LEARNING IN RURAL SETTINGS

Ian Couper & Jana Muller

Ukwanda Centre for Rural Health

19 March 2020

Ukwanda Centre for Rural Health

- Established in 2002: First Centre for Rural Health in Africa
- Aims to train health care professionals to respond to health issues facing rural & underserved communities
- Focus on longitudinal & integrated exposure for students from 5 different professional programmes, with regular collaborative care

Ukwanda Centre for Rural Health

ATLANTIC OCEAN
Garies
Nieuwoudtville
NORTHERN CAPE
Bitterfontein
Vanrhynsdorp
Calvinia
TANKWA-KAROO NATIONAL PARK
Lambert's Bay
Bands Bay
Clanwilliam
KAROO NATIONAL PARK
Beaufort West
Citrusdal
Saldanha
Langebaan
WESTERN CAPE
EASTERN CA
WEST COAST NATIONAL PARK
Ceres
Malmesbury
Laingsburg
Willowmore
Wellington
Worcester
Calitzdorp
Oudtshoorn
Paarl
Montagu
Cape Town
Stellenbosch
Robertson
Swellendam
George
Wilderness
Nature's
Somerset West
Knysna
Plettenberg B
Mossel Bay
Hermanus
Bredasdorp
DE HOOP NATURE RESERVE
Arniston
Agulhas
INDIAN OCEAN

Ukwanda Centre for Rural Health

GEMSBOK NATIONAL PARK
NORTHWEST
McCarthy's Rest
Twee Rivieren
Rietfontein
Askham
NAMIBIA
Vryburg
Kuruman
RICHTERSVELD NATIONAL PARK
AUGRABIES FALLS NATIONAL PARK
Upington
Warrenton
VAALBOS NATIONAL PARK
Kimberly
Alexander Bay
Noordoever
Augrabies
Kakamas
Keimoes
Port Nolloth
Pofadder
Kenhardt
FREE STATE
Hopetown
Prieska
Springbok
NORTHERN CAPE
Kamieskroon
Brandvlei
Britstown
Colesberg
Garies
Nieuwoudtville
De Aar
Carnavon
Hanover
Bitterfontein
Calvinia
Williston
Victoria West
Richmond
Middleburg
TANKWA KAROO NATIONAL PARK
Three Sisters
Clanwilliam
Sutherland
KAROO NATIONAL PARK
Beaufort West
EASTERN CAPE
WESTERN CAPE

Objectives

1. What makes rural setting unique?
2. Why learn in rural settings?
3. What are features of learning in rural settings?
4. What is the experience of Ukwanda?
5. Conclusions: what are the lessons?

“The varied functions and meanings that have been attributed to rural space have made the rural into an ambiguous and complex concept. The rural is a messy and slippery idea that eludes easy definition and demarcation. We could probably all instinctively say whether any given place was rural to us, rather than urban, but explaining why it was rural, not urban, and drawing a boundary line between urban and rural space on a map are altogether more difficult tasks.”

Michael Woods. Rural. London: Routledge, 2011. p.1-2

What does being rural mean?

"As the sun breaks over the furthest rim of hills at Bizana, it illuminates a world apart, an idyll in the city dweller's mind of quietude, of lowing cattle, smoke rising in the still morning air, vivid bird calls in the waking bush, a river, gleaming and silent.
Being there is different. Being there is not romantic. To be there is to be engaged in a struggle to live, and to hope."

Emerging Voices Report, 2005

The notion of place

- Place is important
  - The two rurals: Idyll and reality
  - The notion of place: Rurality is not just about geography
  - Any epistemology of rurality must connect geographical and existential realities
  - “being rural” is inseparable from “rural”
- 3 components of place (Gieryn, 2000):
  1. geographic location
  2. material form
  3. investment with meaning and value

The Challenge

Rural Communities and medical schools in the 21st century face a series of challenges:

- improve quality, equity, relevance and effectiveness in health care delivery;
- reduce the mismatch of health care with societal priorities;
- redefine the roles of health professionals in rural spaces;
- provide evidence of impact on people's heath status in rural areas.

Transforming education

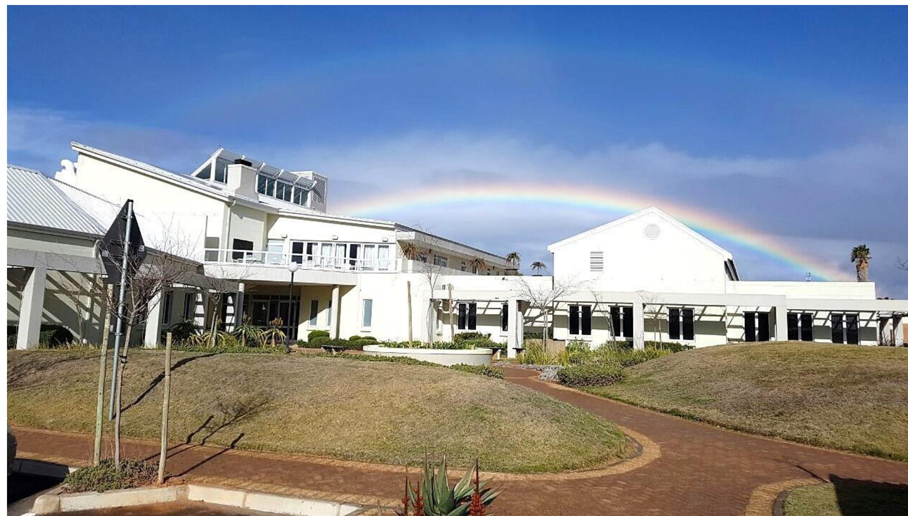
"More health professionals are therefore needed, but not more of the same. A transformation of health professional education should put population health needs and expectations at the centre and should be directed by the reality of health service delivery."

WHO initiative on transforming and scaling up health professional education and training. Report of the second meeting of the core guidelines development group.

March 2012

Motivators for rural training

- **Workforce effects** (Wilson et al, 2009; Verma et al, 2016)
- **Educational advantages** (Magzoub & Schmidt, 2000; Eley, 2008; Denz-Peney & Murdoch, 2008; Couper & Worley, 2010a; Couper & Worley, 2010b; Birden & Wilson, 2012; Kibore et al, 2014)
- **Health service impact** (Diab & Flack, 2013; Hoat & Wright, 2008; Connolly et al., 2014; Mbalinda et al, 2011)



Nature of learning

- Person-centered
- Community immersion
- Holistic approach: experience of social determinants of health and the role of context in health and illness
- Understanding the continuum of comprehensive care
- Emphasis on relationships
    - Learners and patients
    - Learners and health care providers
    - Learners from different professions
    - Learners in teams
- Practically focused: skills in health care provision (Competency-based)

Developing rural learning sites

shared vision

leadership and governance

responsive adaptability

social accountability

Training Institutions

Health Services

students

Relationships

curriculum

Regulatory Bodies

Community

training environment

community

continuity

integration

Go to

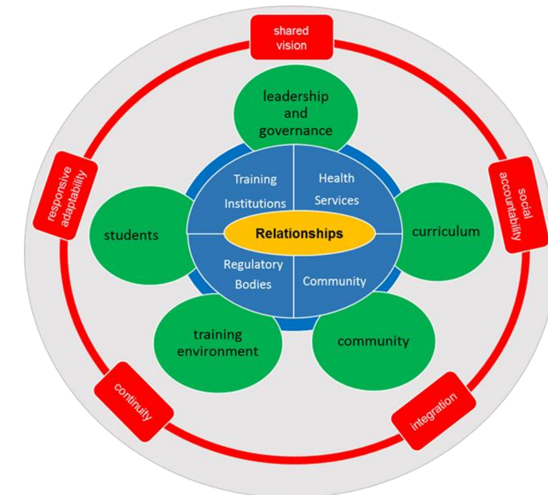
A Framework for Effective Distributed Training

SUCCEED
Stellenbosch University Collaborative Capacity Enhancement through Engagement with Districts

- Framework provides approach to distributed training
- Encourages consistency in universal access
- Facilitates local decision-making and action
- Enabling factors assist to implement, maintain, upscale, and evaluate distributed training initiatives

Simple Rules for Effective Distributed Training

I. Build and maintain relationships
II. Move toward a shared vision
III. Fulfill roles and responsibilities
IV. Balance needs and provide support
V. Engage with learning
VI. Evaluate and provide feedback



Ukwanda rural learning spaces

1. Extended rural training since 2011, involving medicine, OT, dietetics & physio
2. Progressive expansion to 6 rural sites
3. Development of longitudinal integrated model (LIM) of training
4. Extensive research on medical programme models (see list at end)
5. Current research:
   - The Rural Clinical School Story: an explorative inquiry
   - Collaborative care: examining interprofessional learning
   - The Upington expansion project: a developing evaluation

Types of exposure

Longitudinal models of training:

Medicine
18 students doing entire final year in Worcester Hospital
Up to 10 students doing entire final year in district hospitals (LIM)
Up to 4 students in Upington regional hospital

Occupational therapy
8 students doing entire final year in Worcester communities
8 students doing 6 months in Upington

Dietetics
4 students doing entire final year in Worcester communities

Physiotherapy
16 students piloting 10-week integrated rotation in 4 sites

Collaborative care

- Integrated chronic care management programme
- Student run Rehab Centre
- After school programme and food garden
- Adult and children sports initiative
- ECD screening at local clinic
- Annual Health Promotion Days
- Annual Community Partnership Function Day
- Medical students on rehab rotation IV, V and VI
- Home visits

Interprofessional education opportunities

Influence on health care system

Collaboration: Interprofessional assessment and communication tool

- Co-development of a continuity-of-care form based on the ICF framework endorsed by the Western Cape Government Health Rural Districts

Collaborative Care home visit project (April 2012-Oct 2015) J Muller et al 2016

- Identifying unaddressed primary health care challenges in a community

Contribution of students to facilities van Schalkwyk et al 2018

- Student teams seen to make a range of contributions

Category		Consequence		Conditions		Caveat
WORKLOAD	Manifests as	decreased workload	if	students are involved in everyday work activities	but	then students need to be more senior
PATIENT SATISFACTION		increased patient satisfaction as a result of, for example, shortened time to be seen in the emergency unit		students are “more hands”		lengthens time of each consultation because students take longer
PATIENT CARE		enhanced patient care		students are more thorough and holistic		this may be dependent on their skills and the nature of the supervision
TEACHING		job satisfaction and personal growth		teaching is not seen as a “burden”		then teaching should occur by involving the student in everyday work
LEARNING COMMUNITY		encouragement to update and deepen the supervisors’ clinical practice		the students bring the curriculum (e.g. evidence based medicine, biopsychosocial approach) to the team		this requires university support

The project takes place in a health resource-constrained and socially vulnerable community.

Students from five to seven professions are involved for one afternoon a week.

Transformation:
Medical student: *'The home visit project shapes better clinicians, and it teaches us how to work in interdisciplinary teams, which is very important....as a patient would get better treatment'*

Role clarification:
Medical student: *'We would see what the Allied Health Sciences are actually doing, as opposed to just sending the patient to them and not knowing what's happening'*

What happens?

1. **Interprofessional** patient case discussion and **team planning** in groups prior to home visit.

2. **Home visit** with the community health worker in interprofessional groups to identify: health and personal and environmental risk factors facing the family.

3. Return to site: case presentation and **group discussion** to collaboratively identify **relevant solutions** to local issues.

4. **Referrals** made based on the outcome of the discussion and home visit.

Group reflection on the experience.

Data from 2012-2015
155 days
200 homes visited
280 people identified
365 referrals made

Identity:
Allied health student: *'You're not just someone, you're actually a therapist, you're a team member'*

Context:
Medical student: *'Being able to go to the patient's house and see this is where they live and this what they have to deal with and what they have available to them. I think that rounds you more as a clinician'*

Deeper understanding:
Medical student: *'You need to ask (the patients) about their life, how they cope at home. I understand 100% that's why we do home visits. You're shocked to see, oh hectic, wow, this is bad. This is why my patient didn't arrive (for follow up) or this is why they don't have money, or why they want a (social) grant, they really just can't get by'*

Lessons

- Student learning improved
  - Students highly positive and achieve favourably in assessment
  - Students feel prepared to become doctors (Voss et al, 2015)
  - Student attitudes and behaviour changes, with adoption of professional practices that influence patient outcomes (Van Schalkwyk et al, 2015)
- Graduates returning
  - Early results promising
- Clinicians on platform very enthusiastic
- Impact on tertiary academic hospital

Conclusion

- Rural IS unique and ideal for transformative learning
- Rural learning is beneficial for both student and health services
- Experiential learning in interprofessional, service learning and community engagement paradigms has value

Conclusion

We should rate rural heath professions education on the extent to which the graduates:

- Impact on the SDGs
- Work at all levels of the health care system
- Are employed in the public health service
- Are making a difference in rural and underserved areas
- Transform the health system

For more information

a wonderful book. The breadth of experience and insights provided is terrific. You and your co-editors have done a marvellous job bringing together so many viewpoints and practical ideas from our colleagues from around the world.

Prof Michael Kidd
President
WONCA
14 March 2014

The project has been proudly supported by WONCA through the WONCA Working Party on Rural Practice, the Northern Ontario School of Medicine (NOSM), Memorial University of Newfoundland (MUN), and the Rockefeller Foundation.

Requests for permission to reproduce or translate WONCA publications for commercial use or distribution should be addressed to the WONCA Secretariat at:

World Organisation of Family Doctors (WONCA)
12A-05 Chartered Square Building
152 North Sathon Road
Silom, Bangrak
Bangkok 10500
THAILAND

globalfamilydoctor.com
globalfamilydoctor.com/groups/WorkingParties/RuralPractice.aspx

Get the Rural Medical Education Guidebook free at:

https://www.globalfamilydoctor.com/groups/WorkingParties/RuralPractice/ruralguidebook.aspx

71 chapters of practical tips!

References

- Birden H, Wilson I. Rural placements are effective for teaching medicine in Australia: evaluation of a cohort of students studying in rural placements. Rural and Remote Health 2012;12:2167.
- Connolly M, Sweet L, Campbell D. What is the impact of longitudinal rural medical student clerkships on clinical supervisors and hospitals? Aust J Rural Health. 2014;22(4):179-88.
- Couper ID, Worley PS. Meeting the challenges of training more medical students: lessons from Flinders University's distributed medical education program. Med J Aust. 2010;193(1):34-6.
- Couper ID. Evaluation of the parallel rural community curriculum at Flinders University of South Australia: lessons learnt for Africa. AJHPE. 2010;2(2):14-16.
- Denz-Penhey H, Campbell Murdoch J. Rural learning is more than marks: sensitised to knowledge. Med Teach. 2008;30(8):781-6.
- De Villiers MR, Blitz J, Couper I et al. Decentralised training for medical students : Towards a South African consensus. African J Prim Heal Care [Internet]. 2017;9(1). Available from: https://doi.org/10.4102/phcfm.v9i1.1449
- Diab P, Flack P. Benefits of community-based education to the community in South African health science facilities. Afr J Prim Health Care & Fam Med. 2013;5:1.
- Eley D, Young L, Baker P, Wilkinson D. Developing a rural workforce through medical education: lessons from down under. Teach Learn Med. 2008;20(1):53-61
- Gieryn T. A Space for place in Sociology. Annual Review of Sociology. 2000;26(1):463-96.
- Hoat LN, Wright EP. Community-university partnership: key elements for improving field teaching in medical schools in Vietnam. Rural and Remote Health 2008;8(4):894.
- Kibore MW, Daniels JA, Child MJ, Nduati R, Njiri FJ, Kinuthia RM, et al. Kenyan medical student and consultant experiences in a pilot decentralized training program at the University of Nairobi. Educ Health (Abingdon). 2014;27(2):170-6.
- Magzoub MEM, Schmidt HG. A taxonomy of community-based medical education. Acad Med. 2000;75(7):699-707.
- Mbalinda SN, Plover CM, Burnham G, Kaye D, Mwanika A, Oria H, Okullo I, Muhwezi W, Groves S: Assessing community perspectives of the community based education and service model at Makerere University, Uganda: a qualitative evaluation. BMC International Health and Human Rights 2011, 11(1):S6.
- Michael Woods. Rural. London: Routledge, 2011.
- Müller J, Snyman S, Slogrove A, Couper I. The value of interprofessional education in identifying unaddressed primary health-care challenges in a community: A case study from South Africa. J Interprof Care 2019;33:347-55.
- SUCCEED: https://www.cebhc.co.za/succeed/
- The Nelson Mandela Foundation. Emerging Voices: A Report on Education in South African Rural Communities. Cape Town: HSRC Press; 2015.
- Van Schalkwyk S, Blitz J, Couper I, De Villiers M, Lourens G, Muller J, et al. Consequences, conditions and caveats: A qualitative exploration of the influence of undergraduate health professions students at distributed clinical training sites. BMC Med Educ. 2018;18(1).
- Van Schalkwyk SC, Bezuidenhout J, Conradie HH, Fish T, Kok NJ, Van Heerden BH, et al. "Going rural": Driving change through a rural medical education innovation. Rural Remote Health. 2014;14(2):1–9
- Verma P, Ford JA, Stuart A, Howe A, Everington S, Steel N. A systematic review of strategies to recruit and retain primary care doctors. BMC health services research. 2016;16:126
- Voss, M., et al. 2015. We have to flap our wings or fall to the ground : the experiences of medical students on a longitudinal integrated clinical model. African Journal of Health Professions Education, 7(1): 119-124, doi:10.7196/AJHPE.507
- Wilson N, Couper I, De Vries E, Reid S, Fish T, Marais B. Inequitable distribution of healthcare professionals to rural and remote areas. Rural and Remote Health 2009;9:1060.

Ukwanda research

1. Blitz, J., Bezuidenhout, J., Conradie, H., de Villiers, M. & van Schalkwyk, S. 'I felt colonised': emerging clinical teachers on a new rural teaching platform. Rural Remote Health 14, 2511 (2014).
2. Daniels-Felix, D., Conradie, H. & Voss, M. Choosing final-year placement: Why students decide not to go rural. African J. Heal. Prof. Educ. 7, 111–114
3. de Vries, F. News - Ukwanda offers crucial research platform. (2018). Available at: https://www.sun.ac.za/english/Lists/news/DispForm.aspx?ID=5700. (Accessed: 11th July 2018)
4. de Villiers, M., Conradie, H. and van Schalkwyk, S., 2018. Teaching Medical Students in a New Rural Longitudinal Clerkship: Opportunities and Constraints. Annals of Global Health, 84(1), pp.58–65. DOI: http://doi.org/10.29024/aogh.17
5. Duvenage ECM, Dube KR. The availability, utilisation and relevance of therapeutic apparatuses in South African occupational therapy clinical practice. South African Journal of Occupational Therapy 2019; 49(3):3-5.
6. Fish, T., Lourens, G., Meyer, L., Muller, J. & Conradie, H. When the clinic is not yet built ... the Avian Park Service Learning Centre story. African J. Heal. Prof. Educ. 7, 79–80 (2015).
7. Foundation for Advancement of International Medical Education and Research. Projects That Work: 2017 Winners. Foundation for Advancement of International Medical Education and Research (2017). Available at: https://www.faimer.org/project-competitions/ptw/2017-winners.html. (Accessed: 22nd August 2018)
8. Müller J, Snyman S, Slogrove A, Couper I. The value of interprofessional education in identifying unaddressed primary health-care challenges in a community: A case study from South Africa. J Interprof Care 2019;33:347-55.
9. Muller JV, Ned LY, Donald H. A university's response to people with disabilities in Worcester, Western Cape. African Journal of Disability 2019; 8(0):1-11.
10. Pillay et al. Allied health professional rural education: Stellenbosch University learners' experiences. African J. Heal. Prof. Educ. 8, 169–173 (2016).
11. Stellenbosch University. Ukwanda Rural Clinical School | Ukwanda. (2018). Available at: http://blogs.sun.ac.za/ukwanda/ukwanda-rural-clinical-school/. (Accessed: 10th July 2018)
12. Stellenbosch University. Ukwanda. (2018). Available at: http://blogs.sun.ac.za/ukwanda/. (Accessed: 10th July 2018)
13. Stellenbosch University. Ukwanda Rural Clinical School Leading change for rural health A grassroots initiative aimed at improving health services in rural South Africa.
14. Van Schalkwyk, S. C. et al. 'Going rural': driving change through a rural medical education innovation. Rural Remote Health 14, 2493 (2014).
15. Van Schalkwyk, S. et al. Developing an educational research framework for evaluating rural training of health professionals: A case for innovation. 34, 1064–1069 (2012).