



The Impact of Body-Worn Cameras on the Incidence of Occupational Violence Towards Paramedics: A Systematic Review

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Purpose

Recent evidence indicates an increasing incidence of occupational violence (OV) towards paramedics. Body-worn cameras (BWC) have been posited as an intervention that may deter perpetrators, leading to a growing number of ambulance services introducing BWCs at considerable financial cost. The aim of this study was to investigate the impact of body-worn cameras on the incidence of occupational violence towards paramedics.

Introduction

Occupational violence (OV) can be defined as “any incident where a person is abused, threatened or assaulted in circumstances arising out of, or in the course of their work”, and may be perpetrated by patients or their relatives, bystanders, and in some instances co-workers (Safe Work Australia, 2021). OV is highly prevalent in healthcare, with as many as 95% of healthcare workers reporting exposure during the discharge of their normal duties (Griffiths et al., 2015). Increasingly prominent within OV reduction and mitigation strategies are body-worn camera (BWC) initiatives in which paramedics wear a small body-mounted video camera on their person during clinical operations. These devices are not continuously recording, but are activated manually by the paramedic should they sense an elevated risk of OV occurring.

Methods

Methodological Framework	Inclusion/Exclusion	Data Sources and Search Strategy
<ul style="list-style-type: none"> Conducted in accordance to the JBI systematic review methodology guidelines and followed PRISMA reporting standards. The protocol was registered with the National Institute for Health Research International prospective register of systematic reviews (PROSPERO) as Protocol CRD42021238188. Study selection: managed through COVIDENCE (Veritas Health Innovation, Melbourne, Australia). Quality assessment: Hawker’s Instrument (Hawker et al., 2002) 	<p>Inclusion</p> <ul style="list-style-type: none"> BWC must be worn by paramedics (includes: emergency medical technician, community paramedic, extended care paramedic, paramedic practitioner, ambulance officer or similar) The outcome must address impact of BWC on incidence of OV Must be primary research, systematic review or government report, each of which must contain incidence data <p>Exclusion</p> <ul style="list-style-type: none"> Published in a language other than English Conducted in non-civilian setting (e.g. military) 	<ul style="list-style-type: none"> EMBASE Cumulative Index to Nursing and Allied Health Literature (CINAHL); MEDLINE Cochrane Library JBI Systematic Reviews TROVE Google Scholar

Results

Through the search, 152 results were identified, of which 125 were assessed after removal of duplicates. A review of clinical trial databases identified no studies relevant to the objective of this review. See PRISMA diagram.

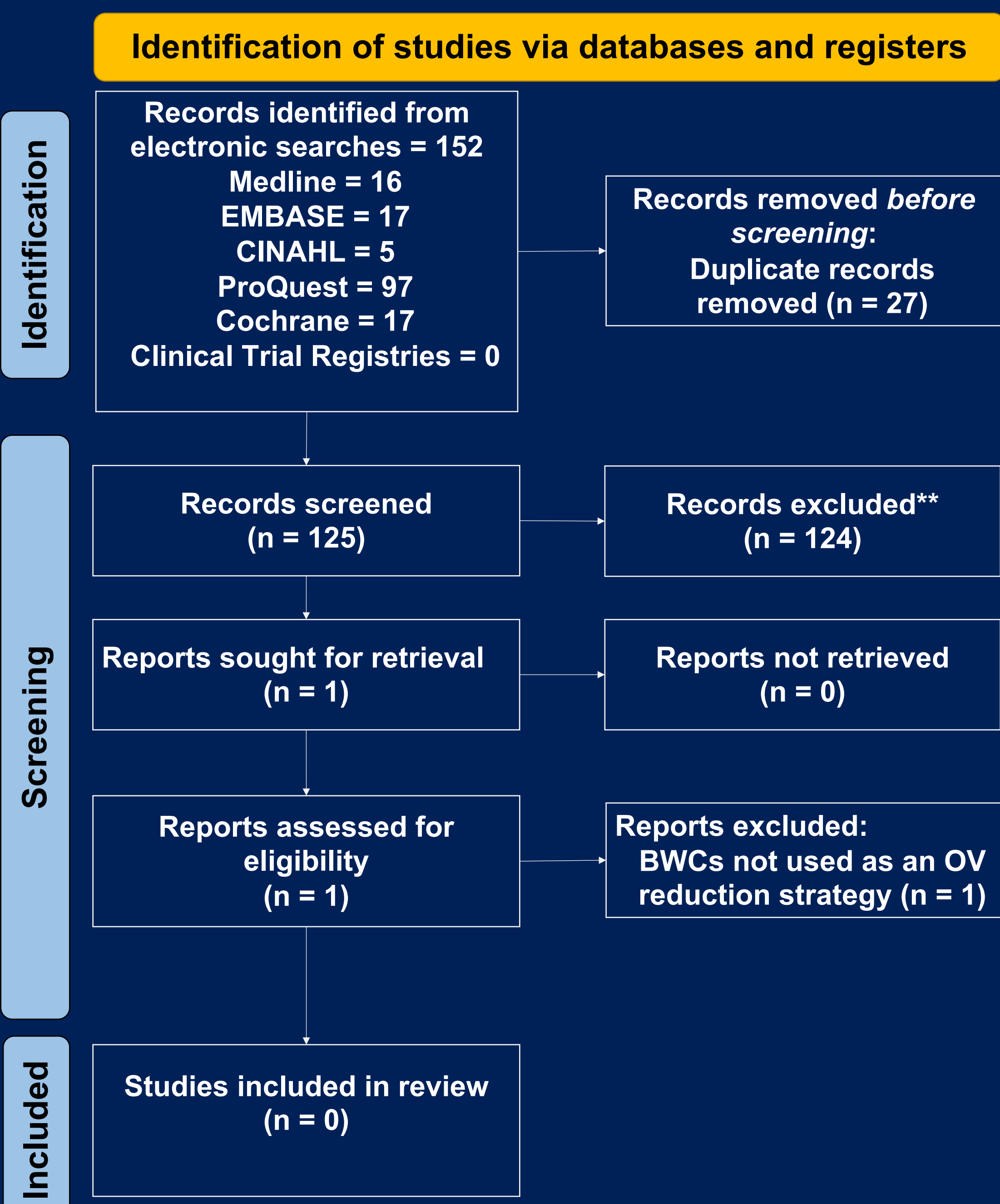
Discussion

- Only one paper was identified for full-text screening: a peer-reviewed commentary on the implementation of BWC devices for paramedics.
- This ‘empty review’ highlights there is an absence of evidence rather than an absence of effect in regards to BWC as an OV-reduction strategy in the paramedicine context.
- In Australia, the first pilot of BWC as an OV reduction initiative commenced in Victoria in June 2017, followed by NSW in 2019. It is unknown why these results of these trials have not been publicly disseminated and been submitted for peer-review. As the general public are key stakeholders in the use of BWC, evidence about BWC should be available for open-market consumption.
- Despite the potential that BWC may reduce harm due to OV, a major concern are the ethical issues associated with privacy, confidentiality and dignity of the paramedics and the patients, their families and bystanders (Douglas and Goodmark, 2015).

Conclusion

- Our review found no evidence that implementation of BWC, alone or as part of a broader suite of initiatives, reduces the incidence of OV towards paramedics.
- These findings suggest that data relating to effectiveness is either not being robustly evaluated or subjected to internal evaluation only.
- Given the increasing adoption of BWC strategy at considerable financial cost, it is vital that effectiveness data be made available for peer-review and industry analysis to inform policy and practice relating to protection and maintenance of paramedic welfare.

PRISMA Diagram



References

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