

# An investigation into student and recently qualified veterinary nurse's confidence when dealing with cardiopulmonary emergencies – can training videos help improve confidence?



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## Introduction

- The hypothesis of this piece of research was: 'Training videos will improve confidence levels of student and recently qualified veterinary nurses during cardiopulmonary emergencies.'
- Confidence amongst veterinary nurses is widely under-researched even though it has been recognised as a recurring theme by researchers such as Dunne *et al.* (2020).
- It has been suggested that an increased self confidence leads to a greater ability to provide successful interventions when measuring using a self ranking scale (Martins *et al.*, 2014).
- Research that further supports the need for this piece comes from Hall and Simpson (2018) who developed narrated videos to aid students with their OSCEs which students reportedly preferred due to allowance of familiarisation with equipment and the environment. An increase in self confidence going into the examinations was reported but they did not measure whether this influenced the outcomes of the OSCEs.

## Methods

- An online questionnaire platform was used and then distributed via email, social media and practice visits,
- The questionnaire had 21 closed questions that gathered data such as demographics, confidence levels before and after watching a training video measured via Likert scales and knowledge questions surrounding cardiopulmonary emergencies,
- The research made use of voluntary response sampling,
- The training video content was collated using the RECOVER guidelines (Burkitt-Creedon *et al.*, 2024) and was then embedded in the questionnaire using a YouTube link,
- A pilot study was conducted, and all methods were approved by Harper Adams Ethical Committee.

## Results

- 10% of respondents reported seeing emergencies on average four times per week and 58% reported seeing emergencies only once a week on average,
- 84% of respondents were able to recall the correct rate of chest compressions required on average and 69% were able to recall the correct rate of ventilation that should be provided during a cardiopulmonary emergency,
- These graphs illustrate the differences in confidence levels across different areas during a cardiopulmonary emergency:

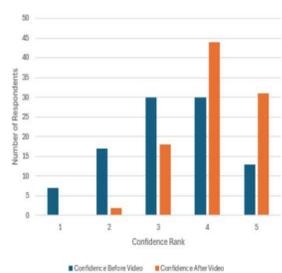


Figure 5: The confidence rankings of participants before and after watching the training video on recognising a cardiopulmonary emergency.



Figure 6: The confidence rankings of participants before and after watching the training video on gathering equipment for a cardiopulmonary emergency.



Figure 7: The confidence rankings of participants before and after watching the training video on working as a lone nurse during a cardiopulmonary emergency.

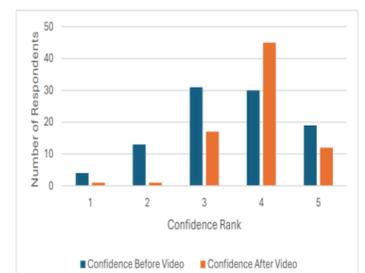


Figure 8: The confidence rankings of participants before and after watching the training video when working within a team during a cardiopulmonary emergency.

## Discussion/Conclusion

- In all assessed areas, there is a significant association between viewing a training video and experiencing an increase in confidence,
- The study answered the research questions as it was concluded that training videos do improve confidence across veterinary nurses,
- Additionally, training videos may be a useful tool for training of veterinary nurses as improving confidence can improve competence within practice by creating more decisive staff (Dunne *et al.*, 2020).
- The researcher acknowledges that this is a small sample size so would recommend further research on a larger sample to ensure generalisability,
- The researcher also acknowledges that there is the presence of other factors that could also influence the respondent's confidence such as frequency of emergencies experienced, baseline knowledge and frequency of training.
- In conclusion, as a significant association was determined, the researcher suggests that training videos can be used as an acceptable alternative training method, and it emphasises the need for continual research into training tools to create the next generation of functioning decisive individuals especially in high pressure emergency situations.

## References

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