

# The effectiveness of providing prehospital care training to prehospital care providers in reducing mortality and morbidity outcomes of trauma victims

Amali Nawarathna, Oxford Brookes University, Supervised by Dr Mamdooh Alzyood

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## BACKGROUND



Traumatic injuries are a global health burden accounting for about 8% of all deaths [1].

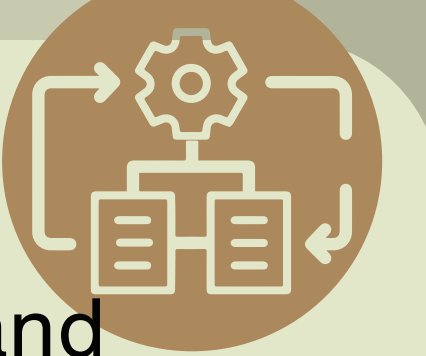
Pre-hospital care effectively manages traumatic injuries' consequences [2].

The effectiveness of training prehospital providers on the patient outcomes of trauma victims is not apparent.

**Study aim: to evaluate the evidence on the effectiveness of providing prehospital care training to prehospital care providers in reducing the mortality and morbidity outcomes of trauma victims.**

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## METHODS



Quasi-systematic review which collates and reviews the best available empirical evidence was used as the research design [3].

A comprehensive literature search was performed followed by a quality assessment of the studies.

The vote counting based on the direction of the effect was used for the synthesis of findings. The estimate of the proportion of effect favouring the intervention was calculated along with the confidence intervals.

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## RESULTS



Out of the 2357 studies identified, 10 studies met the pre-defined criteria.

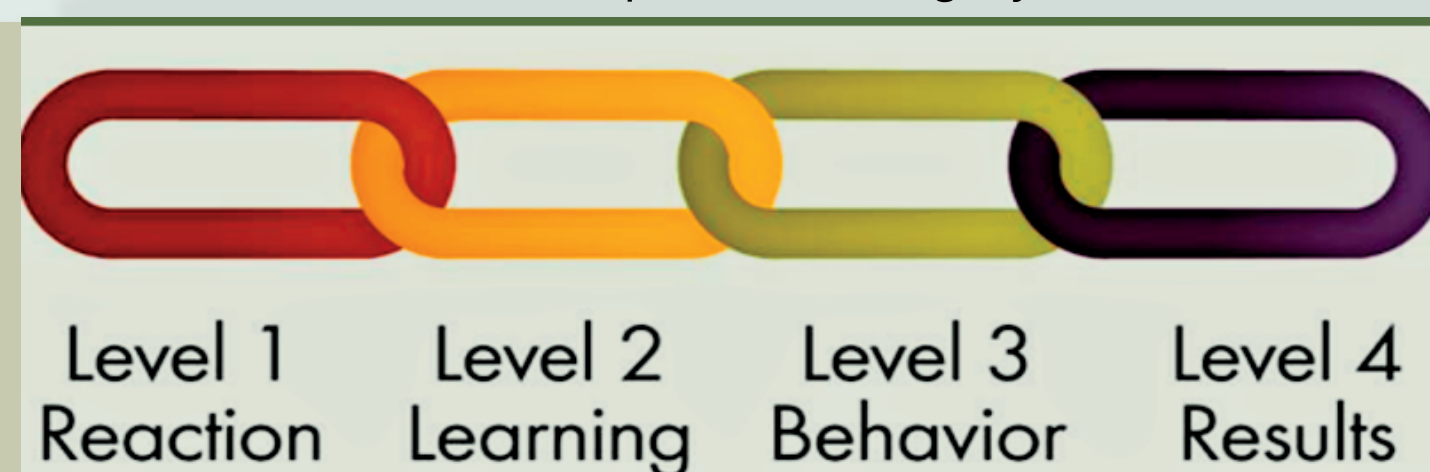
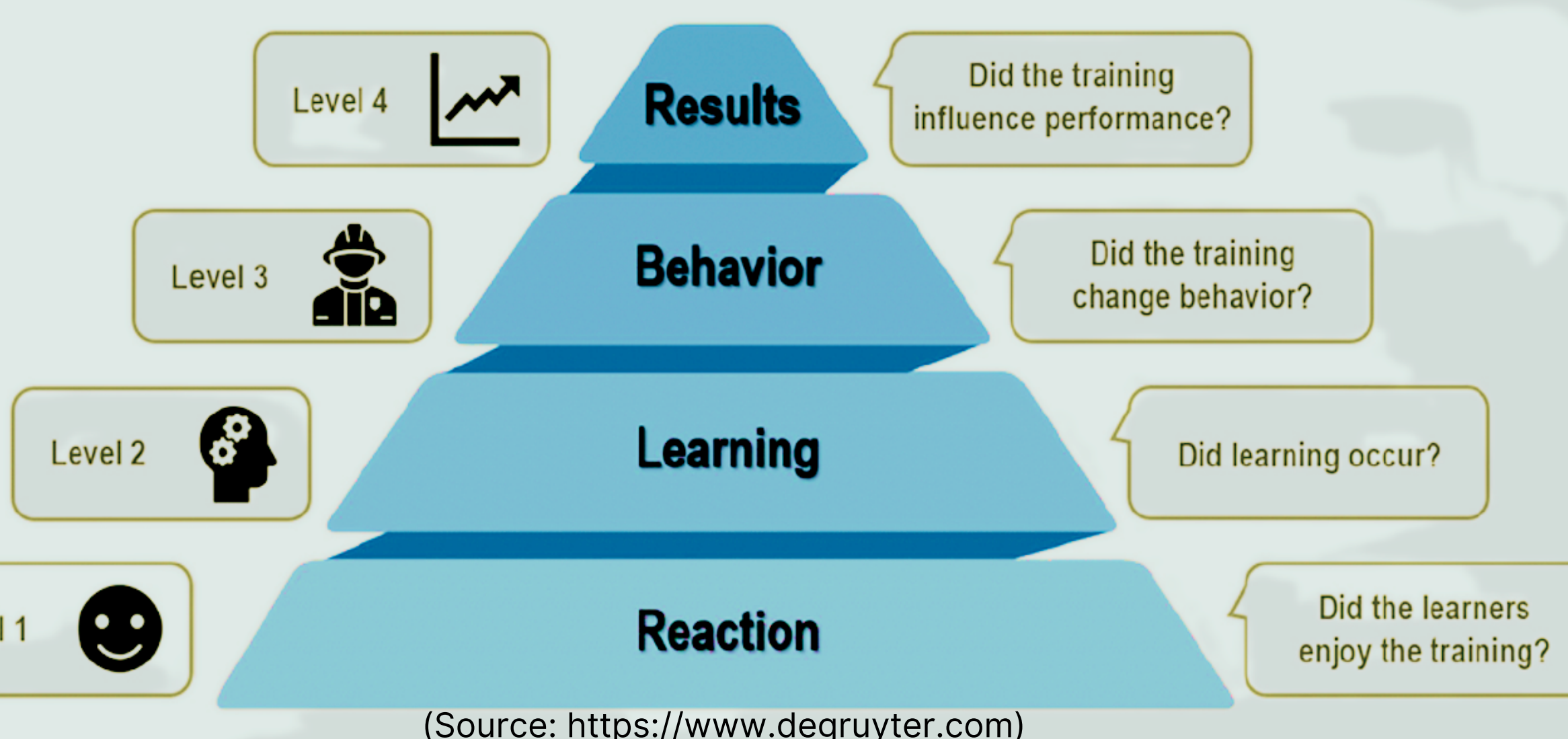
All the studies which assessed mortality outcomes (n=8) favoured training the prehospital care providers in reducing the mortality of trauma victims.

The estimated proportion of the effect favouring the intervention was 1(100%) (95% CI 0.738- 1.00, p=0.08).

Two studies that assessed long-term mortality separately did not show a reduction in mortality with receiving the training intervention.

Out of 6 studies assessing morbidity outcomes, 5 reduced the morbidity. Yet this proportion estimate was not statistically significant [1(100%) (95% CI 0.621- 1.00, p=0.062)].

## Kirkpatrick's model of training



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## CONCLUSIONS



Training prehospital care providers were effective in reducing trauma mortality but not morbidity and long-term mortality.

But results should be interpreted cautiously due to the limitations in the analysis method and the limitations of individual studies.

The review identifies an acute need for more robust large-scale studies in this field.

Kirkpatrick's model of training evaluation could be used for effective and uniform evaluation of the outcomes of the prehospital training program in future research [4].

## References

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3. Aveyard, H. (2019). Doing a literature review in health and social care : a practical guide (Fourth). Open University Press, McGraw-Hill Education.
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