

Chapter 1.1.1

'WHAT BRINGS US TOGETHER': THE VALUES AND PRINCIPLES OF RURAL MEDICAL EDUCATION

Steve Reid

University of Cape Town, South Africa

Paul Worley

Flinders University, Australia

Roger Strasser

Northern Ontario School of Medicine, Canada

Ian Couper

University of Witwatersrand, South Africa

James Rourke

Memorial University of Newfoundland, Canada

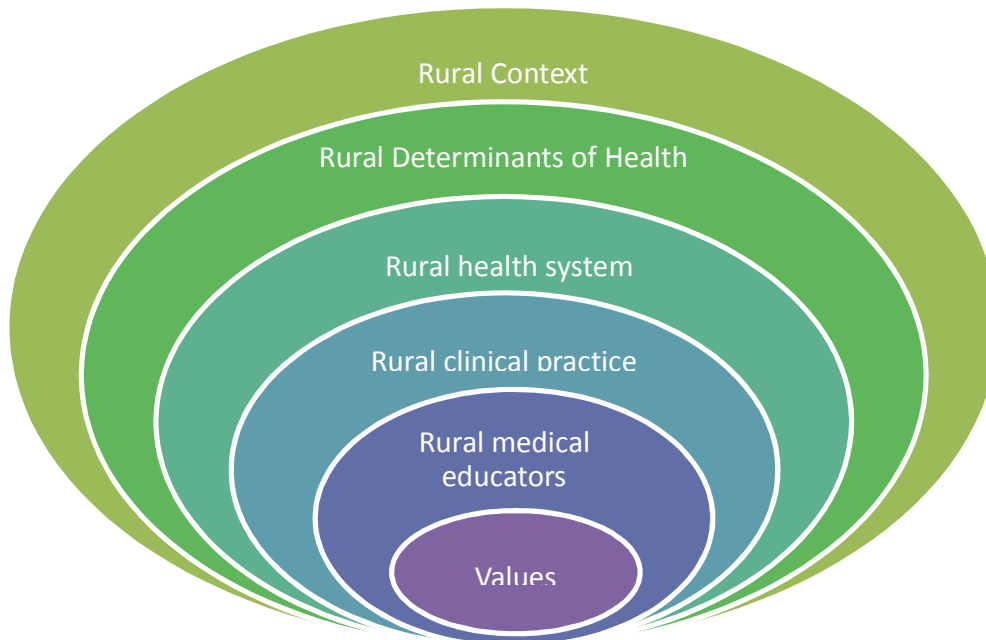
Introduction

Rural practitioners all over the world share a range of experiences, systems and practice in a variety of circumstances that are determined by the rural environment. These lead to a set of principles and values that are also shared, but they are implicit and are not often made explicit. This chapter aims to make these more visible, not in order that they be accepted, so much as to offer them for discussion and debate as a prelude to the rest of this guidebook.

What is it that brings us together as rural health practitioners and medical educators? Is it more than the rural environment? Is it the kind of challenges that we face that are similar? Is it the health systems that we work in? Or is it the kind of work that we do, or the education we received? Maybe it is just the sort of people we are as rural practitioners. It could be the values that we share - those softer ideas that are not often shared clearly out loud, but which are nevertheless very significant.

Diagram 1 gives a schematic representation of the possible relationships between these issues.

**Diagram 1:
The context of rural medical education**



The rural context

The rural context is shaped by a variety of forces that together create a complex backdrop to the work that we do. There are not only geographic factors such as distance and topography that are an obvious feature of the rural context, but there are also specific environmental, political, economic, historical, cultural and social elements that play more or less significant roles in different countries and situations (1).

The **geographic elements** are the most visible components of the context: wide open spaces, large distances between settlements, and agricultural or natural landscapes inform one's mental picture of rural areas. Topography - the shapes and features of specific rural places such as mountains, rivers, and coastlines - are also important in considering access to health services, for example, as well as the particular affinity that we ascribe to certain landscapes. Roads, rivers and other avenues for transport play a major role in constraining or allowing rural communities access to all forms of activity, not only health services.

**Diagram 2:
Perspectives of the rural context**



Environmental elements of the rural context include agriculture, mining, forestry, fishing, wilderness and recreational areas, in addition to more dispersed patterns of settlement. In developing countries, agricultural areas are often distinctly divided between commercial farms as private businesses, and subsistence agriculture through communal or tribal ownership by indigenous peoples. In developed countries there is also a contrast between family-owned farms and corporate farms operated by employees for the benefit of distant shareholders. These different forms of environmental use directly influence patterns of prosperity or poverty, and hence health and illness. In addition, wilderness areas generate their own patterns of ill-health through natural disasters and injuries; for example many rural hospitals have to cope with large numbers of major road traffic injuries where high speed roads pass through rural areas.

The **political and economic forces** that operate in a country have particular ramifications in rural areas. Specific policies that affect rural communities – for example with respect to the allocation of land to one group or another within a society – can create tensions that may lead to unrest and even civil war in rural areas. More often rural areas with their widely distributed populations are

marginalised in the political process, being 'out of sight and out of mind' to politicians who tend to focus on larger gatherings of people in the cities. Traditional leaders play a more significant role in the political process in rural areas. There is also an interdependence between urban and rural dwellers, especially in developing countries, with families divided between the two by the pressures of migrant labour. The 'movers and shakers' in a community tend to migrate to urban areas, which are by nature places of networking and commerce, and always will be. In many African contexts, people who move to the cities retain a connection to the ancestral home, where they will often return when they are ill, but especially when they are old or dying.

In terms of **historical and cultural context**, rural citizens often have a strong sense of community identity and heritage, a sense of belonging or of ownership that is linked to the land. Historical events and movements, dispossessions and shifts in communities are remembered and others are commemorated.

In some countries, a tension exists between the traditional or indigenous ways of life and the western ways, which has direct implications for the way that health is understood, and the ways that health care is sought. However each community has its own unique set of strengths and challenges, and these diverse perspectives have been successfully integrated in a number of rural communities.

There is a qualitative difference in the nature of **social relations** in rural areas (2). It is quite possible to see a whole community, either by looking at a landscape or actually meeting the people at a community gathering. This happens very seldom in a city. Rural systems are smaller and less complicated than urban systems – there are fewer people, fewer agencies, less overall activity and more space. Because of this, it is possible for students to understand a rural community more fully than they might in the complexity of city life.

It is important to note that rural communities are in transition globally, even under threat – not only in terms of urbanisation, but also in terms of some of the values and perspectives that are attributed to them. The burden of diseases is changing - for example in terms of rapid increases in chronic illness - as is the pace of change itself.

The rural determinants of health

Arising from the contextual background, a number of distinct factors play a direct role in determining the patterns of health, illness and disease in rural communities. They can be separated into determinants arising from geographic realities on the one hand, and those of a developmental nature on the other. An 'asset-based' perspective of rural areas (3) tends to emphasise the inherent strengths and positive features of rural life, including social capital, individual and community resilience and an outdoor lifestyle, in contrast to a deficit view which focuses only on the gaps and deficiencies.

In terms of geography, distance and topography clearly create logistical challenges in access to healthcare. In most developing countries, the cost of transport is a major deterrent to accessing help for health-related concerns, even for health promotion. So those at the greatest distance from health facilities receive the least care, which is reflected in Tudor-Hart's concept of the 'Inverse Care Law' (4).

The Inverse Care Law

'The availability of good medical care tends to vary inversely with the need for it in the population served.'

Furthermore, the relative isolation of those living in rural areas in turn leads to a self-reliant attitude that has been described as 'rugged individualism', which results in delays in seeking help for medical advice, and late presentations of disease (5).

In addition to the geographic realities, there are also **developmental aspects** of rural health that include the political, social and economic elements described above. These are particularly obvious in developing countries, but have an impact in every nation regardless of the economic status. Where resources allow, efficient transport systems for emergency care, as well as information and communication technology, can be utilised to mitigate the effects of geographic distance, but the political and social determinants of rural health are significant even in relatively affluent circumstances. In both developed countries and developing countries, most rural areas have objectively higher levels of poverty, fewer resources and less access to facilities. The social determinants of health play a significant role in this discourse (6) – particularly the relationship between health and socio-economic status (7), but also the impact of culture and beliefs about health in certain communities.

Childhood development and the quality of basic education is one of the foundational determinants of health (8), and access to quality education has been clearly shown to affect people's health, health literacy, health-seeking behaviours, and agency in navigating complex health systems.

Rural health systems

Taking into account the rural determinants of health, rural health systems require an intersectoral and developmental approach to health problems at a population level. The most effective engagements are those that aim at the integration of clinical practice and public health interventions in rural communities, through a truly comprehensive primary health care approach that includes intersectoral work as well as community engagement and participation. Well-functioning referral systems are crucial, as well as the reciprocal support systems from urban centres.

The concept of community-oriented primary care (COPC), a precursor to primary health care as defined at Alma Ata in 1978, is a useful approach for clinical practitioners entering the broader field of rural health (9). It begins with making the links between clinical practice and community-wide initiatives in health, and undertaking a community survey that seeks to understand the characteristics, including the strengths and weaknesses of the community as a whole. Since communities are complex and are burdened by many diverse health issues simultaneously, a systematic prioritisation process is necessary to arrive at a clearer community 'diagnosis'. Selecting the most pressing needs for action, an inclusive team is then constituted and a plan formulated with clear targets to address the issue.

This requires a very broad range of skills from a multi-professional team working in an interdisciplinary way, as the issues are complex and inter-related. For example, addressing the dietary preferences of indigenous people that predispose them to obesity and diabetes, or negotiating cultural norms of sexual practices in the light of the HIV epidemic, requires a multi-disciplinary approach at a community level that is beyond the capacity of any individual person or single discipline.

Rural medical practice

The unique characteristic of rural medicine is the very wide scope of practice that is demanded of rural doctors. They are generalists par excellence, to a much greater extent than their urban colleagues and, as such, require particular attributes and special training. On the one hand the need is for excellent procedural skills, particularly in emergencies when backup is a long way away, while on the other hand the skills for dealing with communities are also crucial. Over and above the wide minimum scope of skills, rural practice in different places demands different skill sets for specific needs. Starfield has shown that comprehensive care by generalists is not only more cost-effective, but also leads to better health outcomes at a population level than compartmentalised specialist care (10).

Beyond the skills set, there is the choice of a long-term commitment to a rural community that develops into a sense of identity, which is linked to a working lifestyle, a network of relationships continued over time, and a particular landscape.

Working in a rural community where resources and technology are not immediately accessible requires practitioners to make the most of whatever is available, often under challenging circumstances. As Plato is said to have written: 'necessity is the mother of invention'. By contrast with urban dwellers who have alternatives, the unique preserve of the rural practitioner is the flexibility demanded by the principle of 'any patient with any problem, anytime and anywhere' (11). Dealing with uncertainty and balancing relative risks is a central part of the job. The rural situation demands adaptability not only in terms of the technical tasks, but also in learning the language and customs, and understanding the geography and the social hierarchy of a community.

Relationships are significant, particularly long-term relationships with patients over generations: these give rural practice a deep sense of meaning as well as better outcomes (12). Similarly, longitudinal relationships between preceptors^a and students give rural medical education special significance. Over time however, there

^a A preceptor – or clinical instructor – is a clinician (person who has core clinical skills) who provides clinical teaching at a rural (distant) site. They may work full-time or part-time for the medical school / training institution in a paid or honorary capacity.

is a need to take a break from the 'fishbowl' experience of a small community after a number of years to gain fresh perspectives, and one of the tensions of rural practice is between this deep long-term approach and an increasing trend towards part-time work and mobility in the younger generation of doctors.

Family issues hold particular value, and the spouse of the rural medical practitioner is often a crucial partner in the sustainability of rural practice (13). Bringing up children in a rural environment is an enormous benefit when they are young but becomes more challenging the older they get, when boarding school or home schooling may become the only alternatives. The lack of high quality education is a deterrent to health professionals with families living in more isolated areas and thus has an effect on health care delivery.

Intrinsic to rural practice and to rural medical education are a number of other characteristics that are not often made explicit, but are nevertheless observable (14). These include issues such as resilience or tenacity, together with a commitment to social justice and caring that is complemented by a sense of adventure and the determination to make a difference.

The principles of medical education for rural health

The social accountability of responding to rural community needs is the core principle of rural medical education. The main *raison d'être* of rural medical education is to develop a sufficient number of appropriately trained rural doctors to meet the needs of rural communities. Underpinning this are some key principles, as well as some key challenges (15). Rural communities and rural health care providers should be engaged, involved and supported in the development and provision of rural medical education. Students from rural communities should be proportionally represented in medical schools. Medical school education should maximise and optimise rural relevant content and rural experiential learning through community engagement (16). Rural oriented vocational training should develop the interest, knowledge and contextual competencies for rural generalist practice.

Rural medical education has been shown to produce excellent generalists with sound clinical reasoning skills, who are better able to successfully integrate and manage the impact of social determinants of health on the individual patient and family, than those students have not had a rural experience. Kaufman states that 'in rural communities, the social forces impinging on health can be more readily

defined, while opportunities for intervention are more accessible to the students' (17). Beyond the value of providing appropriately skilled and motivated doctors for rural areas, rural placements during medical education are therefore valuable in their own right as an educational strategy (18), wherever the graduates decide to practice in the long run.

Various rurally-oriented medical schools have developed a range of principles and values that underpin their approach to rural medical education. For example the Northern Ontario School of Medicine (NOSM) maintains the following principles in its academic programmes: inter-professionalism, integration, community orientation, inclusivity, generalism, continuity and dedication to inquiry (19). The School of Medicine and Dentistry at James Cook University aims to: 'lead positive change in health and medical care for communities of tropical Australia and beyond through socially accountable health education, discoveries, partnerships and advocacy that make a difference. Underpinning our work is a shared commitment to social justice, a passion for innovation and a commitment to excellence' (20). Memorial University of Newfoundland's Medical School Mission is 'to enhance the health of the people of Newfoundland and Labrador by educating physicians and health researchers; promoting lifelong learning; conducting research in biomedical, clinical, applied health sciences, community health and medical humanities; engaging communities and decision makers; and collaborating to apply the best available evidence in the formulation of policy and the organization and delivery of care' (21).

Worley proposed that community-based educational programmes can be analysed in terms of relationships (22), and proposes values such as integrity as being central to the quality of education (23), bringing a different perspective to the discourse. Rather than medical knowledge and skills being central to the educational process, he suggested that the relationships of teacher to learner, and of practitioner to patient, as well as of the educational institution to the community that it serves, are the most important foci of rural medical education.

A specific conceptual framework for rural medical education may be provided by the idea of 'critical place-based pedagogy' as proposed by Grunewald (24) - where place-based pedagogy is '... grounded in the resources, issues and values of the local community and focuses on using the local community as an integrating context for learning at all levels ... making learning more relevant to the lived experiences of students, teachers and citizens'.

While place-based pedagogy is appropriate in terms of the geographic determinants of rural health, we need the concepts of critical pedagogy as originally described by Paulo Freire (25) to guide us in the educational arena with respect to the developmental aspects. Critical pedagogy takes as a central concern the issue of power and class in the teaching and learning context. In the following quotation from Giroux (26), the word 'teachers' has been replaced by the word 'doctors' in order to make the principles more immediate to health sciences education:

'We must get away from training [doctors] to be simply efficient technicians and practitioners. We need a new vision of what constitutes [medical] leadership so that we can educate [doctors] to think critically, locate themselves in their own histories, and exercise moral and public responsibility in their role as engaged critics and transformative intellectuals'.

The values of rural medical educators

Educators involved in rural medical education appear to share an implicit set of values, which are proposed here for discussion. Most come into education after years in rural practice which gives rise to a flexibility and resilience, with a 'can do' attitude to challenges that promotes educational innovation. The commitment to social justice and fairness which drives most rural medical educators, in terms of access to high quality health care for all rural people, is a major component of social accountability of the rurally-oriented medical schools.

Closely related is the value of respect for diversity and a cultural sensitivity that allows for a commitment to the whole person, including students from a variety of backgrounds. It has been observed that rural doctors are 'naturally effective teachers' (27), not only in terms of the variety of learning opportunities that are facilitated, but also through a natural teaching style that encourages active learning.

Finally the community orientation of rural medical educators often sets them apart from their colleagues, and they value a collaborative approach to community-based education (28).

Conclusion

The geographic and developmental determinants of rural health arise from the nature of the rural context, in terms of its historical, political, economic, social and behavioural aspects. These shape the health systems that develop to respond to the patterns of illness and the burden of disease in rural areas. All of these factors determine the character of rural clinical practice and practitioners who, in turn, influence the principles and values of rural medical education in the academic environment.

Although each country is unique and each medical school is different, the principles and values that are shared by rural medical educators are remarkably consistent throughout the world. They are literally 'what bring us together'.

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12A-05 Chartered Square Building
152 North Sathon Road
Silom, Bangrak
Bangkok 10500
THAILAND



manager@wonca.net

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