

الإسعاف الوطني National Ambulance



Impact of a pain management education intervention for prehospital care providers



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Pain

- Pain is the most common reason for patients to seek medical attention.
- Under-treatment of pain in the prehospital setting is a common occurrence.
- Non-pharmacological therapies must also be taught and reinforced.



Rationale

- Routine clinical audit identified an inadequate level of analgesia administration to medical and trauma patients reporting pain on a Numeric Rating Scale (NRS; 0-10 scale).
- Anecdotal evidence from informal discussion with clinical staff revealed this was primarily due to an education gap existing.
- We sought to address this clinical deficiency through a proven method of a targeted educational intervention (EI).

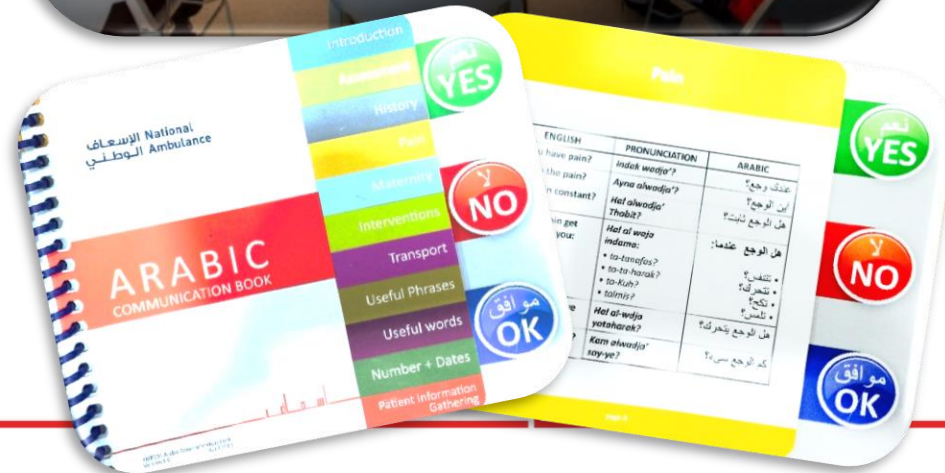
Methods

- Thirty-five clinical staff participated in eight-hour pain management courses facilitated by two experienced Clinical Educators.
- Pre- and post-course surveys were provided to participants. Participation was anonymous and voluntary.
- Ethical approval was granted by the Office of the Chief Medical Advisor

Educational intervention

The EI addressed:

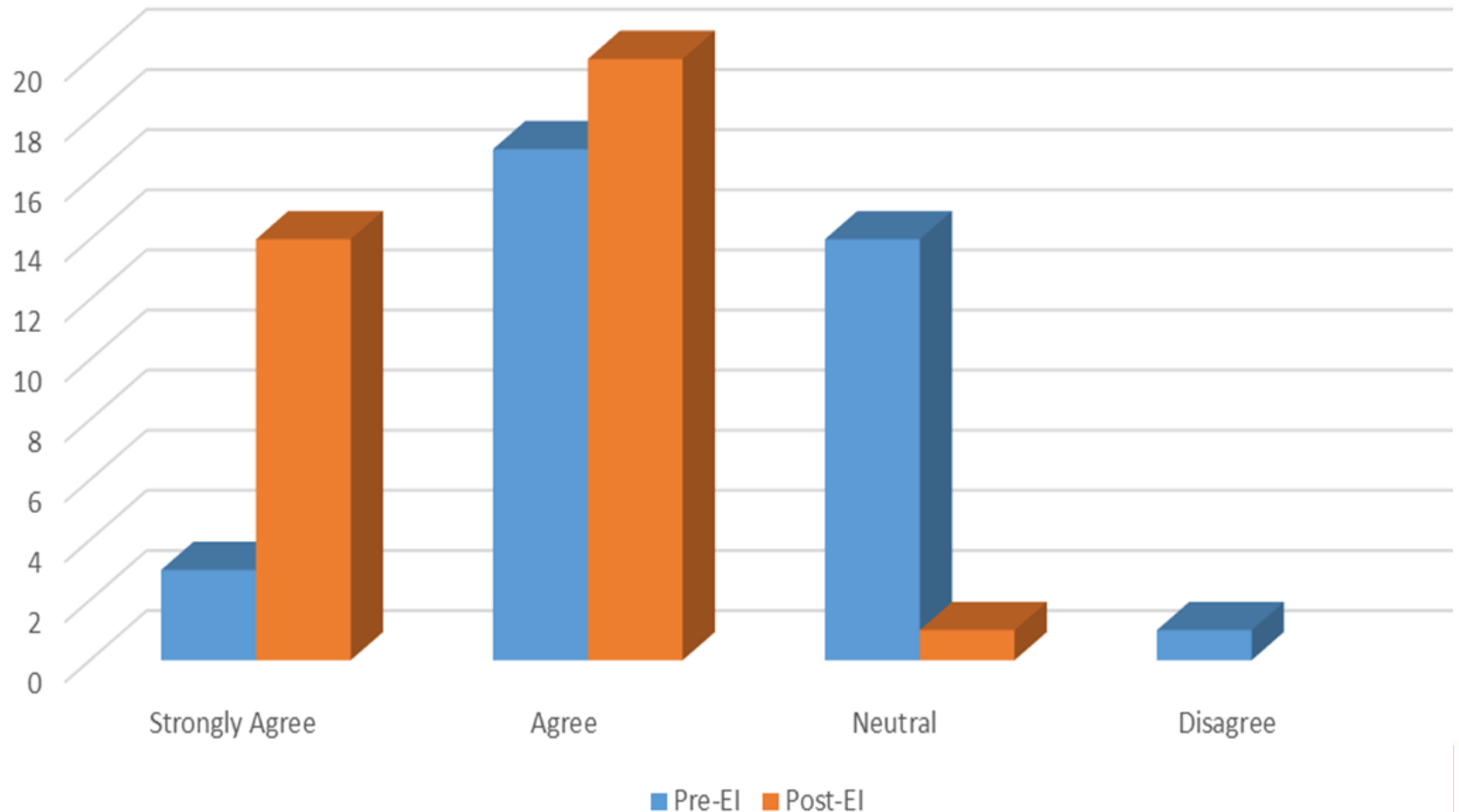
- Accurate assessment of pain
- the physiological response to pain
- pharmacological and non-pharmacological analgesia options
- PHECC Pain Relief Ladder documentation of analgesia
- scenario-based simulated clinical cases requiring application of clinical knowledge to patient care.



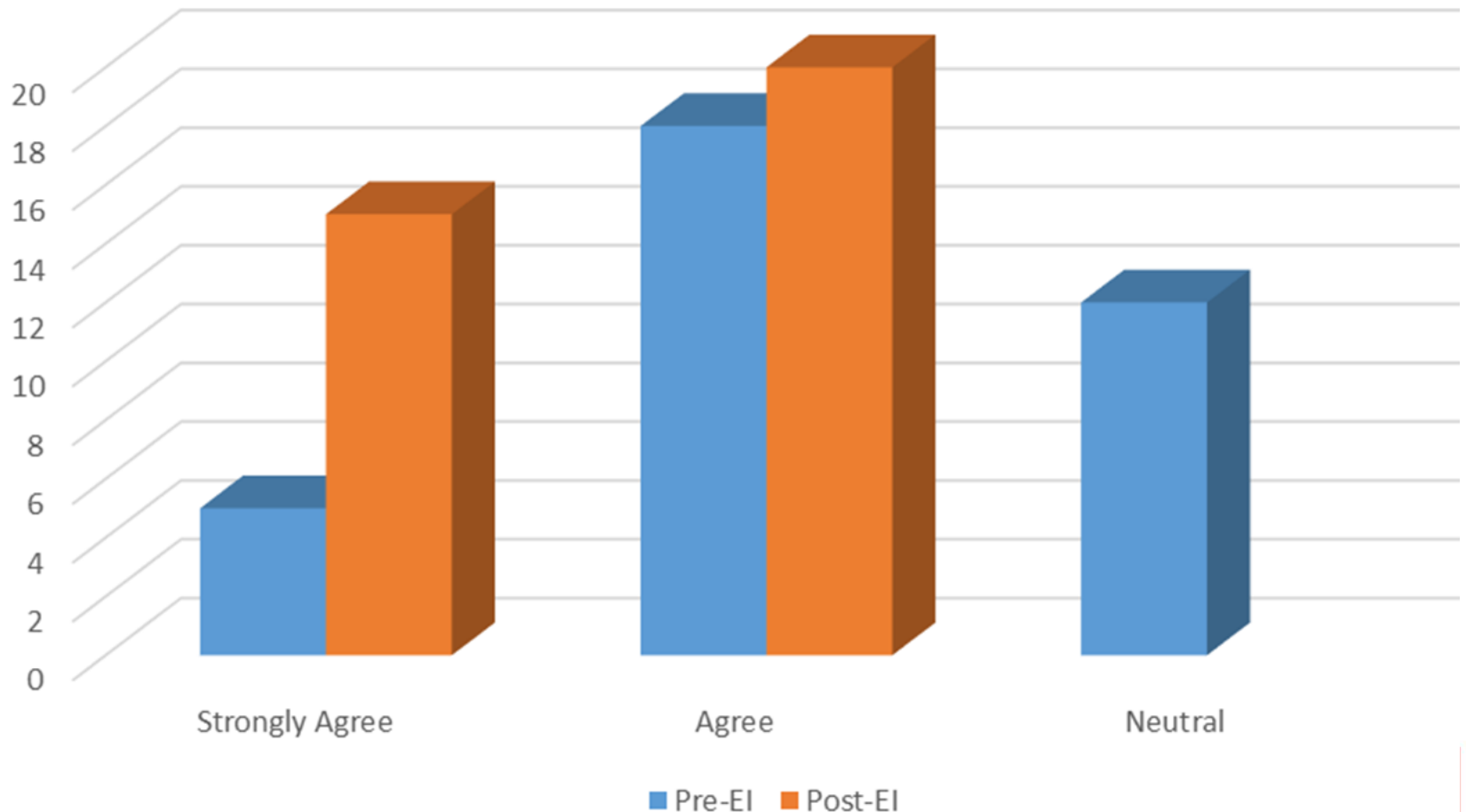
Results

- Mean length of qualification was 3.54 years
- All 35 staff were Emergency Medical Technicians
- All participants indicated previous experience with pain-relief medication administration.
- Post-EI, participants reported their understanding of the physiological process of pain as having improved, an improvement in their understanding of the pain relief ladder and medication administration safety

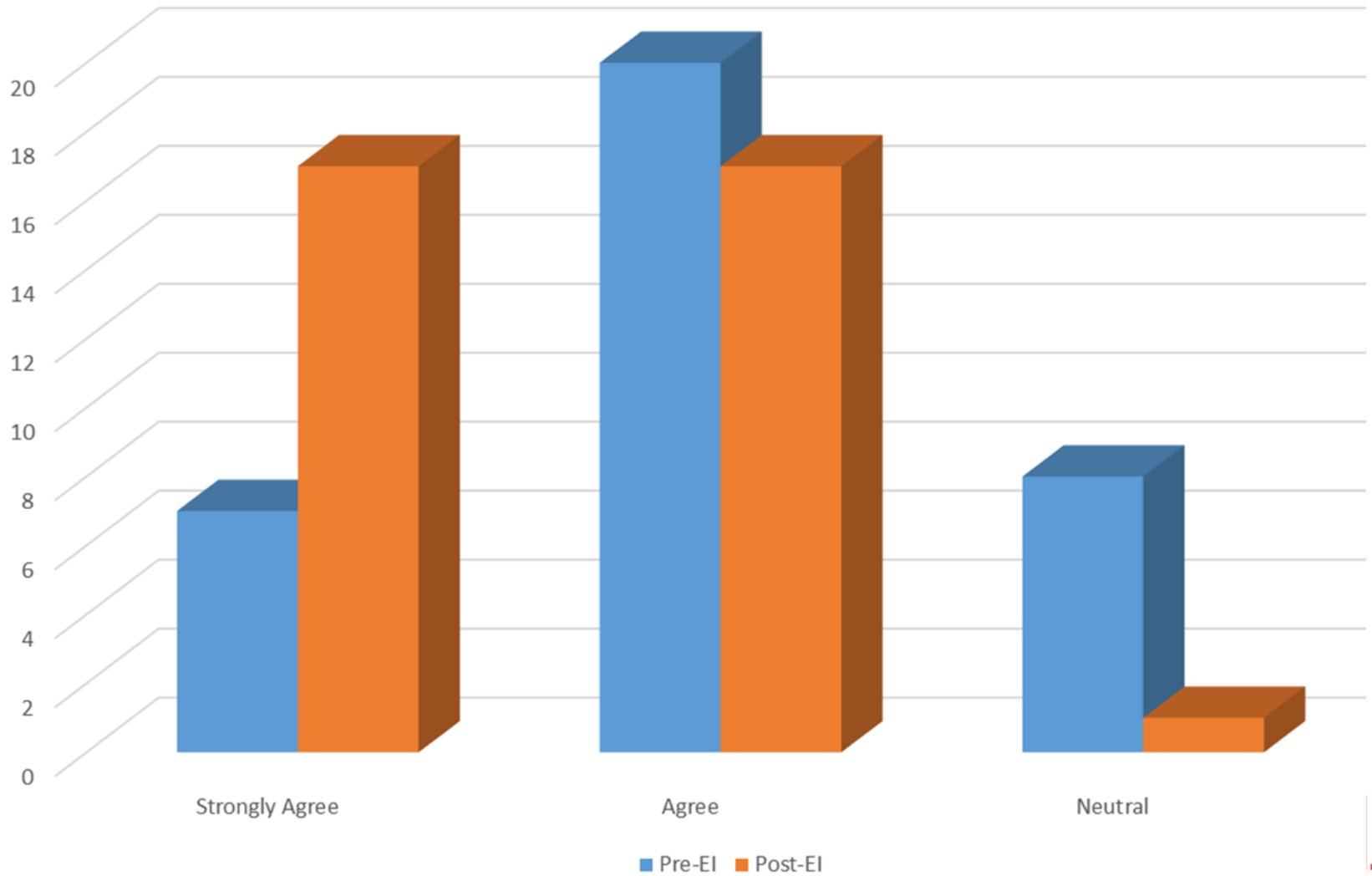
I am confident of my knowledge of pharmacological methods of pain relief



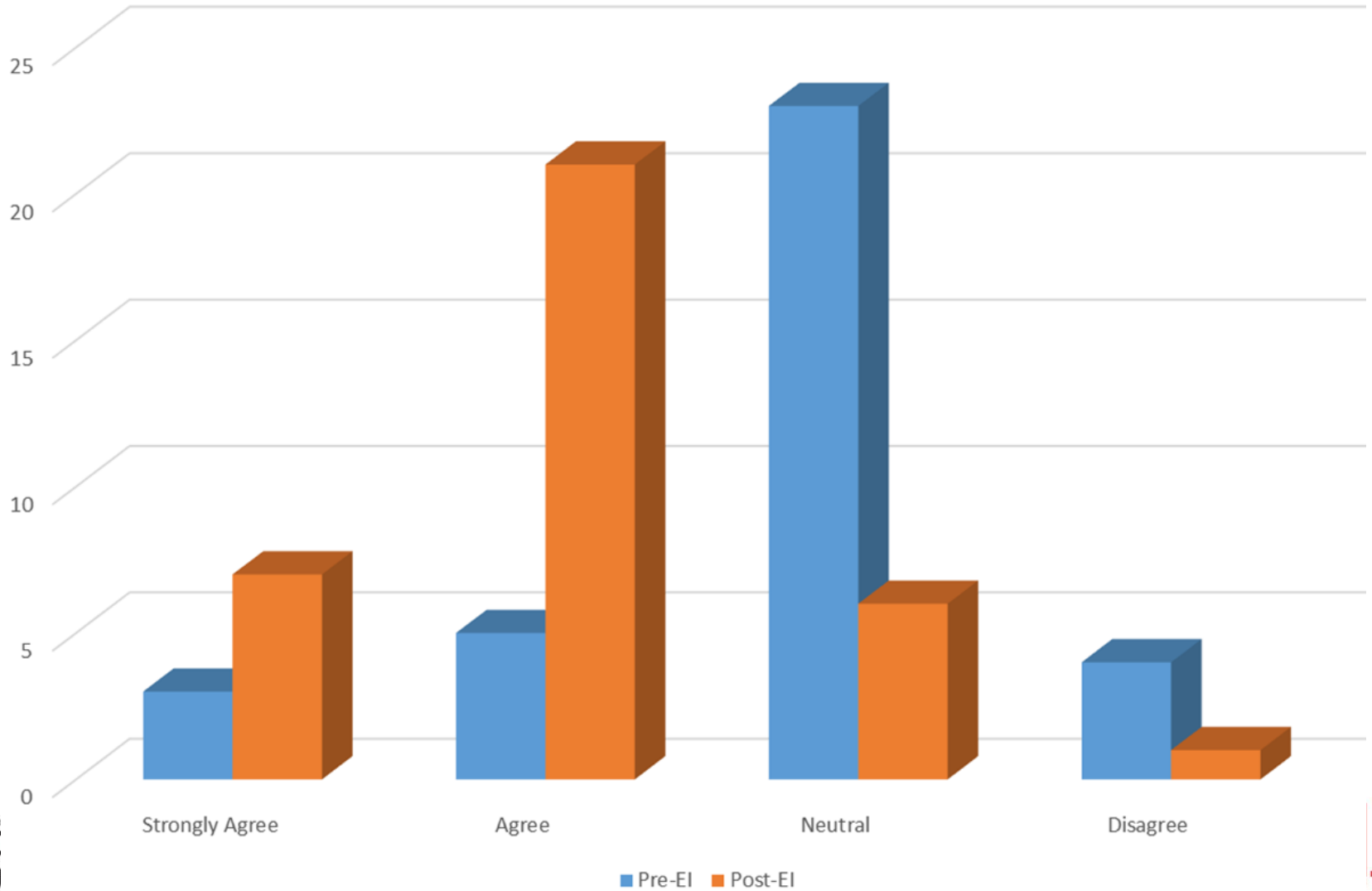
I am confident of my knowledge of non-pharmacological methods of pain relief



I am confident using a pain assessment score on adult patients



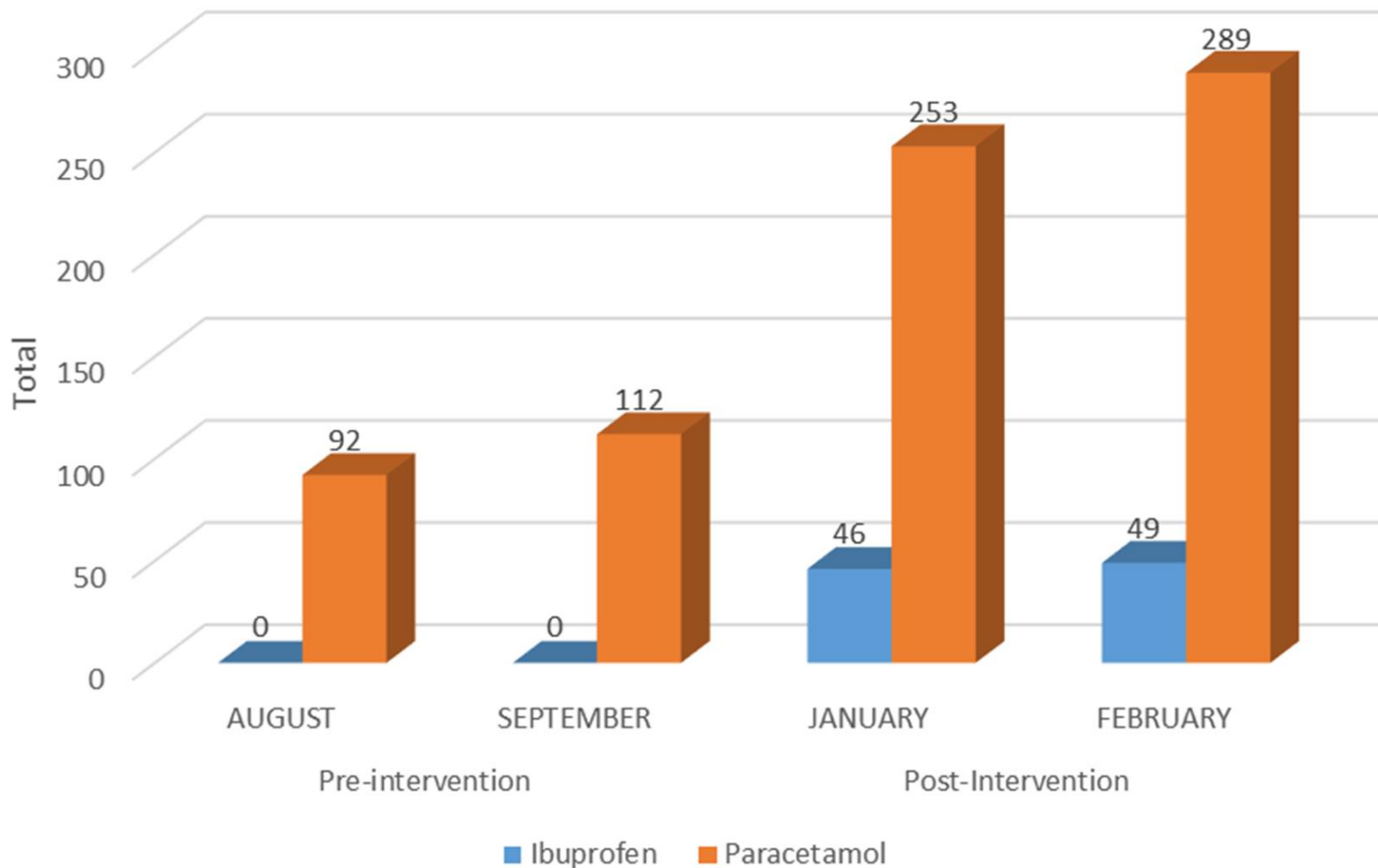
I am confident calculating medication dosages for pain relief



Impact on patient care

- Subsequent clinical audit displayed an improved level of appropriate analgesia administration to patients reporting pain as per NRS in the two-month period following the EI
- Staff also have access to medical oversight and support for medication administration

Pain Medication Usage Pre and Post EI



Conclusion

- A targeted EI addressing deficiencies identified by a rigorous clinical audit process resulted in improved baseline knowledge and improved psychomotor skills as reported by participants.
- Ongoing clinical audit subsequently demonstrated improved clinical management of pain as evidenced by appropriate medication administration as per Joint Commission International standards.
- These results suggest both initial and ongoing continuing education addressing pain management is of benefit to prehospital care providers.

Future research

- A further study is planned which will objectively assess participant's abilities to administer medications safely pre- and post-EI. This will investigate dose calculations, pain scale ratings, and documentation standards.

References

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