

**Orthopaedic Trauma Research Priorities in Latin America:
Developing Consensus Through a Modified Delphi Approach**

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Purpose: Despite a significant burden of musculoskeletal injury, studies of orthopaedic trauma in Latin America are lacking. The purpose of this study was to identify research priorities among orthopaedic trauma surgeons in Latin America in order to set an agenda for future studies.

Methods: A modified Delphi process was conducted. Research questions were solicited from members of the Asociación de Cirujanos Traumatólogos de las Américas (ACTUAR) network. Participants rated questions from 1 to 9 in order of importance. All questions were then redistributed along with aggregate rating, and participants rerated all questions with knowledge of the group responses.

Results: 79 participants completed the first survey and were included in subsequent survey distribution. Of these, 53 participants completed all subsequent surveys. Mean age was 51.8 years, and most participants were male (92%), completed an orthopaedic trauma fellowship (60.3%), and participated in research (80.8%). Five respondents were from a high-income country, 67 were from an upper middle-income country, and 6 were from a lower middle-income country; 15 countries were represented. A total of 65 questions were identified. Six questions were rated between 1 and 3 (“more important”) by over 70% of participants, the threshold for consensus: 1. What is the optimal treatment protocol (timing of surgery, comanagement) for elderly patients with hip fracture? (76.9%) 2. What is the most effective initial and definitive management of musculoskeletal injury, including timing and surgical strategy, in the polytraumatized patient? (74.4%) 3. What is the ideal state of open fracture treatment, including timeliness and method of antibiotics, debridement, surgical fixation, and closure or coverage, at each hospital level in the health-care system (primary, secondary, tertiary)? (71.8%) 4. What patient and fracture characteristics predict infection after musculoskeletal injury? (70.5%) 5. What is the current state of treatment for fracture-related infection, including timeliness and method of antibiotics and surgical intervention, at each hospital level in the health-care system (primary, secondary, tertiary)? (70.5%) 6. What is the optimal protocol for temporary management for the hemodynamically unstable patient with a pelvic or acetabular fracture? (70.5%)

Conclusion: This modified Delphi study of 79 orthopaedic trauma surgeons in 15 countries in Latin America identified geriatric hip fracture, polytrauma, open fracture care, musculoskeletal infection, and care of patients with pelvic and acetabular fractures as top research priorities. This provides important information for resource allocation and goal setting for orthopaedic trauma in the region.