

MEETING ABSTRACTS**Spinal Immobilization in Disasters: A Systematic Literature Review**

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Background/Introduction: A roundtable was hosted by the World Association for Disaster and Emergency Medicine (WADEM) World Congress to explore prehospital spinal immobilization (SI). The participants queried prehospital SI in resource-scarce environments (RSE), whether the disaster or humanitarian setting was applicable to the then recently released ILCOR statement, and identified challenges in maintaining appropriate application of SI in the prehospital RSE. A specific call was requested as an output of the roundtable for WADEM to provide guidance in this area of practice.

Objectives: This systematic review informed a subsequent Delphi study to develop prehospital guidelines for SI in disaster and humanitarian settings.

Method/Description: A systematic review was conducted according to the Preferred Reporting Items for Systematic

Reviews and Meta-Analyses (PRISMA) checklist. The review included English language papers published from January 2000 through July 2019.

Results/Outcomes: The search strategy yielded a total of 1,029 references. After exclusion of duplicates, 919 titles were identified for further screening. After applying exclusion criteria, a total of 14 references underwent evaluation. The reviewed articles comprised six types of studies and represented research from institutions in ten different countries.

Conclusion: There is a lack of high-level evidence on the utility or effect of spinal motion restriction or immobilization on patient outcomes in disasters. There is a need for robust research to determine the clinical benefit of spinal restriction or immobilization in disasters and across disaster types. This systematic review informed a subsequent Delphi study to develop recommendations and guidance for practice related to prehospital SI in disaster and humanitarian settings.

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