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PERSONAL VIEW

A year as a prehospital physician in the Outer Hebrides, Scotland

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ABSTRACT:

Responding in the Scottish Outer Hebrides presents a number of challenges above and beyond standard prehospital work owing to its remoteness in terms of reaching definitive care, and the limited resources available on the island. As a prehospital physician, it is important to have an excellent working relationship with all local emergency services and with the wider community. One's emotional resilience will be tested when responding and living in a rural setting, when you are far less removed from the tragedies you encounter when providing prehospital care.

Keywords:

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FULL ARTICLE:

Outer Hebrides

The Outer Hebrides is an archipelago of islands off the West coast of North Scotland. The main islands are Lewis and Harris, North Uist, Benbecula, South Uist and Barra, which are interconnected by a network of causeways and ferries. The population of the Outer Hebrides is about 27 000 with a visiting population of over 200 000 tourists each year. The Outer Hebrides is also the gateway

to reach the more remote islands that make up the St Kilda archipelago.

Emergency medical service structure

The Outer Hebrides are served by the Scottish Ambulance Service, which is the organisation responsible for providing prehospital care in Scotland, including the more remote areas of the Highlands and Islands. The Scottish Ambulance Service serves a population of around 5 million people across over 13 000 km^2 (5000 square miles), including the island group of the Outer Hebrides, Orkney and the Shetlands (150 km north of the Scottish mainland). They employ over 5000 staff members and respond to in excess of 740 000 calls each year. They provide land ambulance resources, as well as fixed and rotary wing assets in addition to specialist units to manage specialist rescue, hazardous chemical incidents and to support Police Scotland when firearms are deployed.

I respond in the Outer Hebrides on the island of Lewis and Harris to support and assist the local Scottish Ambulance Service crews. While working alongside the ambulance service, I am operating as a volunteer for the British Association of Immediate Care Scotland (BASICS Scotland), a pan-Scotland prehospital care organisation. BASICS Scotland provides clinical governance support for over 190 responders, runs education courses in resuscitation and prehospital care and liaises at an organisational level with the ambulance service to facilitate effective co-working and development of clinical guidelines to be used across the two organisations. BASICS Scotland is supported by the Sandpiper Trust, which was established to support lifesaving initiatives in remote and rural Scotland. The Sandpiper Trust supplies custom-designed response bags, personal protective equipment and medical equipment to responders across Scotland, with responders such as myself often referred to as BASICS doctors/nurses/paramedics or Sandpiper Responders. BASICS Scotland is essential to the success of rural responders through this provision of ongoing training both in person and online and in terms of clinical governance support.

I am usually requested to attend calls by the ambulance service Alternate Response Desk (ARD) located on the Scottish mainland. A triage algorithm used by the control room staff will identify 999 emergency calls near my location (I carry a global positioning system tracker) and these will be flagged to the ARD; I may also be requested to attend calls as a result of a request from an ambulance crew, any other emergency service or at the discretion of staff in the ambulance control room. Locally, I also work closely with the Scottish Fire and Rescue Service and Her Majesty's Coastguard cliff rescue teams, and the Coastguard Search and Rescue Helicopter team based in Stornoway. Such interagency working and training is essential in a remote environment where single-agency resources will be limited in number and scope. Operational clinical advice is available to me at all times from a number of resources including the Scottish Ambulance Service Trauma Desk, or the Scottish Emergency Medical Retrieval Service and through the clinicians based at the local hospital.

Case mix

My last 12 months of activity represents the complexity and variety of the workload in the Outer Hebrides. Clinical skills utilised have been:

- oral endotracheal intubation
- procedural sedation
- sedation after return of spontaneous circulation
- fascia iliaca block
- intraosseous access
- DC cardioversion
- thoracostomy and drain insertion

In addition to the clinical skills, the availability of a doctor to the prehospital teams (paramedics and emergency medical technicians) provides them with access to a senior decision maker and facilitates stepping outside clinical guidelines where this is appropriate and necessary.

Call frequency varies enormously, and as I aim to be available and on-call at all times (except when I am off-island or engaged in other clinical work) these calls can be at any time, day or night. The average is about two or three calls per month, but can be three calls in a single day. The case mix includes:

- paediatric seizures
- near-drowning
- traumatic and medical cardiac arrests
- falls
- palliative emergencies
- road traffic collisions
- sepsis
- acute coronary syndromes

Challenges

A pressing challenge is maintaining competence in a system where there is a low volume of high-acuity calls. Ongoing clinical governance and support is provided from both BASICS Scotland and the Scottish Ambulance Service, and I supplement this with attendance at conferences off-island and undertaking online learning in areas of perceived weakness. One of my core aims is to ensure my clinical decision-making and scope of practice do not deviate too far from standard accepted practice, which I feel could be possible when working in relative isolation in an island community. I find that formal and informal discussions and debriefs are valuable in this regard, and I utilise a number of online forums for such discussions.

On a more personal note, an important challenge is practising prehospital medicine in a small, tight-knit community. The community will often know if I have attended a patient overnight, and furthermore will know the person, the nature of the call and the subsequent outcome. As a primary care physician, I also frequently become involved in the wider ripples of tragic events within the community. It is often difficult to separate my responding, my day job in primary care and personal life. All of these factors contribute to a potentially stress-inducing environment, requiring significant emotional resilience.

Summary

Effective clinical governance is challenging in remote and rural areas. Responding in the Scottish Outer Hebrides presents a number of challenges above and beyond standard prehospital work, due to its remoteness in terms of reaching definitive care, and the limited resources available on the island. As an prehospital physician it is important to have an excellent working relationship with all local emergency services, and with the wider community. The use of tele-education as well as face-to-face training mitigate against de-skilling and loss of competence and confidence.

Emotional resilience is tested when responding and living in a rural setting, when you are far less removed from the tragedies you encounter when providing prehospital care, and the impact of this should not be underplayed.