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OPINION

Rural medicine and 'home stay': a medical student's experience

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Medical education is evolving from a heavily hierarchical and paternalistic approach to a more developmental and student-centred paradigm. In addition, there has been a greater focus on decentralised medical education, taking medical students closer to the lowest tiers of the healthcare system and allowing for a more immersive experience within the communities of their patients. This paper presents the experience of an enlightening rural experience, in which the benefits of such a model to medical education are explored. Furthermore, it presents the highly personal and developmental journey that decentralised and, in particular, rural medical training can offer. A new concept of a 'home-stay' model has now been introduced as part of the rural medicine experience, where students are hosted by a family within the community in which they work. This is a transformative project in which the most fundamental principles of medical training and the art of medical practice can be honed. The convergence of clinical training, public health enlightenment, and family practice are highlighted.

Keywords: epidemiology, home stay, rural medicine

The rural medicine experience

The journey through medicine is an experience that is not for the faint-hearted, and this is not just about the gruesome sight of blood, which most are petrified of, but rather the sweat and tears that one experiences from being bellowed at and belittled by those from whom we are meant to learn. This is how we learn to be safe and competent doctors, or so we are told. Life in medical school and in big city hospitals, filled with specialists and medical machinery, has not been an easy journey, despite the better resources. What I have now come to realise is something I believe a city hospital has never been able to teach me over the years, something I learned in only a short while—a matter of six weeks to be precise—and that is the spirit of Ubuntu, a realisation that has now been etched into my being, and which has changed my perception of medicine and what it means to be a doctor in the African context. This I learned in a place far, far away from the sprawling city, in a remote rural hospital, where respect comes not from rank but from humility and courage in the face of the greatest human adversities.

In the hierarchical setting of central hospitals, we are taught to think, yet our opinions are harshly silenced. Finding myself in a remote hospital where we are not only allowed to use our voices, but where our inputs were sought and valued, I found my thoughts running an endless race. It was a place where problems needed solutions; solutions that I could come up with, and not just arranging a transfer to a senior doctor in a regional hospital. Who knew that the constant firing of neurons could be so enchanting? This is the place I have come to know as 'a student's safe haven', where it is alright to acknowledge what you do not know and to have someone willing to help you overcome your knowledge gaps, without demeaning you; after all, medicine is practised, and it is only though continuous practice that we become better. The profound respect we received was not only from doctors, but from all other health professionals, as well as patients. I believe that being treated with respect by patients was largely because of the respect with which we were treated by the senior doctors with whom we worked. It has been quite evident in previous years that once a student had been belittled by another doctor in front of patients, there is a tragic loss of confidence in students from patients. It seems only natural that a patient would be hesitant to be treated by someone that has been severely chastised by a senior.

Through a more supportive and developmental process in the rural setting, we were able to interact with patients with much greater confidence, and with a sureness that allowed us to be relaxed, to think more clearly, and to be less defensive in all our interactions. This is the confidence that we require to put patients at ease, knowing that, even though I may be junior, I am able to think on my own and to consult others when I get stuck. It is through this experience that I feel I have learned so much more in the short time I spent in a rural hospital. I was given the space to apply and practise what I have been learning over the years, without the pressure of the entire ward listening to how badly I am insulted when I offer an incorrect answer. The patients we interacted with were equally supportive as well; perhaps the confidence we gained helped to make them feel at ease. Patients were quite willing to speak openly and to allow us into their most private moments.

I realised through my interaction with these rural patients that life is not only different for us coming from cities, but for them as well. Life in rural South Africa, where there are not many opportunities for employment, and limited public transport, gave the issue of low socio-economic status a whole new meaning. I realised that through all the advances made in medicine, specifically in HIV/AIDS and TB, there has been little impact on the lives of ordinary South Africans in rural areas. This is not because treatment does not work, but because there are so many other dynamics in the patients' lives that true access to treatment and medical care has not become what we envisaged. That is why much more focus needs to go into finding new ways to assist these patients, and why outreach and social upliftment programmes are of such great value to these most vulnerable members of our society.

The effects of limited health resources are felt more intensely here, where social, economic and health factors collude against the impoverished. These extend to the lack of availability of laboratory tests and basic equipment, which have a direct impact on the quality of care that can be achieved. Many of the patients, especially male patients, presented very late in their disease, often with severe complications, which increased their risk of morbidity and mortality. In addition, those presenting early often fell through the cracks in a system that is so heavily strained by the burden of advanced disease that it almost blind to those who are not imminently dying. Additionally, there is also the struggle of transferring patients to referral hospitals, against the hierarchy of medicine which presses down firmly on the lower tiers of the healthcare system, mistaking the absence of capacity for incompetence or even laziness. The barriers to the upward referral of patients within the healthcare system are significant, and threaten the gains we have made in securing a path to appropriate diagnosis and management. The case below, from my rural experience, is illustrative of this point.

Mr SM, a 21-year-old, HIV-negative man, with no other comorbid illnesses, was recently diagnosed with drug-sensitive pulmonary tuberculosis and presented with features of confusion and septic shock. He was found to be in respiratory failure, and required both ventilatory and inotropic support. Recognising the severity of the patient's illness, the regional level facility was contacted to facilitate a transfer. Sadly, the referral was declined and the patient was left to be cared for at a hospital that was not equipped to provide the necessary intensive care support. The patient continued to deteriorate, requiring increasing ventilator and inotropic support. The patient was re-discussed with the referral hospital, which again refused to take over his care. The decision was maintained when the case was discussed with another hospital higher up on the referral ladder. The patient died soon thereafter. The factors that determined the outcome of this patient are certainly complex, and cannot be naively attributed to the unwillingness of the referral facilities to move the patient upwards within the system, but the only certainty is that the doctors at this rural hospital were calling out for help in a situation they were not resourced to manage. While having done all they could, depleting the hospital's stock of adrenalin, the district hospital doctors were helpless as they watched their patient die. The death of this patient opened my eyes even more, to see the severe limitations of our health system, of our own inability to listen beyond what the ear can decipher, to hear the cries for help from our colleagues, and the lack of capacity within our system to absorb the burden of disease within the lower tiers of the system. This was just one case, among the many other deaths I saw every week.

Despite the disheartening circumstances, doctors in this rural hospital wake up each morning, attend to their patients with patience and warmth, continue to encourage and support each other and still have time and patience to teach students whenever they can, without insults or irritation. At the end of my rotation, it occurred to me that these doctors are the highest spirited and happiest doctors I have been blessed to work with, and I salute them for their courage and dedication.

Another big part of our rural block involved a new concept called 'home stay'. This is an innovative project where students are given an opportunity to live in the home of a local family, within the community they intend to serve. The aim of this project is to help us, as medical students, to truly understand rural life and how people in the community are impacted by their environment, beliefs and cultural practices. I opted to become part of a beautiful family that took me in, welcomed me and made me feel like part of their community. It was a difficult transition from city life to rural life—where there is no piped water and many depend on the rain and community taps with unpurified water, where electricity is not accessible to all and so fire is their friend; and where toilets are deep holes where darkness lurks with no ending.

Another challenge for me, as a person with atopy, was having to live with so many allergic triggers that I could do little about, from cow dung to smoke from ground fires, to pollen, dust and grass that is all around. Having had the problem from a young age, I have learnt to adjust my surroundings, or rather avoid certain triggers, but to live in an area where your entire environment is a trigger, I realised that life for those with similar conditions in these poor and remote regions must be a great challenge.

Another important thing I noticed was how quickly it became dark once the sun set behind the local mountains. With the lack of street lights, and poorly electrified villages, that darkness came swiftly and was not easily overcome. This made driving in the area very dangerous since it was mountainous, with animals walking freely on the roads. The uneven, non-demarcated and narrow roads made it easy for accidents to occur, and it became apparent why most motor vehicle accidents resulted in fatalities. Furthermore, due to these conditions, it was difficult to find transport once it became dark, making it difficult for patients to seek health care late at night, and further explaining why patients were more inclined to be in a hurry to leave the hospital when it became late. It was not because they have other things to do or through lack of care for their own health, but because transport and safety were not guaranteed after dark.

Implications for South African medical education

Rural medicine has been a huge area of importance for the health department of South Africa and many other governmental institutions across the world, with the aim of improving services and facilities, as well as establishing and retaining a workforce in those areas. Despite the many factors that negatively influence the health of those living in rural parts of South Africa, the provision of health services to these remote parts of the country remains a significant challenge. The deficit of doctors in these parts of South Africa is increasingly becoming a crisis, leaving those remaining under enormous strain.

While the new concept of home stay in South African medical education has not been subject to scientific evaluation, studies of similar imprint have been conducted in other parts of the world where the effect of rural medicine exposure and the intention of future rural medicine practice has been studied. In Australia, rural medicine exposure was an important predictor of future rural medical practice among students from non-rural backgrounds. This was based partly on the positive effect of rural medicine experience on students' clinical confidence.[1] A similar study, also conducted in Australia, revealed a higher proportion of students who initially intended to work in a metropolitan area, changing their intentions to favour practising in rural areas after being exposed to a rural clinical programme.[2]

However, a study conducted in South Africa revealed that a higher proportion of students originating from rural areas chose to return and practise medicine in those areas, when compared

with those of urban origin. It has been suggested that a higher intake of individuals of rural origin into medical schools was a way of overcoming the deficit of doctors in rural areas.[3] However, given the enormous challenges facing medical education in this country, it is unlikely that such a simple solution will be possible. The use of concepts such as home stay may be the compromise that is necessary to generate the sense of identification and belonging that drives the intention to return to a community as a practitioner.[4]

The consequences of failing to allow for an immersive rural experience are also clear: without rural exposure, the vast majority of medical students from non-rural backgrounds are unlikely to take on the challenge of rural medical practice, even the most altruistic among them.[5–7]

The way forward

While health is defined as not just a mere absence of disease, but encompassing physical, mental and social well-being, it is evident that medicine in rural South Africa is still trailing far behind that goal. With rocky roads that metaphorically reflect the life journey of many rural South Africans, and with poverty and all its dynamics in the forefront of the lives of these communities, mental and social well-being is no less turbulent than their physical struggles. Even though the health system aims to bring services to all, the focus of health in these remote areas seem to have neglected to address the primary issues that can improve the quality of lives of those in rural parts of South Africa, and has, rather, placed more focus on control and elimination of disease.

Equally crucial in the context of the South African rural health crisis is that we encourage positive rural exposures in undergraduate rural medicine training so that we attract doctors to practise medicine in rural areas, whether or not they originate from those areas.

It is thus imperative that further local research be conducted in order to take into account factors that influence an individual's likelihood of selecting rural medicine practice in the South African context. These studies should focus on medical students' undergraduate exposure to rural medicine with additional focus on novel concepts such as home stay, and their influence on likelihood to select rural hospitals for future employment.

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