Rural medicine as a sub-specialty

Could rural medicine be regarded as a specialty, or sub-specialty, in its own right? This article is intended to generate discussion and debate, and makes no apologies for being provocative.

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Let me begin by differentiating rural health from rural medicine. If rural health is the big picture, including all the team players and stakeholders concerned with health in rural areas, then rural medicine is the medical slice of that action. It is the medical input to the rural health team. So, depending on the size and the capacity of the rural health team, there are various medical roles that need to be fulfilled, in the community, in primary care and in hospital care. The smaller the team, the smaller the capacity, the more multi-skilled the practitioners need to be.

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There is no doubt that there is a growing body of knowledge and an extremely deep as well as historical body of practice in rural medicine that could differentiate our place in the medical hierarchy. But there is a marked lack of theory, of conceptual thinking, that supports a unique position from the basis of principle. What are the underlying theoretical principles by which we practise? And in what respects do they differ from those of family medicine?

The unique principle of rural medicine is the extraordinarily wide scope of practice that is demanded of rural doctors. We are generalists par excellence, to a much greater extent than our urban colleagues, to an extent that sets us apart, to an extent that demands special training, and to an extent that demands recognition some time down the line by the powers that be, as a sub-specialty in its own right. It is something to be strived for, a standard of competence that is not easy to attain. Not every community service doctor who finds him or herself in a rural hospital for a year can be regarded as a rural medical specialist. Most often they realise, through the experience of the year, their gaps and shortcomings as generalists, and they seek further training to address those gaps. Or they are so terrified by the experience of what is expected of them, that they leave the public service for ever, for a situation that is not professionally, socially or emotionally as demanding.

So for rural medicine, it is an extremely wide set of skills that best describes our discipline, if we are going to define it as such. In a nutshell, it revolves around our ability to cope with any patient with any problem, at any time in any place. It is a capacity which most urban generalists, even family practitioners in an urban context, are not prepared to take on. Not many urban GPs, for example, still do their own caesarian sections or anaesthetics, or routinely conduct deliveries or reduce fractures. At the other end of the spectrum of skills, very few

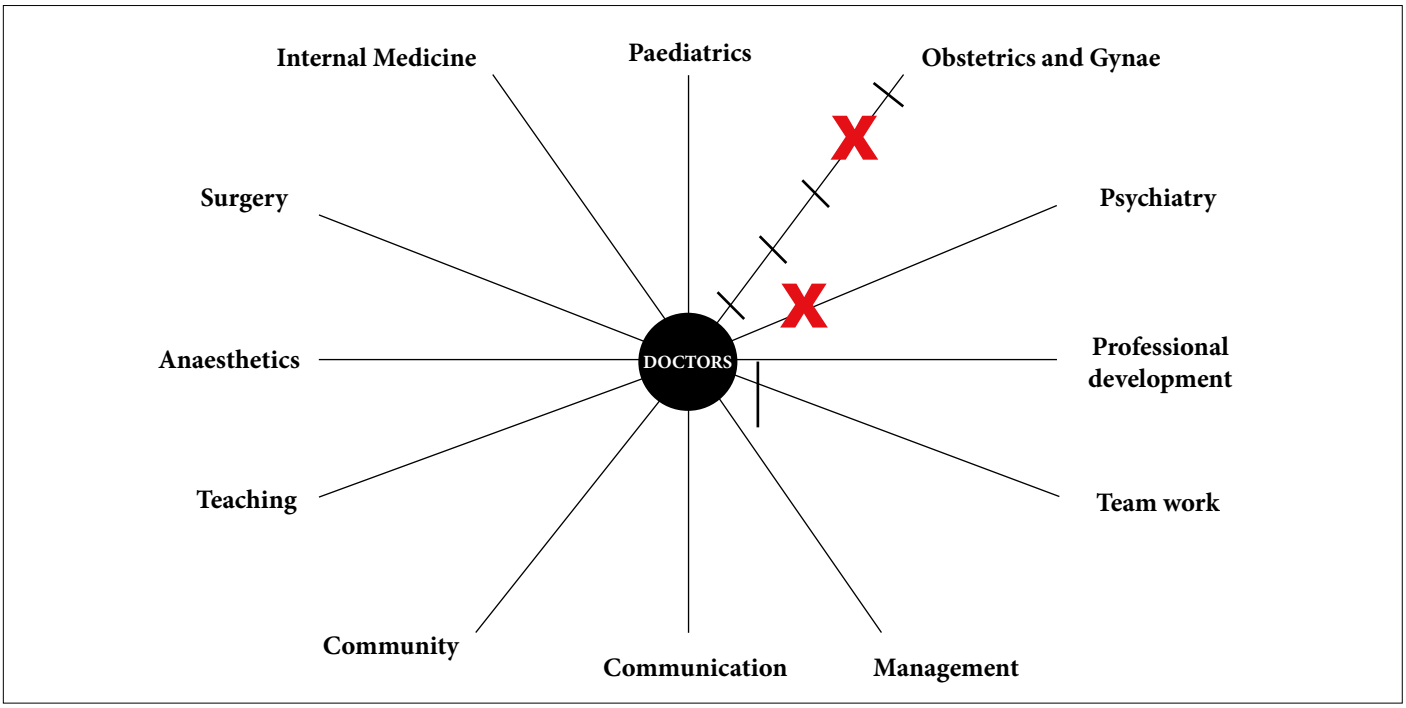

Fig. 1. A diagrammatic representation of the skills required of rural practitioners.

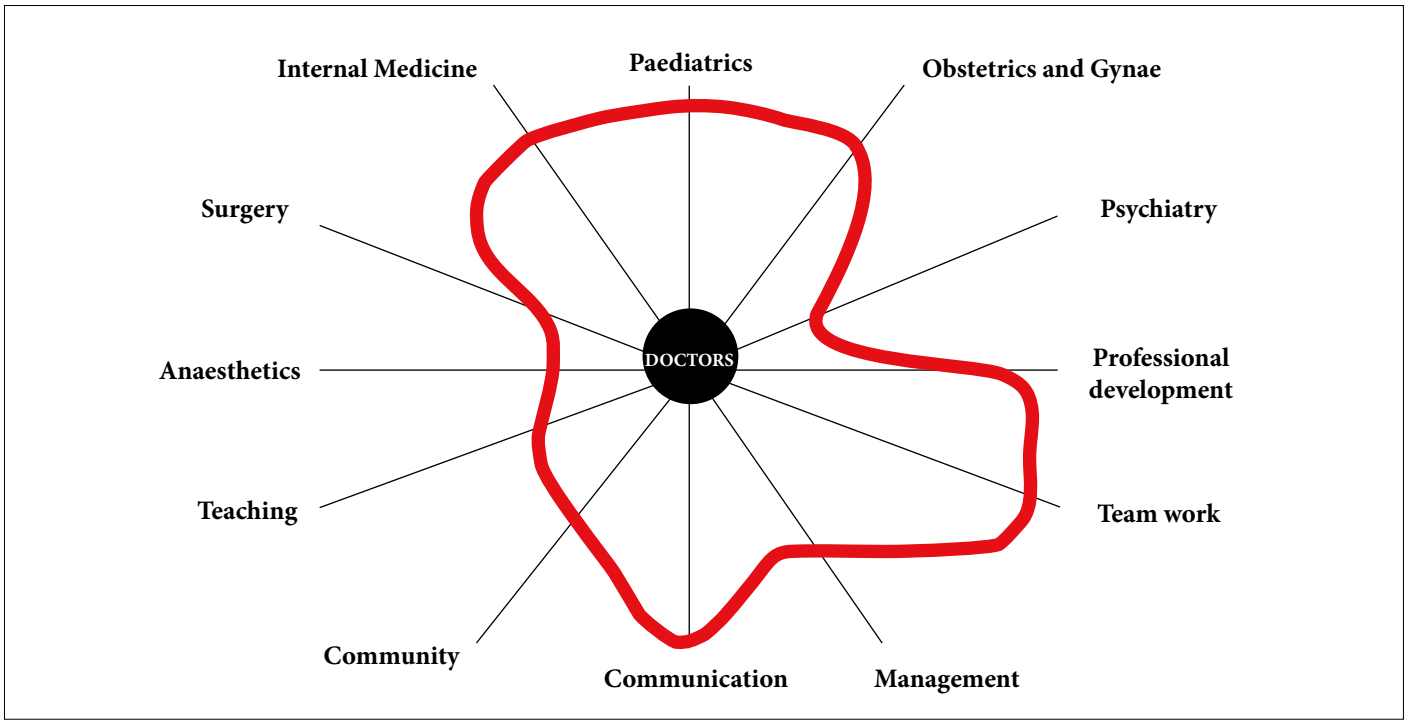

Fig. 2. The diagrammatic representation of an individual's skills profile.

urban generalists get seriously involved with the community-wide challenges of health care for a population. Rural practitioners necessarily get involved, often because there is no-one else to do it. So from community-wide care, to the outpatient and ward-based competencies, to the procedural competencies based in theatre, there is a spectrum of ability that was common to all GPs 50 years ago, all of which are still important in contemporary rural medicine.

There is a basic level of generalist care that every rural practitioner must be able to cover, that comes to the fore especially on after-hours calls. The old maxim, 'Any patient, any problem, any time, anywhere', means that no matter how severe or serious or complicated the problem is, the rural doctor needs to make a plan, and be able to deal with the emergency management, if not the definitive. Every rural practitioner needs to have a basic level of generalist skills that cover all the disciplines – one needs to be a good anaesthetist, a competent obstetrician, a reasonable physician, paediatrician, surgeon and psychiatrist. And you need to know something about psychiatry, and ENT, and when the head injured patient comes along, you need to remember your Glasgow Coma Scale – the list goes on, and on. Urban generalists, by contrast, are spared most of the urgent catastrophes, which go straight to the trauma centres and casualty units. They are also spared the obstetric demands that are dealt with by specialised obstetric units that are only available in urban areas.

There is a basic basket of skills that every community service medical officer needs to have, and which most do, if they have had a decent undergraduate education and internship. This can be conceptualised as the spokes of a wheel, with each spoke representing a different specialty (Fig. 1). There are other skills and competencies that also need attention, including the more challenging areas of community work, teamwork, communication, organisation, leadership and personal care. And you can rate your level of skills along a simple 5-point scale, with 1 being 'I know nothing' through to 5 being 'I can teach someone else'. So one could draw a skills profile – stronger in some areas than others (Fig. 2). How do you rate your level of competency in leadership, for example, on a scale of 1 to 5? As you develop as an all-rounder, this line tends to become more clearly defined, and you can target your weak spots. After a few disastrous anaesthetics for example, you know with certainty what you knew only vaguely before, and often that is that you don't know enough. So going on a clinical update at a regional hospital for 2 weeks can change your profile. Being an all-rounder means exactly that – there can be no weak spots, because sooner or later you are going to be faced with one of your weak spots in the middle of the night, when things like teamwork and communication really count – and this around a bleeding Caesar patient who really needs a hysterectomy but won't make the transfer. We need to be jacks of all trades and masters of most of them. Only once you have covered all the bases can you legitimately 'specialise' in an area in which you feel more comfortable.

So, for example, while it is possible to run a 150-bed district hospital service that offers the full 'package' of services 24 hours a day, 365 days a year with 8 medical officers, it is very difficult to do anything more than provide hospital services with less than 8. A

larger team can run a more comprehensive service including the community aspects and possibly a greater role in procedural care. One medical officer, for example, can be assigned to visiting outlying clinics and promoting and supporting the community-wide activities, while another can be devoted to management issues, including recruitment and retention of staff. But less than 8 means all hands on deck, and in order to run a 24-hour service in a typical South African district hospital allowing for study leave and other conditions of service which promote sustainability, a smaller team can only just keep a hospital going.

Secondly, in addition to the range of skills, a certain flexibility and creativity is needed in rural areas. I always remember the solo British doctor at Nkatha Bay hospital in Malawi when we visited there on an elective, excusing himself quietly to just pop out and fix the hospital water pump, because no one else seemed to be able to sort it out. And I remember thinking, as a naïve medical student – where did he learn that? Would I have to learn about water pumps if I worked in a rural area? (In retrospect, in fact it would have been extremely useful!)

Each rural community has its own particular characteristics, and we have to be prepared to adapt to the circumstances. We need to allow the context that we find ourselves in to shape our practice and the profile of skills that we acquire. Whereas a neurosurgeon demands certain technical equipment in order to be able to do his job (without the CT scans, the MRI scans, the operating microscopes and the stereotactic assistance, he would refuse to operate) by contrast, the unique preserve of the rural practitioner is the flexibility demanded by the principle of any patient with any problem, anytime and anywhere. While our urban colleagues have options, and urban patients have alternatives, in most instances we and our rural patients do not have. So part of the job description is the flexibility and creativity to make do with what is available, to be shaped by the context in which we work, whether it's Tristan da Cunha, or Taung, Mqanduli, Ingwavuma or Siteki. It is important to learn not only the technical medical skills, but also the language and customs, to understand the geography and the social hierarchy, and find one's place in them. These are the environments which shape our lives and our work, which determine the way that we think collectively together about rural medicine, and consequently shape and create our discipline.

In Africa, the context is one of development. Health cannot be a commodity that is bought and sold, because it is intricately linked to sustainable livelihoods, and this is a responsibility of government. Health care cannot just be a service industry, because the market system excludes those who cannot pay, and access to care needs to be regarded as a basic human right. Rural medicine needs to reflect this context specifically, since so much of our work is bound up in the social and economic determinants of disease and illness. Although it is far from a unique characteristic, the relationship of poverty to health is much more obvious in rural areas, since there is a higher level of unemployment and fewer options for development. Cities are developing much faster than rural areas, and always will – that is what they are good for. So development will always be a significant part of the rural context, as people struggle to sustain very marginal livelihoods under difficult conditions. Movers and shakers tend to move to the cities and do their shaking there.

There is another level of skills which, for those who have been in the game for some time, becomes more and more important after some years. It is not so much a skill as what we may call an attribute. And that is the attribute of 'stickability' or tenacity, the choice of a commitment to work and dedication to a rural community that is otherwise relatively marginalised and disadvantaged in the bigger scheme of things. The value system of rural doctors, the values that underlie our common understandings and assumptions, are important. This tenacity carries with it a commitment to make the best of a situation under the circumstances, whatever they are – and sometimes because one has no choice. There is no one else within 100 km who is able or prepared to deal with a particular patient's problem, or community problem, or surgical problem, other than a rural doctor; but this requires an upfront commitment to a community. And so the third broad principle that separates rural medicine from other medical disciplines, is a longer-term commitment to a specific rural community. By longer-term I mean at least three or four years. It is important for rural practitioners to live and be part of that community, and it is difficult to travel in an out again and still be involved and integrated in a sustainable way.

Finally, a discipline of rural medicine should be positioned as a sub-specialty of family medicine, which places the patient at the centre of the picture and acknowledges the importance of context. In the case of rural medicine, that context is the rural environment. This would mean that anyone who wants to be registered as a rural medical specialist first has to become a family physician. Family medicine would be strengthened and not weakened by rural medicine, and specific rural modules could be incorporated into the training programmes to allow some degree of differentiation at an early stage.

In summary, we have a unique position in the medical world by virtue of our commitment to our patients in rural communities, which carries with it the need to develop an extremely wide scope of practice, as well as attributes such as flexibility and creativity. These characteristics set rural medical practice apart, and demand specific training and recognition, which should be incorporated into family medicine as a sub-specialty in its own right.

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- Rural medicine is unique in terms of:
  - the extremely wide scope of medical practice, including surgical, anaesthetic and obstetric care, as well as community-oriented primary care in addition to office-based primary care
  - the flexibility and adaptability required in resource-constrained situations
  - the long-term commitment of rural practitioners to their communities.
- The scope of practice is best described by the maxim 'any patient with any problem, at any time, and anywhere'.
- The adaptability of rural doctors relates to the context of development, the relative lack of resources, as well as the language and culture of traditional communities in rural areas.
- The commitment of rural doctors to particular communities is part of the value systems of those who have made their careers in rural medicine.
- Rural medicine should be developed as a sub-specialty of family medicine in such a way that both are strengthened in the process.