after the education sessions showed a median comfort level of 5/5 compared to 3/5 in SIM participants. TTX showed an average change in comfort level of 2.13 (SD 1.53) pre- and post-education sessions compared to 1.68 (SD 1.38) in the SIM group, with no statistically significant difference between the groups.
Conclusion: Both modalities increased comfort level in managing MCIs, although participants in TTX performed better on the post-exercise assessment. This data suggests TTX may be an efficacious cost-effective strategy to increase knowledge and comfort in preparing staff for MCIs.

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Applied Artificial Intelligence in Development of Virtual Simulated Emergency and Disaster Scenarios - Based on Real Patient Data

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Background/Introduction: Virtual simulation models enable preparation of healthcare teams working in emergency and disaster responses, by providing practice of leadership and communication in decision making. The statistical functions are also suitable for assessment of team performance. However, developing virtual simulated scenarios focused on team training is time-consuming, expensive, and consists of complex developmental processes. This feasibility study aimed to explore if application of AI on trauma registry would support automated creation of virtual simulated scenarios based on real patient data.
Objectives: To determinate design and effects of an automated system converting real patient data into virtual simulated scenarios.
Method/Description: Mixed methods with two data sets. The first data set was extracted from trauma patients records for the development of a system converting real patient data into virtual simulated scenarios. The second data set consisted of focus group interviews.
Results/Outcomes: The end product consisted of a Python-based program for automating virtual simulation scenario creation and a graphical user interface (GUI) displaying the scenarios. Further improvements were needed in efficiency and correlated to the quality of data derived from patients' records. Incorporating functions such as time as stress factor, integration of decision-making components based on a decision-making tree would also contributes to usefulness and acceptance of the system.
Conclusion: The potential of the system is cost efficient and beneficial for healthcare teams and educational bodies by its ability to provide great numbers of emergency and disaster scenarios, and the access and presentation of real patient data in situations with limitations, such as during the pandemic.

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HOSPEX Tabletop Simulation for Emergency Medical Teams: Ethiopia Case Study

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Background/Introduction: Emergency Medical Teams (EMTs) face several challenges in conducting cost-effective and time-efficient training exercises, particularly in resource-limited settings. HOSPEX TABLETOP is a low-tech classroom-based interactive field hospital simulation exercise designed to train and test casualty management protocols, field hospital layouts, standard operating procedures (SOPs), and team decision-making before expensive full-scale exercises or deployment. The Belgium and Denmark EMTs have already adopted the simulation. The Royal College of Surgeons of England collaborated with the founder of HOSPEX Tabletop to pilot this training with the Ethiopian EMT and assess its impact.
Objectives: To train Ethiopian EMT staff in field hospital operations and develop a cadre of instructors to deliver HOSPEX tabletop training in other LMICs.
Method/Description: A HOSPEX Tabletop, customized to reflect the layout and staffing of the Ethiopian EMT, was used to train 34 participants from diverse specialties and experience levels over four days, including an instructor training day. Questionnaires were used to assess the impact.
Results/Outcomes: Participants were actively engaged throughout the training, rapidly adapting to the simulated environment. They gained experience in using SOPs, managing trauma, diseases, and conflict cases, and applying major incident medical management principles. The training highlighted areas for improving the SOPs and prompted significant changes to Ethiopia's EMT layout, tested within the exercise.
Conclusion: HOSPEX Tabletop proved to be an effective and engaging training tool, yielding very positive feedback. It enhanced participants' knowledge and skills, whilst also identifying and developing potential instructors. Insights gained from the training have already contributed to improvements in the EMT's awareness and preparedness.

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