

EFFECTIVENESS OF MASS CASUALTY PROTOCOLS IN HOSPITALS

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BACKGROUND AND PURPOSE

- A mass casualty incident (MCI), either a natural incident or a man-made incident, that requires a rapid response exceeding the local resources and capacity to respond, has been estimated to occur somewhere in the world every day (Wilkinson & Matzo, 2015).
- PICO Question:** We researched what the effect of training protocols are for hospital staff and their preparedness during mass casualties.
- Purpose:** Develop evidence-based practice guidelines to improve effectiveness of mass casualty training protocols in hospitals
- The main objective of our literature review is to analyze training protocols for mass casualty incidents. We are looking at how the nurses responded to the training protocols and the effectiveness of the training put into action.

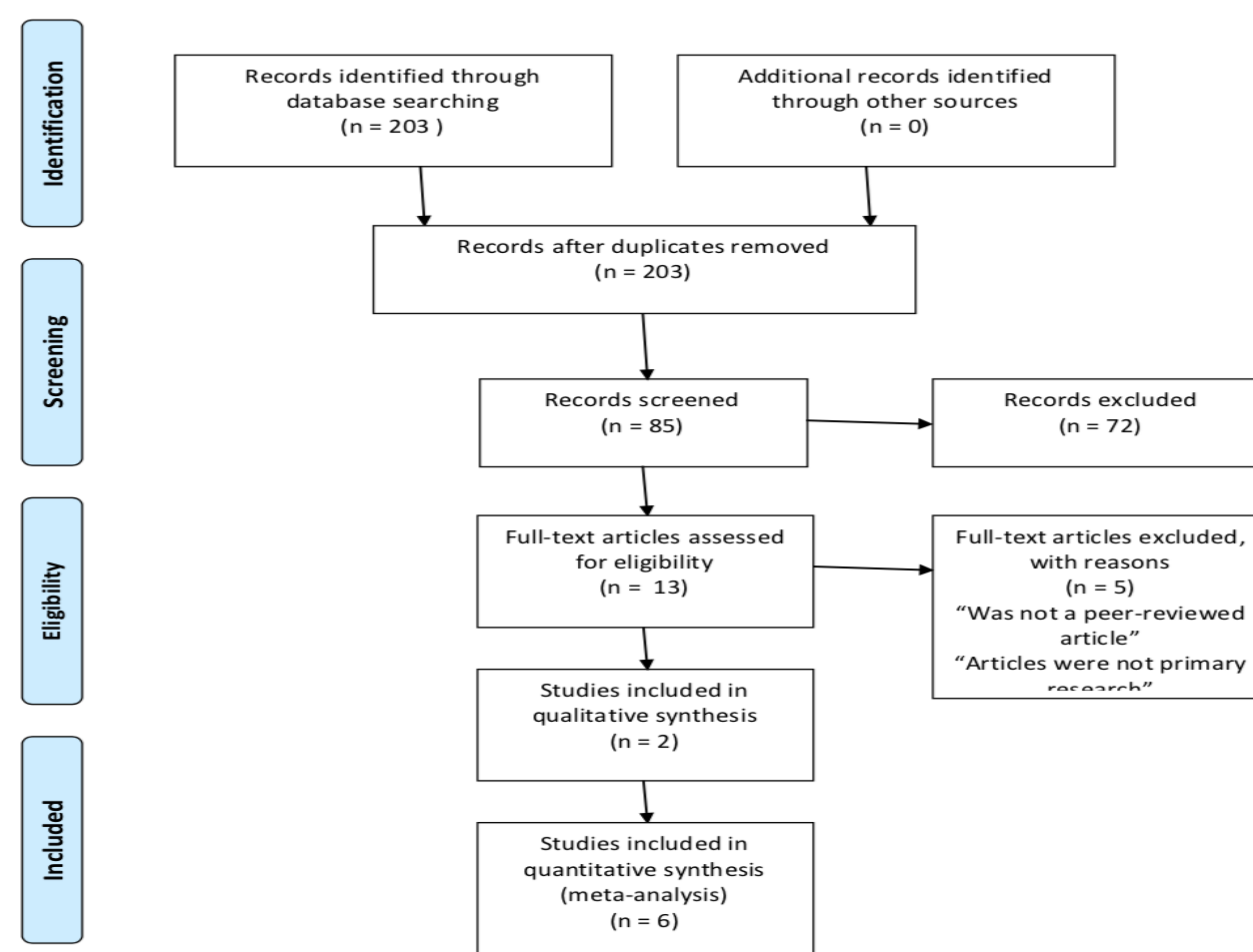
Results of Literature Review

- Nursing students felt more confident and prepared for a mass casualty response after attending a simulation and didactic lecture on disaster readiness (Fernandez-Pacheco et al., 2018)
- Hospital staff members possess knowledge or experience related to MCIs, but may not be aware of mass casualty incident plans in their facility (Lewis et al., 2016).
- Emergency Personnel improved in knowledge pertaining to MCI response following training (Glow et al., 2013)

PRACTICE GUIDELINES RECOMMENDATIONS

- No notice exercise trainings should be conducted every 6 months as refreshers (Waxman et al., 2017).
- MCIs checklist will be visibly posted in specified areas throughout hospital (Lewis et al., 2016)
- Mechanism for evaluation and critique of performance will be administered following exercise/drill (Waxman et al., 2017)
- New hires will undergo simulated MCI trainings during orientation (Fernandez-Pacheco et al., 2018)

Prism Flow Diagram



(Baily, 2017)



Missouri Hospital Association. (n.d.). *Emergency Preparedness*.

REFERENCES

- Baily, L. (2017, July 6). Pocket nurse shares strategies for running a mass casualty incident simulation scenario [digital image]. Healthy Simulation. <https://www.healthysimulation.com/12194/pocket-nurse-shares-strategies-for-running-a-mass-casualty-incident-simulation-scenario/>
- Fernandez-Pacheco, A.N., Delgado, R.C., Gonzalez, P.A., Fernandez-Navarro, J.L., Madrigal-Ceron, J.J., Rodriguez, L.J., Alonso, N.P., Armero-Barranco, D., Lopez-Iborra, M.L., Damian, E.T., & Rios, M.P. (2018). Analysis of performance and stress caused by a simulation of a mass casualty incident. *Nurse Education Today*, 62(2018), 52–57. <https://doi.org/10.1016/j.nedt.2017.12.016>
- Glow, S.D., Colucci, V.J., Allington, D.R., Noonan, C.W., & Hall, E.C. (2013). Managing multiple-casualty incidents: A rural medical preparedness training assessment. *Prehospital and Disaster Medicine*, 28(4), 334-341. <https://doi.org/10.1017/S1049023X13000423>
- Lewis, A.M., Sordo, S., Weireter, L.J., Price, M.A., Cancio, L., Jonas, R.B., Dent, D.L., Muir, M.T., & Aydelotte, J.D. (2016). Mass casualty incident management preparedness: A survey of the American College of Surgeons Committee on trauma. *The American Surgeon*, 82(12), 1227-1231. Retrieved from <https://sesc.org/american-surgeon-journal/subscribe/>
- Missouri Hospital Association. (n.d.).] Emergency Preparedness [digital image]. <https://web.mhanet.com/emergency-preparedness.aspx>
- Waxman, D.A., Chan, E.W., Pillemer, F., Smith, T. WJ., Abir, M., & Nelson, C. (2017). Assessing and improving hospital mass-casualty preparedness: A no-notice exercise. *Prehospital and Disaster Medicine*, 32(6), 664-666. <http://dx.doi.org/10.1017/S1049023X17006793>
- Wilkinson, A.M., & Matzo, M. (2015). Nursing education for disaster preparedness and response. *The Journal of Continuing Education in Nursing*, 46(2), 65-73. <http://dx.doi.org/10.3928/00220124-20150126-01>