

Assessing health care provider knowledge and preparedness for disaster management in Syria

Submission date 10/09/2025	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 10/09/2025	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 10/09/2025	Condition category Other	<input type="checkbox"/> Individual participant data <input checked="" type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Syria has faced many major disasters in recent years, including earthquakes, bombings, and disease outbreaks. Doctors, nurses, and medical students are on the front line when these events happen, but it is unclear how prepared they feel to respond. This study aims to find out what medical students and young doctors in Syria know about disaster response and how ready they are to handle such emergencies. The results will help create better training programs to improve care during future disasters.

Who can participate?

Medical students in their 4th, 5th, or 6th (final) year of university in Syria.

Resident doctors and other healthcare professionals, like nurses, general practitioners, and hospital staff.

What does the study involve?

Participants will be asked to complete a confidential questionnaire. The questions will ask about their background, their knowledge of dealing with disasters, how prepared they and their hospitals are, and what kind of training they think would be most helpful. Filling out the questionnaire should take about 10-15 minutes. No treatments or tests are involved.

What are the possible benefits and risks of participating?

There is no direct benefit to participants. However, their answers will help improve training for future healthcare workers, which could benefit the wider community in Syria. There are no anticipated physical risks. The questions are not expected to cause distress, but if thinking about disasters is upsetting, participants can skip questions or stop the survey at any time.

Where is the study run from?

University of Aleppo, Syria.

When is the study starting, and how long is it expected to run for?

July 2025 to August 2025

Who is funding the study?

Investigator initiated and funded. The protocol does not specify a funding source.

Who is the main contact?

Mohammad Al-jawad, mhammadjawad877@gmail.com

Contact information

Type(s)

Public, Scientific, Principal investigator

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Study information

Scientific Title

Disaster management knowledge and preparedness among healthcare providers in Syria: a cross-sectional study

Study objectives

Primary:

- To assess the level of knowledge and preparedness among medical students and hospital residents in Syria regarding disaster response, including earthquakes, aerial bombings, and mass health emergencies.

Secondary:

- To identify gaps in disaster management education and training among medical personnel, and to provide recommendations for enhancing disaster preparedness among healthcare professionals in Syria.

Ethics approval required

Ethics approval required

Ethics approval(s)

approved 13/07/2025, Institutional Review Board (IRB) of Faculty of Medicine, University of Aleppo (-, Aleppo, +963212229184, Syria; +963212670400; inter-rel@alepuniv.edu.sy), ref: 2513

Study design

Multicentric observational cross-sectional study

Primary study design

Observational

Study type(s)

Screening

Health condition(s) or problem(s) studied

Disaster management among healthcare providers

Interventions

This study will employ a cross-sectional observational design to assess the knowledge and preparedness for disaster response among medical students and hospital residents in Syria. The research will be conducted over a two-month period across various medical colleges and hospitals in Syria.

A structured questionnaire will be administered to a calculated sample size of 1,074 participants. The study population will include medical students in their clinical years (4th, 5th, and 6th years) and hospital residents, alongside other healthcare professionals such as general practitioners, nurses, and administrative staff. Preclinical medical students, non-medical personnel, retired healthcare professionals, and those who do not provide informed consent will be excluded.

The questionnaire is divided into four sections: (1) Demographic Information, (2) Knowledge of Disaster Management, (3) Preparedness and Disaster Response, and (4) Evaluation of Training Programs and Needs. Data will be collected on variables including prior training experience, self-rated knowledge, familiarity with specific emergency scenarios, and perceived institutional preparedness.

For data analysis, descriptive statistics (percentages, means, and standard deviations) will be used to summarize demographic data and calculate the prevalence of prior training and knowledge. Common gaps will be identified through frequency analysis of responses. A comparative analysis using chi-square tests will assess significant differences in preparedness levels across different academic and professional levels (e.g., 4th-year students vs. 5th-year students vs. residents). Correlation analysis will be conducted to examine the relationship between prior training experience and perceived preparedness.

Intervention Type

Other

Primary outcome(s)

Variable Level of knowledge and preparedness for disaster response measured using a structured, study-specific questionnaire at a single assessment point during the 1-month data collection period.

Key secondary outcome(s)

1. Prevalence of prior disaster management training measured using the demographics section (Item 6) of the study-specific questionnaire at a single assessment point during the 2-month data collection period

2. Most frequently reported gaps in knowledge and preparedness measured using a frequency analysis of responses from Sections 2 and 3 of the study-specific questionnaire at a single assessment point during the 2-month data collection period
3. Comparative preparedness levels across academic and professional levels measured using a comparative analysis (e.g., Chi-square tests) of responses from Sections 2 and 3 of the study-specific questionnaire at a single assessment point during the 2-month data collection period
4. Correlation between training experience and perceived preparedness measured using a correlation analysis of responses from the demographics section (Item 6) and Sections 2 and 3 of the study-specific questionnaire at a single assessment point during the 2-month data collection period
5. Perceived importance of and preferred methods for disaster training measured using Section 4 of the study-specific questionnaire at a single assessment point during the 2-month data collection period

Completion date

10/08/2025

Eligibility

Key inclusion criteria

1. Medical students enrolled in recognized universities in Syria
2. Resident doctor and other health care professional
3. Only students in clinical years (4th, 5th, and 6th years)

Participant type(s)

Health professional, Learner/student, Resident

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

21 years

Upper age limit

60 years

Sex

All

Total final enrolment

877

Key exclusion criteria

1. Preclinical medical students (1st, 2nd, and 3rd years)
2. Non-medical students or individuals not affiliated with medical institutions
3. Retired healthcare professionals or those not currently practising
4. Individuals who do not provide informed consent to participate in the study

Date of first enrolment

17/07/2025

Date of final enrolment

10/08/2025

Locations

Countries of recruitment

Syria

Study participating centre**Syria**

The study will be run by researchers at medical colleges and hospitals across Syria, where the participants are based.

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Syria

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Sponsor information

Organisation

University of Aleppo

ROR

<https://ror.org/03mzvzx96>

Funder(s)

Funder type

Other

Funder Name

Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Mohammad Al-jawad, mhammadjawad877@gmail.com

IPD sharing plan summary

Available on request