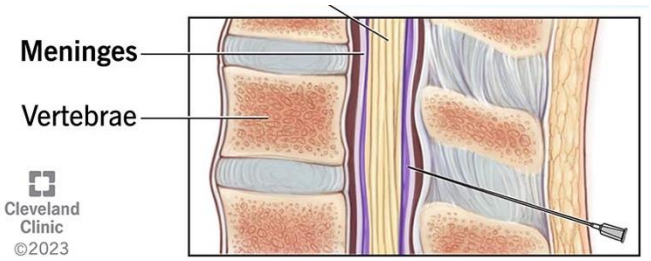
Lost in Translation: Limited English Proficiency and Suboptimal Management of Postdural Puncture Headache

Meeseo Lee BA, Stella M Alphas BA, Heidi C. Lightfoot MBBS MRes, Nolan Wheeler BS, Ricardo Kleinlein PhD, Vesela P. Kovacheva MD PhD, Jimin J. Kim MD MSc

Background



Epidemiology

- Incidence: 0.4-1.5%
- Associated with significant maternal morbidity and interferes with maternal-infant bonding

Treatment

- Conservative measures
- Definitive treatment: Epidural blood patch (EBP)

Barriers

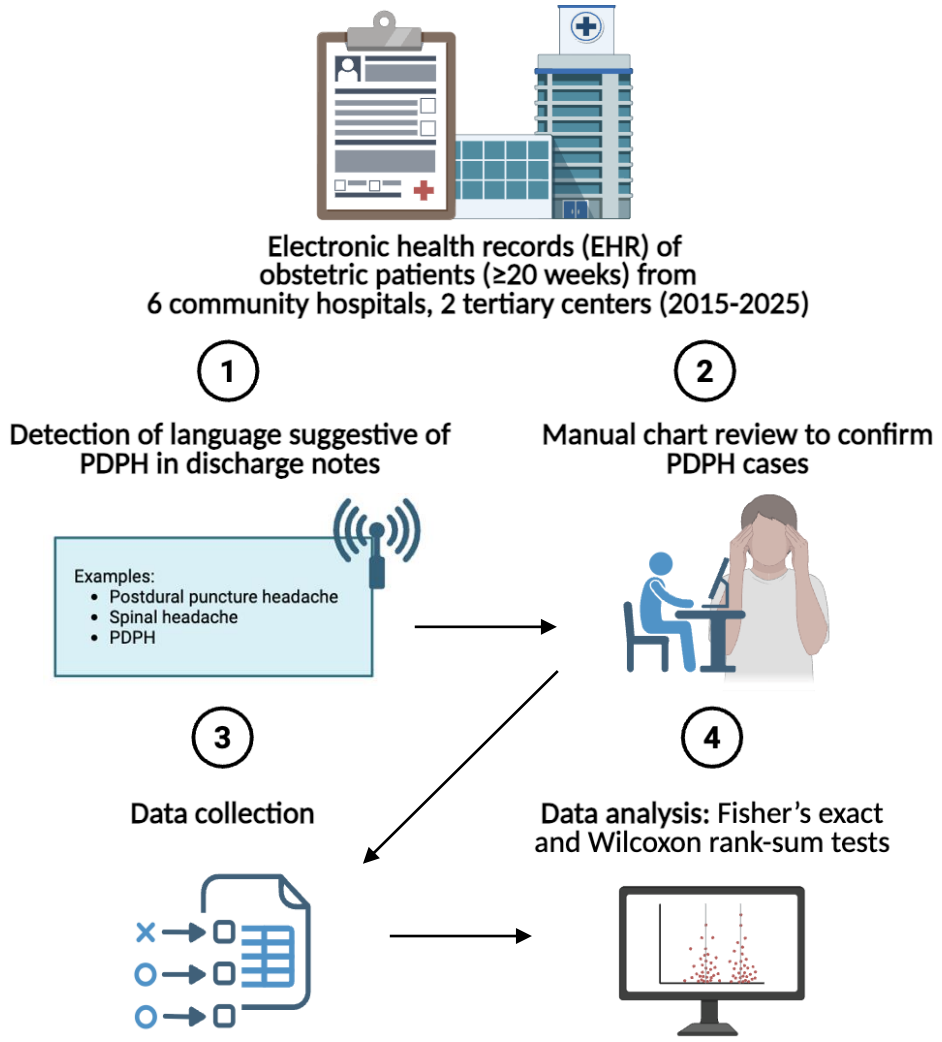
- Racial and ethnic minority obstetric patients are *less likely to receive EBP* for postdural puncture headache (PDPH)

Aim

Determine whether obstetric patients with limited English proficiency (LEP) experience differences in PDPH management compared with non-LEP patients

References
Vallejo & Zakowski. Best Pract Res Clin Anaesthesiol. 2022.
Armstrong S et al. Curr Opin Anaesthesiol. 2024.
Lee A et al. JAMA Netw Open. 2022.
Potnuru PP et al. Anesth Analg. 2024.

Methods



Exposure

Preferred language as indicated by EHR

- Non-LEP: English
- LEP: non-English

Primary Outcome

- Receipt of EBP

Secondary Outcomes

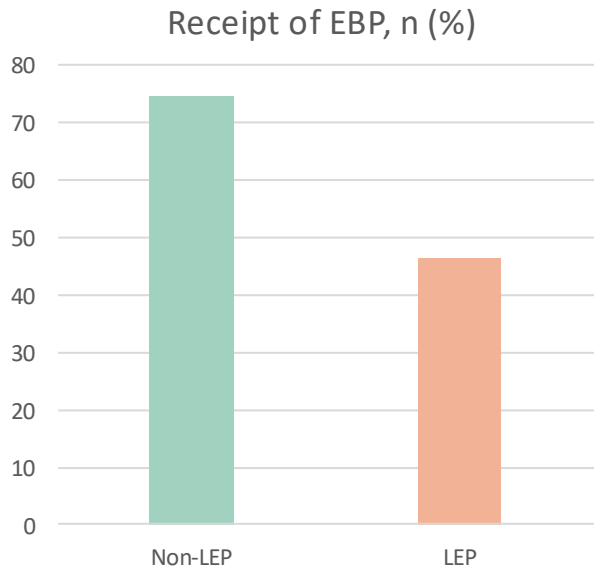
- Time (hours) from neuraxial procedure to first EBP
- Duration (days) of and number (n) of anesthesia follow-up
- Repeat EBP (≥ 2)

Results

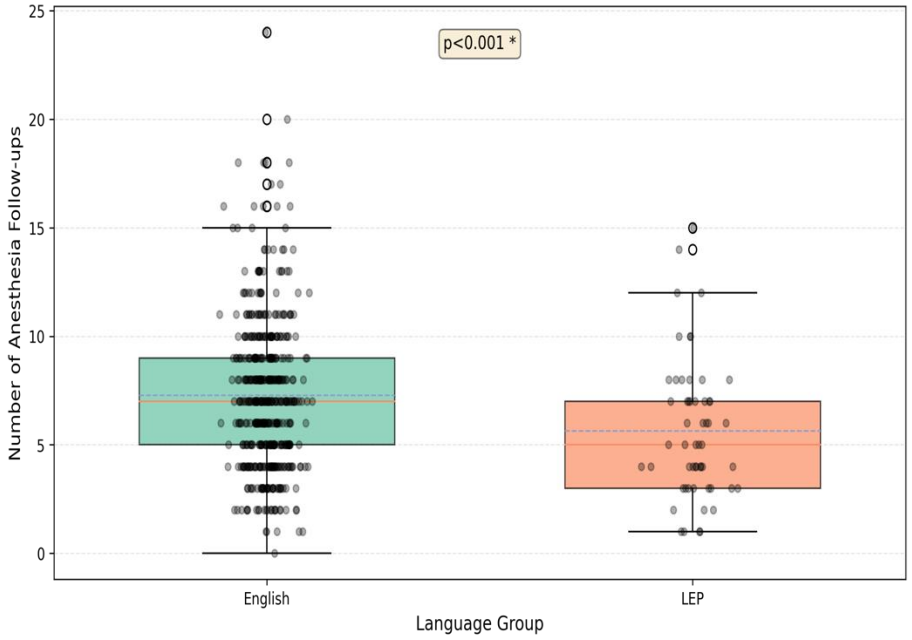
Total of 556 obstetric patients with PDPH
- Non-LEP (n=500)
- LEP (n=56)

Compared to non-LEP, LEP patients had…

70% lower odds of receiving EBP



shorter and less anesthesia follow-up care



Conclusion & Discussion

Obstetric patients with limited English proficiency received suboptimal management for PDPH

Limitations include EHR inaccuracies, incomplete diagnostic capture, and residual confounding

Targeted interventions to improve language-concordant care and standardized PDPH pathways are needed