

RETHINKING “REMOTE AND RURAL” EDUCATION

By Alan Batt^{1,3}, Jessica Morton^{2,3}, Matthew Simpson³

¹National Ambulance LLC, Abu Dhabi, United Arab Emirates, ²Student Paramedics Australasia, NSW, Australia, ³Prehospital Research Support Site, prehospitalresearch.eu

Introduction

The traditional model of paramedicine refers to the role of paramedics with a focus on treatment and transport to emergency departments of acutely ill and injured patients. However, changes in demand from patients for clinical resources has seen the need for evolution and diversification of service delivery to include patient assessment with non-transport options to include referral to primary health care, referral to community services, definitive treatment and transport to emergency department alternatives. (Pearson et al. 2014)

The role of remote and rural paramedic practice is one that needs further refinement and recognition. Rural and remote practice has been acknowledged in health as being its own unique discipline (Denz-Penhey and Murdoch 2007), with identified issues in other health disciplines that impact on clinicians to include higher workload due to a limited workforce, few specialists, community expectations and the introduction of role conflict in that individuals are seen by the public as a clinician 24 hours a day, seven days a week (Humphreys and Wakeman, 2008). The evolving role of community paramedicine also needs further research, as recommended in the Canadian National EMS Research Agenda (Jensen et al. 2013). Community paramedicine in the rural environment is an area warranting specific research.

Educational Challenges

The need for the development of a comprehensive rural and remote component in all

undergraduate paramedic curricula is essential for multiple reasons. One reason is that rural and remote paramedic practice is its own unique discipline. Rural and remote medical practice, including paramedic practice, is not the same as metropolitan practice (Mulholland et al. 2012; Smith and Hays 2004), and therefore requires a tailored educational approach.

Secondly, paramedics in other jurisdictions such as the UK and Ireland can undertake short ‘remote medic’ courses, but in order for rural and remote practice to be accepted as a specialty discipline within paramedicine these courses need to be replaced with a substantive module or subject at undergraduate level within existing paramedic degree programs or as a stand-alone postgraduate qualification such as in James Cook University in Australia, where paramedics can undertake a Graduate Certificate of Rural and Remote Paramedic Practice. Completion of a short ‘remote medic’ course is an insufficient educational grounding for provision of health care to remote communities. Red River College in Manitoba recently announced they will offer an Advanced Care Paramedic program via distance education in 2015 to allow rural paramedics to further their clinical knowledge and abilities.

The majority of undergraduate paramedic programs incorporate simulation, through the use of manikins that can mimic a multitude of medical, trauma and obstetric clinical presentations and/or actors that role play patient presentations. However, these simulations are generally limited in duration due to the quantity of students and time constraints, resulting in many simulations limited to less than 30 minutes duration. Rural patients can be in the care of

a paramedic for hours, therefore, the authors propose that simulation scenarios in the undergraduate learning environment should provide for exposure to prolonged patient contact cases. This will also allow paramedic students to further develop affective domain learning objectives.

Research into clinical placements for student paramedics in rural and remote environments needs to be undertaken, as the literature provides information only on a twelve month experience (Gum et al. 2009). The unique experience offered by clinical placement in remote communities allows paramedic students to experience the characteristics of remote and rural practice – primary care presentations, prolonged backup times, vastly increased patient transport and contact times and increased community expectations. Paramedics in remote communities influence health care not just through direct skill provision – they are also an essential aspect of community welfare and well-being through community engagement and health promotion activities (Stirling et al. 2007). This extended role can be appreciated by student paramedics through direct exposure on clinical placement.

Rural challenges

One myth that plagues the ability to recruit clinicians to rural and remote areas is that working in these areas restricts career development and exposure to more significant illness and injury – this needs to be dispelled. Dr. Tim Leeuwenberg, a prominent Australian rural General Practitioner is oft quoted as saying “Critical illness does not respect geography”.

Paramedic education needs to acknowl-



edge the need to expose potential graduates to the rural and remote working environment, in order to limit the culture-shock if they get posted to these areas. This approach needs to be taken in conjunction with the discipline of community paramedicine and multidisciplinary teams in the rural environment to ensure the workload is offset with the skills and clinical treatment options rural and remote communities require.

The National Rural Health Students Network (NRHSN) in Australia is a predominantly student run, government-funded body, comprising of 28 rural health clubs. Membership gives students of all health disciplines the opportunity to apply for scholarships to extend their education in rural areas or undertake clinical placements in country Australia. Their role is to inspire interest, dispel myths and advocate for opportunities for health care students to commit to returning to or taking up a position in rural Australia.

Rural Appreciation Weekend (RAW) is one of the major annual NRHSN events. RAW was founded by Dr Shannon Nott, a medical student at the time who was frustrated with the stigma associated with rural practice. Nott created rural appreciation weekend, where medical, nursing and other allied health students went 'out bush' for a weekend and experienced first-hand the joys and challenges of living and working in rural Australia.

In 2014, Student Paramedics Australasia (SPA) formed a partnership with the RAW organizing committee to enable student paramedics for the first time to attend the conference. SPA also provided a highly regarded and experienced Intensive Care Paramedic, Geoff Kiehne, to present on "Pulling it together, when it all falls apart". This topic was chosen in light of the various disciplines of the delegates and emphasizing the need for interdisciplinary co-operation and flexibility in rural environments. (Mulholland et al. 2014)


RAW was held on a working farm with no luxuries. Portable toilets were provided as amenities, tradesmen lights were used at night which were powered by a hired generator. The conference space was in a tin shed in 35 degree weather. In addition to the academic presentations, delegates were shown around the 400-acre farm, where they learnt about horses and the typical injuries they can cause, snake bites were addressed by a qualified snake handler who brought in snakes, and common rural presentations were discussed, including heavy machinery and related farming accidents and gunshot injuries.

A similar unique approach could be developed in other countries where remote and rural areas are served by paramedics. Student paramedics in Canada, Ireland, the UK and elsewhere may benefit from a RAW inspired

event allowing them to experience the unique attributes of remote and rural practice in their respective home countries.

Conclusion

Remote and rural paramedic practice is unique to every service, territory and geographical region. A one-size-fits-all approach will not work for incorporating remote and rural education into the undergraduate paramedic curriculum. The importance of interprofessional cooperation and potential interprofessional learning opportunities cannot be understated.

Educators need to be aware of the unique demands and challenges of their local rural health systems, and use this knowledge to assist in the shaping of curricula. Marketing rural practice to future student paramedics should encompass that working as a rural practitioner is not just about the workplace but also the lifestyle. Extended scope of practice and the challenges of rural and remote practice are easily taught through traditional academic means. However teaching resilience, problem solving and adaptability that are all skills and qualities to be an effective and successful rural practitioner that can be impressed upon students through novel, targeted educational interventions. 

References

Denz-Penhey H and Murdoch JC. (2007) A student view of the difference between general practice and rural and remote medicine. *Rural Remote Health*. 7(2):641

Gum L, Dix C, Ingerson C, Clark P. (2009) Riverland rural paramedic students connecting with communities. In: Australia NRH, editor. 10th National Rural Health Conference; Cairns.

Humphreys J and Wakerman J. (2008) Primary health care in rural and remote Australia: achieving equity of access and outcomes through national reform. A discussion paper. In: Commission NHaHR, editor. Canberra.

Jensen J, Bigham B, Blanchard I, Dainty K, Socha D, Carter A, Brown L, Travers A, Craig A, Brown R and Morrison L. (2013) The Canadian National EMS Research Agenda: a mixed methods consensus study. *CJEM*; 15(2):73-82

Mulholland P, O'Meara P, Walker J, Stirling C, Tourle V. (2012) Multidisciplinary Practice in Action: The Rural Paramedic – It's Not Only Lights and Sirens. *Australasian Journal of Paramedicine*. 7(2)

Mulholland P, Barnett T, Spencer J. (2014) Inter-professional learning and rural paramedic care. *Rural Remote Health*. 14(3):2821.

Pearson KB, Gale JA, Shaler G. (2014) Community Paramedicine in Rural Areas: State and Local Findings and the Role of the State Flex Program 2014. Flex Monitoring Team Briefing Paper No. 34. [Available at <http://www.flexmonitoring.org/wp-content/uploads/2014/03/bp34.pdf>. Accessed 9th January 2015.]

Smith J and Hays R. (2004) Is rural medicine a separate discipline? *Australian Journal of Rural Health*. 12:67-72.

Stirling CM, O'Meara P, Pedler D, Tourle V, Walker J (2007) Engaging rural communities in health care through a paramedic expanded scope of practice. *Rural and Remote Health*. 7: 839. [available at <https://www.collegeofparamedics.org/media/159688/omeara.pdf>. Accessed 1st January 2015]

Keywords – *paramedic, remote, education, student, rural*

ABOUT THE AUTHORS



Alan Batt is a Critical Care Paramedic and Clinical Educator working with National Ambulance LLC in Abu Dhabi, UAE.

Email: abatt@nationalambulance.ae
Phone: +97125968670



Jessica Morton is a qualified Nurse and a current Student Paramedic in Edith Cowan University, Australia. She sits on the Executive Committee of Student Paramedics Australasia.

Email: jessica.morton@studentparamedics.org.au



Matthew Simpson is a Paramedic Specialist - Intensive and Extended Care in Australia, with a special interest in remote and rural paramedic practice.

Email: emtsa@bigpond.net.au
Phone: +61429047754

