INTRODUCTION TO WILDERNESS INSTRUCTOR

Student Electives in Wilderness Medicine: Curriculum Guidelines—An Introduction

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In March of 2000, the Department of Emergency Medicine at the University of New Mexico introduced a student elective in wilderness medicine.¹ Their program was adapted from Wilderness Emergency Medical Technician (WEMT) courses, and included both classroom didactic sessions and outdoor scenarios in a variety of wilderness settings. It also included outdoor survival training. European mountain medicine courses for physicians, which started in 1984, also include training in mountaineering and other wilderness survival skills.^{2,3} When the Department of Emergency Medicine at New York Presbyterian Hospital in Manhattan started their wilderness medicine program in 2005, however, they allied with an affiliated university, Cornell, which already had an outdoor education program. So that became part of their wilderness medicine elective. Because their staff used their wilderness medicine training in responding to the September 11, 2001, attacks and other disasters, it was natural to include disaster response and hazardous materials training in their wilderness medicine program.⁴ This reminds us that wilderness medicine training is relevant not just to wilderness emergencies but to any situation in which rapid transport to a hospital is not available, or when Emergency Medical Services (EMS) are overwhelmed or disabled by disasters. Even in normal medical practice, wilderness medicine training can be useful, as former participants in the University of Pennsylvania Medical School wilderness medicine elective reported when they were surveyed years after graduation.⁵

So what does wilderness medicine training for medical students include that may not have been part of the traditional curriculum? First, although it includes classroom instruction, it also takes them out of the hospital setting to environments in which they lack the resources and support that are taken for granted in urban practice. So they have to improvise, as well as use survival skills to protect themselves and their patients. They also need to perform skills taught in Wilderness First Responder (WFR) and WEMT courses that doctors normally delegate, which is why wilderness medicine electives borrow from those courses or even incorporate them in the elective, as

the University of New Mexico program described earlier does. Some programs, like the Medical Wilderness Adventure Race, also introduce the element of team competition.⁶ Team competitions in scenarios have a long tradition in first aid and EMS, but not in the training of medical students. Realistic scenarios that require teamwork and improvisation (even without the element of competition) are an important part of wilderness medicine electives, and help prepare medical students for situations that could occur even in urban practice, especially in the aftermath of a disaster. Wilderness medical scenarios can use high technology patient simulation, if it is available.⁷ But outdoor scenarios can also be made realistic with moulaged patients and improvisation.^{8,9}

Because wilderness medicine practice guidelines are based on consensus rather than legislation, standard curricula for wilderness medicine electives can only be based on consensus. The authors have taken the first step by asking directors of these programs and other experts what they think should be included. At first sight, Table 1 may seem puzzling because so many of the topics are part of the standard medical curriculum. But treating injuries or medical emergencies in a wilderness or disaster situation would be very different from treating them in a well-equipped hospital after EMS has provided urgent care and rapid transportation. It is interesting that patient assessment is at the top of the list, with 33 of 35 respondents saying that it must be included. A thorough patient assessment used to be part of every medical curriculum, but how many doctors today ever perform the kind of detailed head-to-toe examination that we still teach to every student in Emergency Medical Technician (EMT) and Emergency Medical Responder (EMR) courses? And how many medical students could accurately assess a patient's vital signs or injuries without the diagnostic equipment that is now standard in hospitals? So trauma and environmental injuries are ranked high in the table. It is also interesting that spinal cord injuries rank second in Table 1, just after patient assessment, because urban EMS systems are finally catching up with wilderness medicine and teaching EMTs to do spinal

assessment so that they do not unnecessarily place patients on a backboard.

There is more division of opinion about the priority of wilderness survival skills in the electives, perhaps (as the authors note) because they are not medical skills. But they are included in some electives, and are a standard part of European courses in mountain medicine. Although respondents were not asked to give reasons for their choices, they will certainly feature in the discussions that this article is likely to provoke.

References

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