WILDERNESS INSTRUCTOR

Introduction to *Injuries and Illness in College Outdoor Education*

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Courses in wilderness emergency care, from the Wilderness First Aid (WFA) to the Wilderness First Responder (WFR) and Wilderness EMT (WEMT) level, train participants to treat injuries and illnesses with whatever they have on hand or can improvise in a wilderness or remote situation. When instructors design their curricula and schedules, however, they need to decide which injuries and illnesses to include, and how much class time to spend training participants to assess and treat each one. In making that decision, 3 factors are the most important: How common a problem is it in wilderness activities; how serious it would be; and how long it takes participants to learn how to deal with the problem?

Studies like the one described in this article are valuable for 2 reasons: They help wilderness guides anticipate and prevent problems in their activities; and they help emergency care instructors make their curricula more realistic. Those of us who teach emergency care value whatever feedback we can get from our students and alumni on how they used what they learned to prevent or deal with wilderness emergencies. For example, one of this author's students in a WFR class improvised a traction splint for a fractured femur with 2 ski poles on a winter ski ascent of Mt. Rainier. While femur fractures are not common in wilderness activities (with none reported in this study), they are life-threatening because of internal bleeding (which traction splinting helps to control); and this justifies teaching them in advanced courses. Foot blisters, by contrast, deserve class time because they are very common in wilderness

activities, and can be disabling, although they are seldom considered significant enough to include in injury statistics.

Occasional feedback from students and alumni, however, does not give us a balanced account of the frequency and consequences of wilderness injuries and illnesses. For example, we tend to associate wilderness evacuation with dramatic accidents causing life-threatening injuries. But the authors found that gastrointestinal conditions (caused by poor hygiene) required the most evacuations. They also found that teaching trip participants proper food preparation hygiene halved the number of cases. These statistics send a strong message to emergency care instructors on the importance of teaching prevention in their classes.

It is surprising to learn that the injury rates for activities like rock climbing and whitewater kayaking (both commonly perceived as dangerous) were lower than in competitive basketball and women's gymnastics, respectively. However, the wilderness activities in this study were closely supervised by trained guides and instructors, and not at the competitive level. So it would be interesting to see how these wilderness activities compare at a more competitive and unsupervised level.

Though modest in scope, this study provides useful information (and a few surprises) for wilderness and emergency care instructors. If it encourages others with access to similar data to publish their own studies, then wilderness instructors will have a better basis for designing their courses, and training their participants for the emergencies they are likely to encounter.

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