Evaluation of an outcome measure for patients in humanitarian settings after trauma: the Activity Independence Measure-Trauma (AIM-T)

SCIENTIFIC DAYS

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Conclusions / Operational implications

The AIM-T assesses activity independence after trauma, in a reliable and valid way.

This study further supports the evidence for the use of the AIM-T, in clinical practice, project management or research.

Background

Trauma represents a huge **burden globally.**
Monitoring this burden can help improving **quality of trauma care.**

> **Beyond mortality, the quality of survival after trauma matters.**

In humanitarian contexts, lack of resources means that quick and practical tools are required; these should also be **valid and reliable**.

Activity Independence Measure – Trauma (AIM-T)

The Activity Independence Measure – Trauma (AIM-T) was developed in Afghanistan by MSF and Humanity & Inclusion in 2011.

This tool has been used in many MSF trauma projects. It has been since shortened and revised to be appropriate across different cultures.

Aims of this study

Before wider use, we need to know:

☐ Is the AIM-T able to discriminate different groups of patients after trauma?
☐ Is the AIM-T consistent with other validated measures?
☐ Is the AIM-T reliable across users?

Methods

- 4 MSF projects in Burundi, Central African Republic, Cameroon and Iraq
- 195 patients assessed with the AIM-T, the Barthel Index (BI), and pain scores. 84 patients were assessed a second time using the AIM-T, performed by another physio.

Construct validity:
☐ Known-group validity (differences between defined groups): Mann-Whitney Test
☐ Concurrent validity (correlation with BI and pain scores to different extents): Spearman correlation coefficient (SCC)
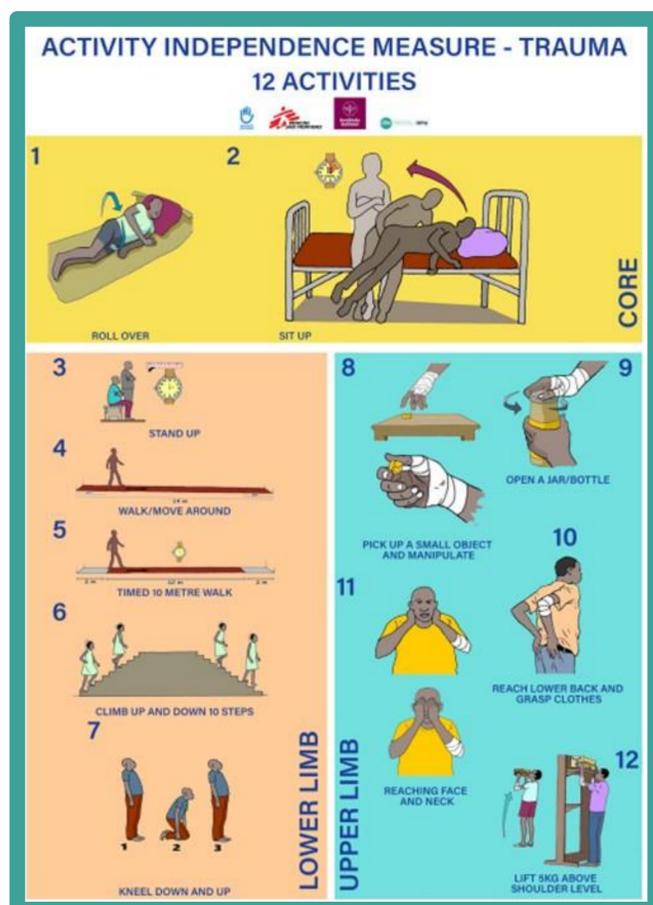
Inter-rater reliability:
☐ Agreement between users: intra-class correlation coefficient (ICC)

Ethical approvals obtained from MSF and the 4 national ethical review boards.

Results

☐ Significant AIM-T scores differences between groups of patients, based on the acuteness of their trauma, and on the number of injuries (p=0.001).
⇒ The AIM-T **can discriminate** different types of patients.

☐ The AIM-T showed low correlation with pain scores (SCC between -0.206 and 0.520) and strong positive correlation with BI (SCC 0.791).
⇒ The AIM-T **is consistent with other measures,** reflecting activity independence.

☐ Good to excellent inter-rater reliability (ICC between 0.833 and 0.952)
⇒ The AIM-T **is reliable** across users.

Scan me for more information on the AIM-T!

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r2hc Research for health in humanitarian crises elrha Karolinska Institutet Hi humanity & inclusion the new name of Handicap International