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Mapping the Evidence on Humanitarian Logistics in the Iran-Iraq Earthquake: A Scoping Review



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Backgrounds

Logistics and relief supply chain management are important components of the response to earthquakes. The Iran-Iraq earthquake presented major challenges for relief operations. This scoping review aimed to map the available evidence on the logistics and relief supply chain aspects of the this earthquake.

Methods

Database Search:
PubMed, WOS, Scopus
Range: 2017 - 2026

Inclusion Criteria:
English language,
Iran-Iraq earthquake,
Humanitarian logistics,
Relief chain management

Exclusion Criteria:
Other earthquakes,
Geological,
Engineering,
Structural perspectives,
Reviews,
Letter to editor,
Conference abstract,
Editorial

9 articles included

Qualitative thematic analysis to map evidence

Findings

4 Categories

- Network design and distribution planning, the most studied area, mainly using optimization models
- Medical supply management, including blood inventory and medication supply chain resilience
- Casualty evacuation and epidemic control, covering patient transfer, shelter allocation, and Internet-of-Things applications
- Operational challenges and relief actors' roles

Conclusion

Effective earthquake response requires integrated planning that links preparedness with response. Policymakers should invest in pre-positioning of supplies, information systems, and training of humanitarian actors, including volunteers

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