

Curious about operational medicine?

DR LIGAYA SOLERA

Operational medicine refers to healthcare that is provided in unconventional settings where important resources – such as medical supplies, medical expertise, space and time – may be limited by factors like location, temperature extremes, natural disasters and armed conflict.

According to Dr Teofredo “Ted” Esguerra, the physician for a Philippine Mt. Everest expedition team, operational medicine encompasses a wide range of specialties, including aviation medicine, naval medicine, combat medicine, disaster medicine, emergency medicine, emergency medical services, wilderness medicine, expedition medicine and travel medicine.

Operational medicine involves treating a wide range of conditions, both common and uncommon, and is considered a particularly good fit for generalists trained in family medicine, internal medicine, emergency medicine, or even pediatrics. The American Academy of Family Physicians, for example, has a chapter called the Uniformed Services Academy of Family Physicians, comprised of family physicians, family medicine residents and medical students who provide primary care and oversee health programs for their assigned units in the United States armed forces.

Esguerra said that training in operational medicine – unlike residency training in mainstream specialties – mostly consists of short courses enhanced by experience in the field.



A few popular operational medicine specialties are discussed below.

Military medicine

Military medicine can be practiced by either civilian or military doctors and can involve treating wounded combatants (battlefield medicine), planning strategies for dealing with mass casualties, and providing healthcare to soldiers and their dependents in peacetime. In the UK, the Defence Medical Services (DMS) accepts applicants at any stage of their professional career, whether undergraduate, general practitioners or fully accredited specialists. Once accepted, military doctors are assigned to either the British Army, the Royal Navy or the Royal Air Force. Service at the DMS need not be long-term and many British doctors actually go for a short military commission before moving on to NHS or private practice.

Wilderness medicine

Wilderness medicine is concerned with providing emergency care in remote settings. Wilderness medical professionals evaluate, triage

and give preliminary treatment to hikers, climbers and other individuals engaged in various backcountry activities. Training is done through short courses that are often marketed as adventures in themselves, such as 21-day treks to the Everest base camp or a 14-day camping trip through rural Nepal. Participants are also able to acquire CME credits upon completion of these courses.

Expedition medicine


A closely related subspecialty is expedition medicine, which deals with medical conditions associated with adventure travel. Expedition medical officers are responsible not only for treating illnesses or injuries during the trip itself but also for pre-expedition planning, which actually takes up most of the doctor's work. In the UK alone, there are eight institutions and organizations offering expedition medicine courses.

Disaster medicine

A disaster medicine specialist's role is twofold: providing healthcare to survivors of disas-

ters, and helping to plan response and recovery strategies before the disaster actually occurs. In the US, physicians can be board-certified in disaster medicine if they demonstrate the core competencies defined by the American Board of Disaster Medicine and the American Academy of Disaster Medicine.

Travel medicine

Travel medicine is concerned with the evaluation and management of international travelers' health problems. It commonly consists of prevention (travel advice and vaccination), assistance (treatment of travelers), and facilitating access to healthcare (through travel insurance). Most of the people who avail of travel medicine services are those going from developed countries to developing countries, with the most common conditions of concern being malaria, yellow fever, meningococcal meningitis, and traveler's diarrhea. Short courses in travel medicine are offered in various centers worldwide, including a 5-day GBP1,070 course at the London School of Hygiene & Tropical Medicine. 

TIME concept in wound management

DR LOUELL L. SALA

Wound bed preparation is a comprehensive system of optimizing conditions that will encourage normal endogenous processes of healing. It is based on the premise

that there are underlying molecular processes that eventually affect complex cellular mechanisms. [*Wound Rep Regen* 2005;13:S1-11] Hence in 2003, a group of international wound healing experts formulated a conceptual framework known eventually as the TIME con-