Improving analgesia prescribing by FY1 doctors in a Scottish district general hospital

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Relief of acute pain is fundamental to good patient care and can result in improved clinical outcomes as well as reduced complication rates.[1]

A large proportion of the prescriptions for analgesia in hospitals is done by junior doctors. After several suboptimal analgesic regimens were noted in patients attending for acute surgical issues, we sought to improve the prescribing practices and confidence of Foundation Year doctors (FYs) at Inverclyde Royal Hospital. IRH is a 360-bed district general hospital within NHS Greater Glasgow and Clyde.

Methods

A random selection of case notes (n=16) from medical, surgical and orthopaedic wards were reviewed. The analgesia prescriptions were assessed as excellent, acceptable, or unacceptable for each of six domains:

- Stepwise regime
- Whether the prescription was deemed sufficient for the patient's pain score
- Appropriate adjuvants prescribed (e.g. PPI with NSAID, or laxatives with opiate medications)
- Safe dosing
- Legibility
- Consideration of contraindications or drug interactions

A series of small-group tutorials (four to five per group) were offered to all FY1 doctors in the hospital (n=19). Prior to the first tutorial attendees were asked to complete a survey assessing their confidence in prescribing in several hypothetical clinical scenarios they might encounter during their workday. This was carried out on a 4-point Likert scale. Following the tutorial, attendees were asked to again rate their confidence in these scenarios.

Each small-group session followed the same format:

- An initial brief discussion of the WHO Analgesic ladder[2] step-wise approach as well as the local guidelines found within NHS GG&C Adult Therapeutic Handbook.[3]
- FY1s were asked to consider several hypothetical clinical scenarios and asked to prescribe what they thought was appropriate analgesia and any adjuvants they considered necessary on a copy of the local drug prescription chart ("Kardex").
- Small-group discussion of the clinical scenarios focusing on the FY prescriptions and a question-and-answer period.

Two weeks after the tutorials, a further selection of analgesia prescriptions (n=16) was assessed on the same criteria.

Results

12 of 19 FY1s attended. Prior to the tutorial, only two doctors felt they had received sufficient teaching on analgesia prescribing. Afterwards, 100% stated they had learned something new, and their confidence improved across a range of clinical situations (Figure 1). Text feedback was unequivocally positive (Figure 2).

Re-auditing demonstrated a clear reduction in 'unacceptable' prescriptions across the reviewed domains from 28% to 9%, and increase in 'excellent' prescriptions from 23% to 31% - see Figure 3

Did you learn something new?

"Use of adjuncts. Complex cases. Routine opiate Rx."

"Using anaesthetic charts for information"

"Methadone conversion difficult. NSAIDs increase anticoagulants"

"Think more about regular weak analgesia"

"Reinforced and reconsolidated previous knowledge."

"Prescribing gabapentin can be done short term"

"No NSAIDs if elderly"

"Titration of IV morphine. Dilution of naloxone - useful."

"Yeah loads

What did you find useful?

"Cases were a good way to explore analgesia prescribing"

"Use of kardex in real time for "real" cases. D/w anaesthetist re pain meds."

"Dosing in elderly patients - starting with 1mg at a time"

"Practical examples of real life situations. [Tutor] v helpful and explained things well."

"Scenarios were good. IVDU patient helpful."

"Prescribing in patients with high requirements."

"How to give naloxone. IV paracetamol."

"Case based examples"

"Very helpful in general, thank you!"

"More teaching like this please"

Figure 2. *Feedback from tutorial attendees*

Figure 1. *FY1 confidence in analgesia prescribing*

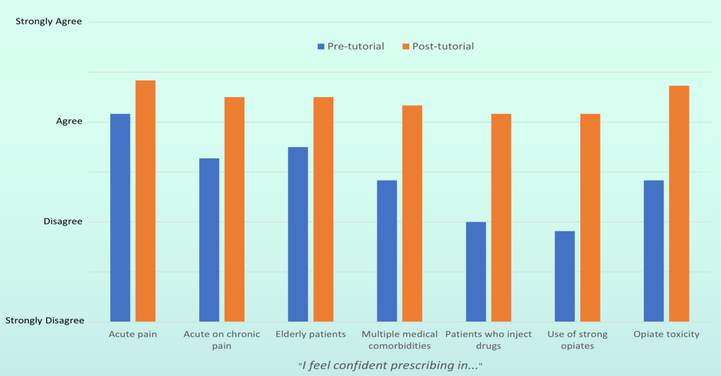
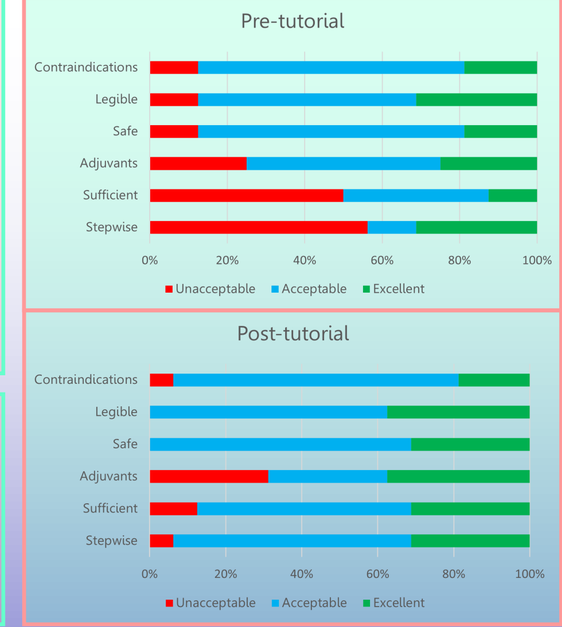


Figure 3. *Summary of prescription reviews*



Discussion

There was a clear appetite for teaching on analgesia prescribing among the FY1 group. Small group tutorials as well as the simulated prescribing activity and time for feedback appeared to be effective. However, this necessitates a relatively high faculty commitment in order to keep group numbers low, facilitating effective discussion.[4] The self-reported increase in confidence was supported by improvement in the quality of prescriptions.

Acknowledgements

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References

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