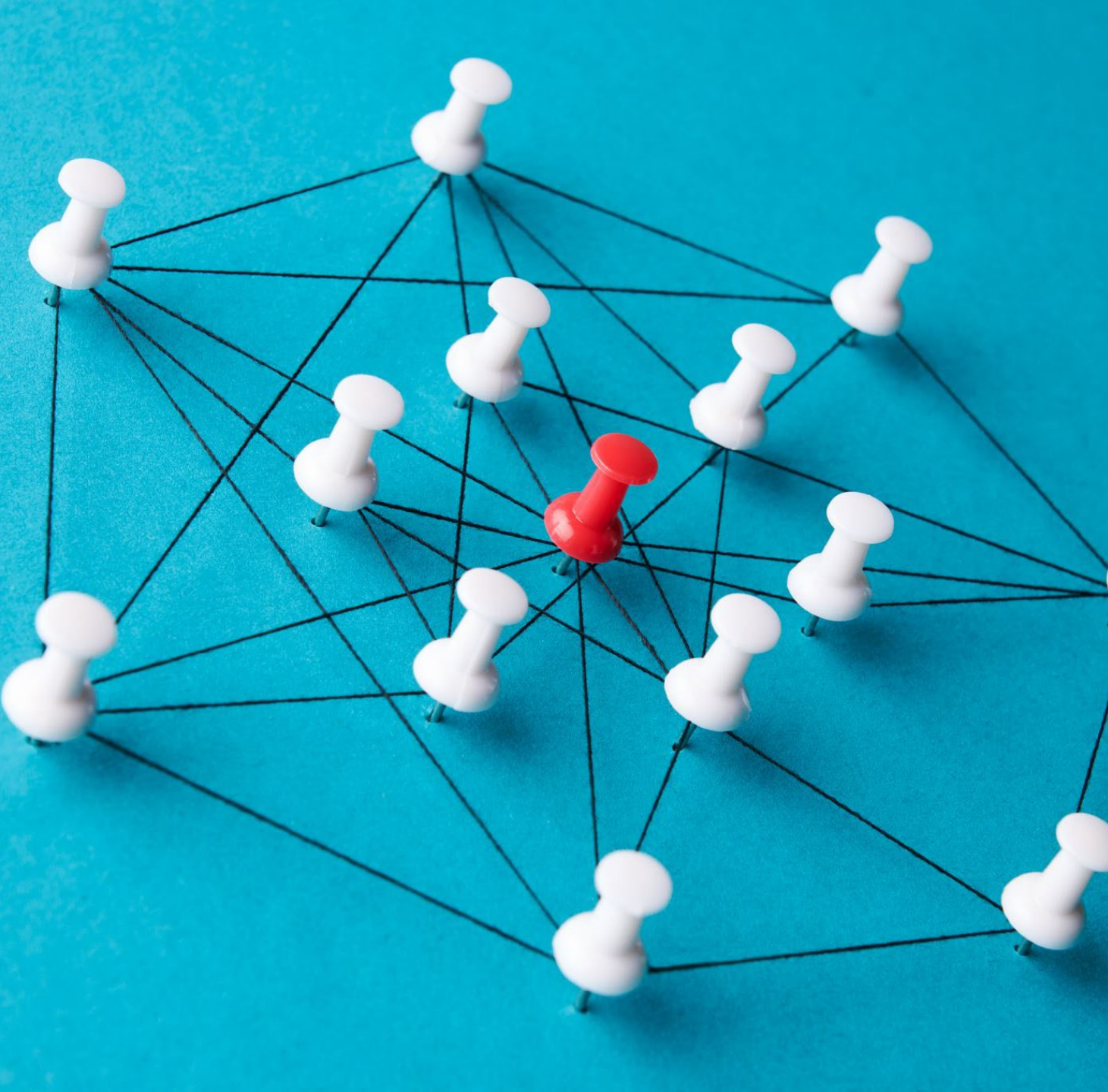
How a dysfunctional planet impact on health  
How a dysfunctional health system causes environmental harm

## Medical detective

Evaluating the climate resilience and environmental sustainability of PHC facilities

## Interventions

Environmentally responsible prescribing  
Improving the CR and ES of PHC facilities



Networking  
and  
partnerships






- School for Climate Studies and African Hub of CliMigHealth Network
- Southern African Association of Health Educators SIG



- SA Academy of Family Physicians
- PRIMAFAMED
- WONCA Africa and World and Environmental SIG

## Planetary health and environmental sustainability in African health professions education



**Authors:**  
James H. Irlam<sup>1</sup>   
Charlotte Scheerens<sup>2,3</sup>   
Bob Mash<sup>4</sup> 

CliMigHealth and the Education for Sustainable Healthcare (ESH) Special Interest Group of the Southern African Association of Health Educationalists (SAAHE) call for the urgent integration of planetary health (PH) and environmental sustainability into health professions





# Outreach and policy support

- 
- Early days...
  - General public
  - Policymakers
  - Health professionals

## THE CONVERSATION

Academic rigour, journalistic flair

Climate Arts, Culture + Society Business + Economy Education **Environment + Energy** Health + Medicine Politics Science + Tech

### Five questions for African countries that want to build climate-resilient health systems

Published: June 25, 2023 1.09pm SAST



The background features a repeating pattern of colorful speech bubbles in shades of teal, yellow, red, and purple. Each bubble contains a dark blue question mark. The bubbles are scattered across the entire frame, creating a textured, question-oriented background.

Questions / discussion