

RUNNING THE GAUNTLET

Emergency physicians sign on for challenge and camaraderie of extreme obstacle races **BY GRETCHEN HENKEL**

“The greater the obstacle the more glory in overcoming it.” – Molière

In May 17, emergency physician Sudip Bose, MD, FACEP, FAAEM, along with three nurses and two other physicians from his emergency department at Medical Center Hospital in Odessa, Texas, each paid a \$190 entry fee to spend the day slogging across muddy streams, crawling in mud under barbed wire, running up 40-degree inclines, and jumping over fire pits, among other barriers, in a nine-mile endurance race. The occasion was the Spartan Super in Austin, Texas. For Dr. Bose, who was a state-ranked mile runner in high school and won physical fitness awards during his military service, the race was an “all-around fitness event and a great way to build camaraderie within our department.” He also pointed out that the ailments he treats as an emergency physician bring home the importance of staying fit and healthy.

Dr. Bose and his team are part of a growing trend of Americans incorporating obstacle races into their fitness goals. According to the *Los Angeles Times*, such events have become more popular than marathons, with an estimated 1.6 million participants in 2013 who signed on to test their physical and mental stamina. While major events such as Tough Mudder, the Warrior Dash, the Spartan races, and the Volkslauf (with the motto “Pain Is Good”) offer different course and obstacle configurations, they share common themes of physical and mental challenge and often emulate the military training model.

Events such as Tough Mudder’s Boa Constrictor, where racers crawl through a series of pipes, and Electroshock Therapy, where participants run through an obstacle field hung with electrified wires, are designed to elicit a maximum fear factor. The Artic Enema, for example, entails jumping into frigid water and swimming under a wooden plank before pulling oneself out of the water.

Howard Mell, MD, MPH, chair of ACEP’s EMS Section, pointed out that such events are actually “haunted-house scary” and that obstacle races pose no greater risk to participants than do more standard marathons. “These types of obstacle courses have been done for years in the military and by SWAT teams as they prepare for what they do,” he noted. “[These events] are for ‘weekend warriors’ doing the same. There will be broken bones, bruises, cuts, and scrapes, and there are going to be a couple of people who give themselves angina because they’re just not in the condition to do these things. But the same can be said of a marathon.”



Above: Dr. Bose crawls through the mud to get under a barbed wire obstacle in the Spartan Super. Right: Dr. Bose and colleagues jump over fire.



© PHOTOS COURTESY OF THE REEBOK SPARTAN RACE

Benefits Outweigh Risks

Participants often cite the benefits of camaraderie and accomplishment that they gain from completing such courses. Trina Flores, 37, of Atascadero, California, began participating in mud runs five years ago after shedding 50 pounds. She has now completed 17 races and enjoys the fun and teamwork required to help others surmount obstacles. “I like mixing it up,” she said. “Doing marathon runs would be boring for me, and the part I like is that [mud runs] really push you out of the box.” Next spring, Dr. Mell will participate

with two other emergency department colleagues from medical school in a GORUCK event, founded by a former Navy SEAL, which features running with 40 pounds of bricks in a rucksack and emphasizes team building through accomplishment of a mission.

Dr. Bose said part of his motivation for participating in the Spartan Super

was to raise awareness for his nonprofit foundation, The Battle Continues (www.thebattlecontinues.org), which provides aid to wounded veterans and advocates for health care issues. (Dr. Bose is also a motivational speaker, applying lessons learned from combat as a template for surmounting other life challenges. Proceeds from corporate leadership lectures also go to injured veterans.)

In fact, fatal injuries sustained during obstacle races are rare. There have been two reported deaths: a man who drowned after jumping into ice-cold muddy water at a Tough Mudder event and a cardiac event sustained by a rescue worker at another. However, some physicians have questioned the safety of these extreme racing events. In a published case series of Tough Mudder participants treated at the Lehigh Valley Hospital in Allentown, Pennsylvania, the authors

summarized participants’ diverse injuries requiring transport to the emergency department. The injuries ranged from moderate dehydration to contusions and dislocations to near syncope and electrical injuries.¹ Although the injuries were not excessive compared with other endurance competitions or military training exercises, the authors did “strongly encourage” participants to obtain sign-off from their physicians before enrolling in such competitions.

per was to raise awareness for his nonprofit foundation, The Battle Continues (www.thebattlecontinues.org), which provides aid to wounded veterans and advocates for health care issues. (Dr. Bose is also a motivational speaker, applying lessons learned from combat as a template for surmounting other life challenges. Proceeds from corporate leadership lectures also go to injured veterans.)

Teamwork and Challenges

In November, Dr. Bose and his team will tackle the Spartan Beast, a 13-mile course with different obstacles. He has added another goal to his regimen. He is seven pull-ups shy of winning a pull-up competition. “I’m gonna try to nail those pull-ups!” he says. Beyond that, though, he believes there is a psychological benefit to embracing the challenges of extreme racing. “I think it’s inspirational when people push their limits,” he said. “Whether it’s a physical race or another obstacle, you can take that same skill set and apply it to other aspects of your life. I also think what our injured veterans or patients overcome is much more difficult than any extreme race.”

Reference

1. Greenberg MR, Kim PH, Duprey RT, et al. Unique obstacle race injuries at an extreme sports event: a case series. *Ann Emerg Med.* 2014;63:361-366.

GRETCHEN HENKEL is a medical journalist based in California.

PREPARING FOR ENDURANCE EVENTS: PARTICIPANTS AND PHYSICIANS

Those planning to participate in an obstacle race should follow a common-sense training regimen, advised Dr. Bose. Participants should aim for building stamina through cardiovascular exercise and upper-body strength for multiple climbing events, as well as flexibility, to head off injury.

Dr. Mell advised emergency physicians to be prepared if marathon or endurance race events are planned for their area and to insist that the hospital’s EMS director be involved in communication with event sponsors.

For the race itself, minimum requirements should include:

- A planned and coordinated response for integrating medical staff into the hospital’s 911 system
- Automated external defibrillators positioned within a two-minute response radius throughout the race course
- EpiPens and tourniquets to handle other basic emergency situations.