

4 THE CHALLENGES OF MANAGING A COVID OUTBREAK DURING A LONG-RANGE DESERT PATROL

Lt Col Natasha Chatham-Zvelebil. *Consultant Emergency Medicine Roto 3B; Emergency Medicine Consultant Joint Hospital Group (South) and University Hospital Southampton*

10.1136/military-2023-maliabstracts.4

The challenges of managing an infectious disease outbreak in a deployed military setting are well documented. During Op NEWCOMBE the outbreak of COVID in camp was predicted with Force Health Protection strategies and a medical response plan in place. Roto 3, December 2021 – June 2022, had a triple vaccinated task group, and models suggested any outbreak would be clinically and operationally insignificant.

These models did not consider the specific challenges of an outbreak during a long range environmentally challenging desert patrol. The consequences of this COVID outbreak were clinically and operationally significant. The clinical effects were disproportionately severe, with features of heat illness a likely contributor. The management of patients was challenged by heat and lack of climate controlled and isolation facilities. The medical group itself suffered with cases of COVID, resulting in the requirement of the Ground Manoeuvre Surgical Group to assume the deployed Role 1 clinical role, provide a partially climate-controlled environment and manage the logistics of maintaining the testing capability and PPE equipment. The outbreak resulted in 3 cancelled patrols, 8 aeromedical evacuations, 9 strategic evacuations and a total of 106 cases, of which 42 were confirmed or suspected whilst on patrol.

The clinical and operational impact of this COVID outbreak should have been predicted. The challenging environment combined with a physically degraded population towards the end of a 6-month deployment, demonstrated that using disease modelling based upon healthy UK-based populations is ineffective. Future deployments must take this into consideration.

5 DIAGNOSTIC RADIOGRAPHY AND REACH BACK CAPABILITY IN THE REMOTELY DEPLOYED ENVIRONMENT; A SUMMARY FROM OP NEWCOMBE ROTATION 3

Sgt Jessica Bailey. *RAF Diagnostic Radiographer Roto 3; Royal Centre for Defence Medicine (Oxford), Rm 3503 Lvl 3, John Radcliffe Hospital, Headley Way, Oxford*

10.1136/military-2023-maliabstracts.5

Diagnostics remains to be an important and vital capability of any deployed field hospital or surgical team, particularly for teams that find themselves deployed in the most remote locations, such as Mali. The DRGo gives the British military a portable radiography solution. Completely digital, it provides an instantaneous X-ray for clinicians to review. A 6-month period between Dec 21 and Jun 22 saw 29 full X-ray examinations completed with a 50% split between those patients being referred for imaging in the firm base and those referred whilst out on patrol. With no deployed radiologists on the ground, the ability to obtain radiologist reports is pivotal to the patients' subsequent treatment pathway. X-rays and CT scans were uploaded back to the Royal Centre for Defence Medicine for reporting through the help of Project Lara. Project Lara brings together several separate innovation capabilities to deliver a better improved telemedicine solution. It gives

Defence Medical Services personnel the ability to request support or transfer medical information whilst deployed in the field via secure communication systems. The project utilises a SATCUBE satellite terminal, essentially a portable WiFi hotspot. When setup, it allows for a high-speed broadband connection of around 10mbps in less than a minute. Used in conjunction with the secure messaging app, Pando, complete radiologist reports were received back from the UK often in less than one hour of uploading the initial X-rays. A natural fit, the deployed Radiographer took on the role of the communications lead and demonstrated how well the two roles could combine in future remote Operations.

6 THE ADVANTAGES OF DEFENCE MEDICAL ENGAGEMENT

Lt Col Robert A Salaman. *Clinical Director Roto 4A. Consultant Vascular Surgeon, East Lancashire hospitals NHS Trust. 207 Field Hospital. Deputy Consultant Advisor (reserves) General and Vascular Surgery*

10.1136/military-2023-maliabstracts.6

The Ground Manoeuvre Surgical Group was established to provide DCR/DCS support to Operation Newcombe, the UK contribution to MINUSMA, a UN stabilisation and support mission in Mali. Opportunities arose during my tour to forge closer relationships with other nations' surgical teams to the benefit of all.

The UK team delivered a trauma SIM session in the as-yet untested temporary French facility during the drawdown of OP Barkhane. Several human factors issues were identified, and procedures changed prior to the facility going live. Subsequently I was invited to attend when a UK soldier required emergency care in the French facility. I gained multinational working experience and the UK soldier was reassured by a UK presence in the surgical team.

Informal weekly meetings with the Germans and Swedes enabled a thorough understanding of each teams' experience and skills. The UK team were consequently invited to lead the damage control surgery of an Egyptian UN soldier with multiple limb injuries from an IED strike. This provided valuable experience for the UK orthopaedic and general surgeons and an ODP. The UK team was subsequently able to significantly contribute to the after-action review as well as providing significant expertise and training to the greater UN team for future MMI planning.

Two of the five UK Defence Engagement Strategy's aims are "Capability and capacity building, and Access and influence. By enthusiastically engaging with the medical teams of all nations, the UK GMSG team enhanced its capability and gained significant access and influence to the benefit of injured soldiers.

7 PRINCIPLES OF DELIVERY OF SURGICAL CARE FROM A MILITARY FACILITY TO A LOCAL POPULATION; LESSONS LEARNT FROM DEPLOYED SURGICAL CARE IN GAO

Maj Grosset Antoine. *Orthopaedic, Trauma and Limb Reconstructive Surgery department; Percy Military Teaching Hospital, Clamart, France; French Military Health Service*

10.1136/military-2023-maliabstracts.7