

Anaesthesiologist led virtual antenatal epidural class results in better patient information recall postnatally: single centre, cross-sectional survey

A. Brady, E. Hughes, Y. Besharatian, T. Tan, P. Popivanov

Introduction:

Pregnant women should receive sufficient information about the nature, benefits, side effects and alternatives of labour epidural analgesia as part of the informed consent process. (1)

Research to date shows that many women are inadequately informed when receiving a labour epidural which gives rise to ethical issues and medicolegal implications. (2)

We endeavoured to enhance the way in which we provide antenatal information about labour epidurals to our patients by providing an anaesthesiologist online antenatal class to all patients.

Primary outcome:

- The difference in subjective and objective recall of epidural information between patients who attended the classes and those who did not.

Secondary outcomes:

- Proportion of patients who had information about labour epidural antenatally
- Sources of antenatal info
- Subjective assessment of the quality of this information
- The time patients decided to use an epidural
- Confidence to consent
- Satisfaction with epidural pain relief
- Patient time preference for information delivery

Methods:

- Investigator led, single-centre, cross-sectional survey study following CROSS guidelines. (3)
- An anonymous 18 question survey evaluating the role of standardised, anaesthesiologist led, virtual antenatal epidural classes
- 30 minute class held once per week
- 273 patients met inclusion criteria and 218 consented to take part
- Inclusion criteria: primigravida women who delivered with use of a labour epidural in the previous 24 hours
- Exclusion criteria: refusal, non-fluent English speaker, had received epidural information at anaesthesia clinic
- Survey response rate was 80% (175/218) of whom 88 attended the class and 87 did not attend

Discussion & Conclusion

- Previous studies have shown conflicting results in patient information recall about epidurals between antenatal class attendees and non-attendees. (4,5)
- Our research further supports the current recommendation of anaesthesiologist involvement in antenatal information provision.(2)
- To our knowledge, this is the first report about virtually delivered antenatal epidural classes.
- Women who do not attend anaesthesiologist led epidural class antenatally are more likely to consent for labour epidural without sufficient understanding about its nature, benefits, possible side effects and alternatives. This bears potential ethical and medico-legal consequences.
- Our study demonstrates that an online anaesthesiologist led antenatal class about labour epidurals is a viable option to improve the provision of patient information and is something other departments could consider introducing.

Results:

- Patients who attend anaesthesiologist led virtual antenatal epidural classes have better objective and subjective recall of epidural nature, benefits and risks.
- There was no statistically significant difference between the groups in the time they decided to receive an epidural, confidence to consent, satisfaction with pain relief and preferred time to receive information.
- The majority of patients want to receive information antenatally. Only one patient responded that she would want to receive information only during labour.

Table 1. Comparison of objective information recall. Class attendees vs non attendees survey true/false questions scores out of 15 (1 point per correct answer).

Mean score of class attendees (A)	8.759
Mean score of class non attendees (B)	6.379
Difference between means (B - A) ±	-2.379 ± 0.3311
95% confidence interval	-3.033 to -1.726
P value	<0.001

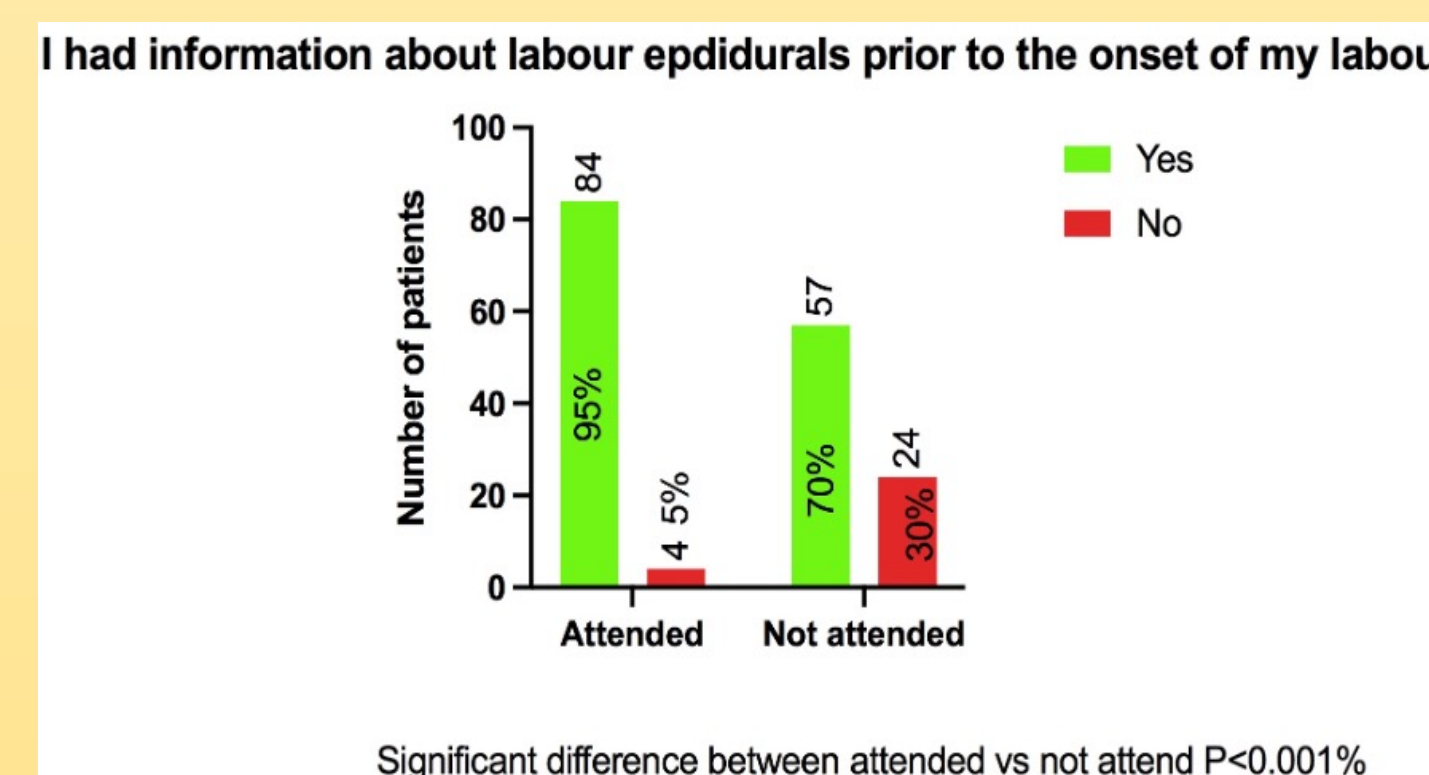
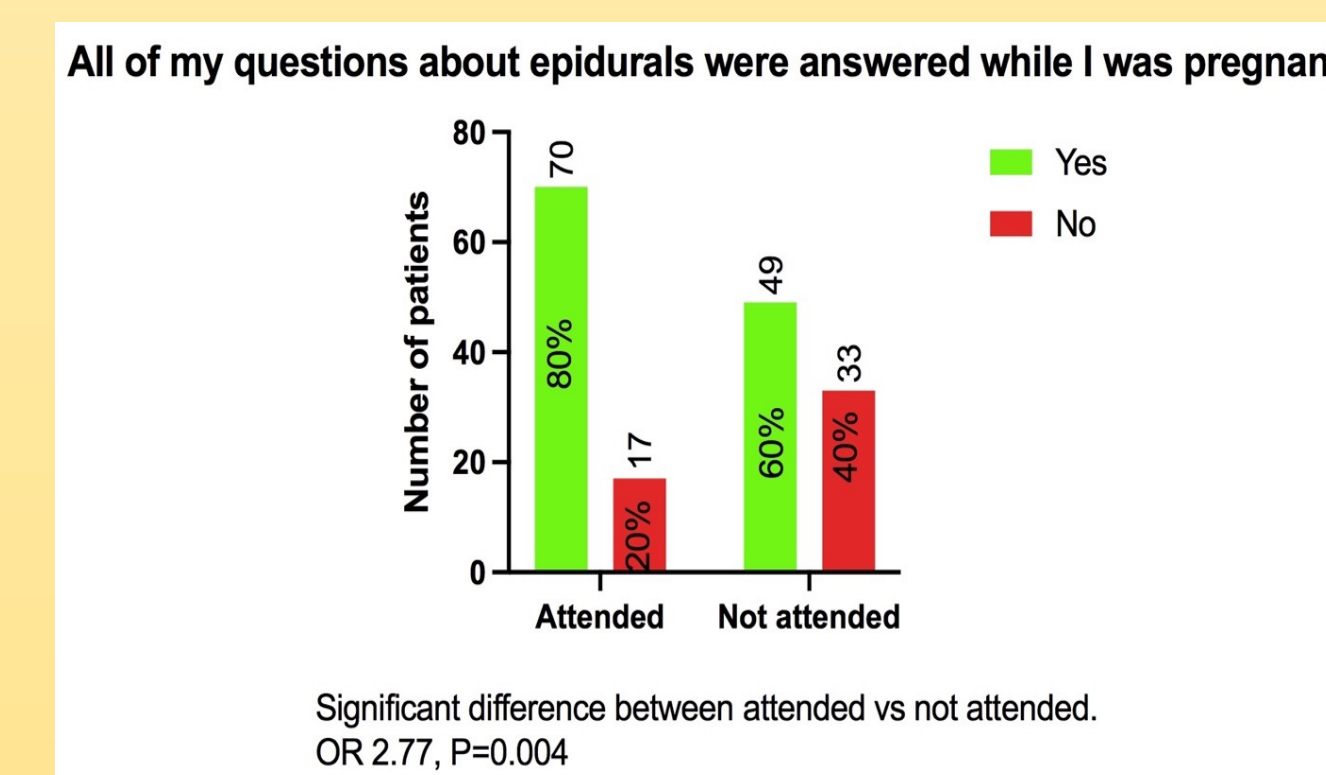
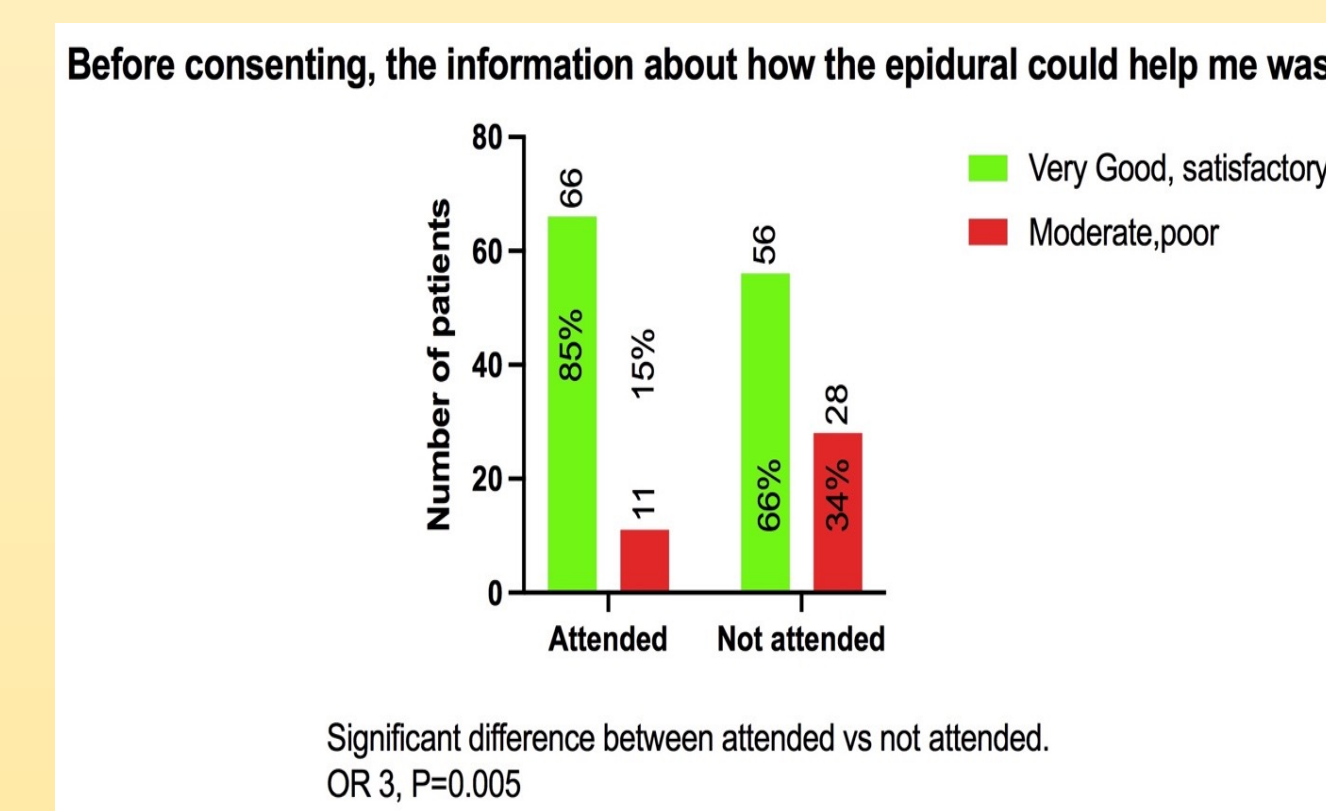
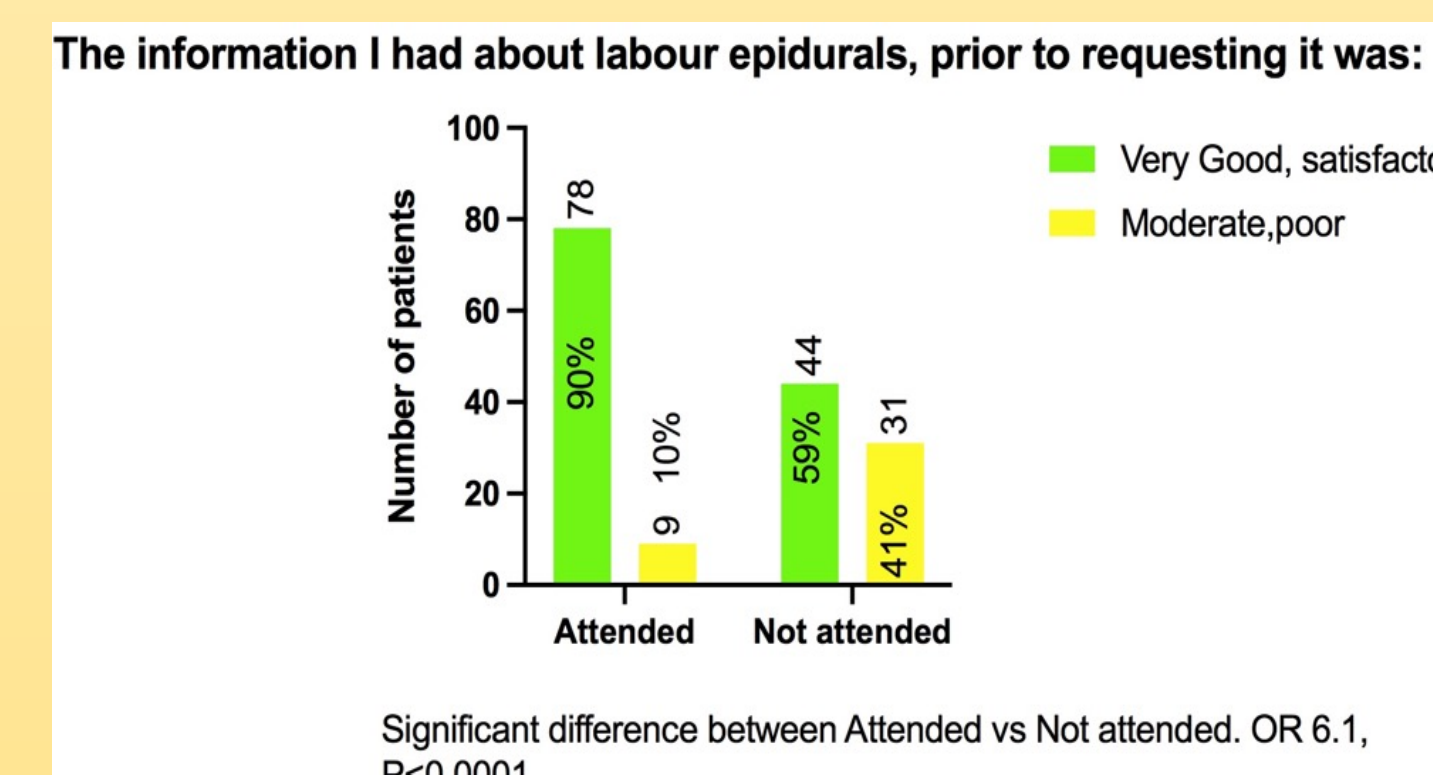


Table 2. Comparison of subjective epidural information recall. Class attendees vs non-attendees answering 'very good, satisfactory' with regards to the quality of information they had about labour epidurals. Values are Odds Ratio (OR), 95% Confidence interval (95% CI), p value.

Question	OR	95% CI	P value
Before consenting, the information I had about how epidural can help me was "very good" and "satisfactory"	3	1.34-6.4	0.005
Before consenting, the information I had about potential harm was "very good" and "satisfactory"	5.30	2.15-13.5	0.0002
Before consenting, the information I had about alternative options was "very good" and "satisfactory"	1.0	0.55-1.86	1



References:

- (1) HSE. National Consent Policy [Internet]. Health Service Executive; 2022. Available from: <https://www.hse.ie/eng/about/who/national-office-human-rights-equality-policy/consent/documents/hse-national-consent-policy.pdf>
- (2) Brinkler R, Edwards Z, Abid S, Oliver CM, Lo Q, Stewart A, et al. A survey of antenatal and peripartum provision of information on analgesia and anaesthesia. Anaesthesia. 2019 Sep;74(9):1101–11.
- (3) Sharma A, Minh Duc NT, Luu Lam Thang T, Nam NH, Ng SJ, Abbas KS, et al. A Consensus-Based Checklist for Reporting of Survey Studies (CROSS). J Gen Intern Med. 2021 Oct;36(10):3179–87.
- (4) Swan HD, Borshoff DC. Informed Consent—Recall of Risk Information following Epidural Analgesia in Labour. Anaesth Intensive Care. 1994 Apr;22(2):139–41.
- (5) Affleck MD, Staff Anesthesiologis PJ, Waisel MD, Staff Anesthesiologist DB, Cusick MD, Staff Anesthesiologist JM, Decar MD, Staff Anesthesiologist TV. Recall of Risks Following Labor Epidural Analgesia☆. J Clin Anesth. 1998 Mar;10(2):141–4.