

Increasing Intrapartum Interpretation Services

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Introduction

It is well known that interpretation services improve patient satisfaction, comprehension, and quality of care while reducing readmissions and adverse events [1-5]. This study aims to determine the frequency that interpretation services are documented for intrapartum admissions in patients with limited English proficiency (LEP). The objective of this Quality Improvement (QI) study is to evaluate an intervention designed to increase the use of interpretation services.

Methods

Chart review from three prenatal offices identified patients with limited English proficiency (LEP) and a due date in a selected six-month range. LEP was verified by documented use of an interpreter at any time during prenatal care. Data were extracted through chart review from hospital admission for delivery. The QI intervention was the creation of a section within Obstetric H&P (Image 1) for uniform documentation of interpretation services, which was implemented after month 4. Data were analyzed with SPSS Version 26 using Fisher's exact test. Data sub-analysis was performed for refugee patients. Documentation of refugee health examination or country of refugee camp verified refugee status.



Image 1: Creation of Interpreter Section within Obstetric History & Physical (H&P)

Results

46 women met the study criteria. Age ranged from 22-42 years with a mean of 32 years. Gestational age ranged from 26-42 weeks with a median of 39 weeks. Gravidity ranged from 1-12 with a mean of 4.48. Parity ranged from 0-10 with a mean of 2.98. The most common languages Arabic, Somali, and Kinyarwanda. The primary languages of women with LEP are displayed in Figure 1.

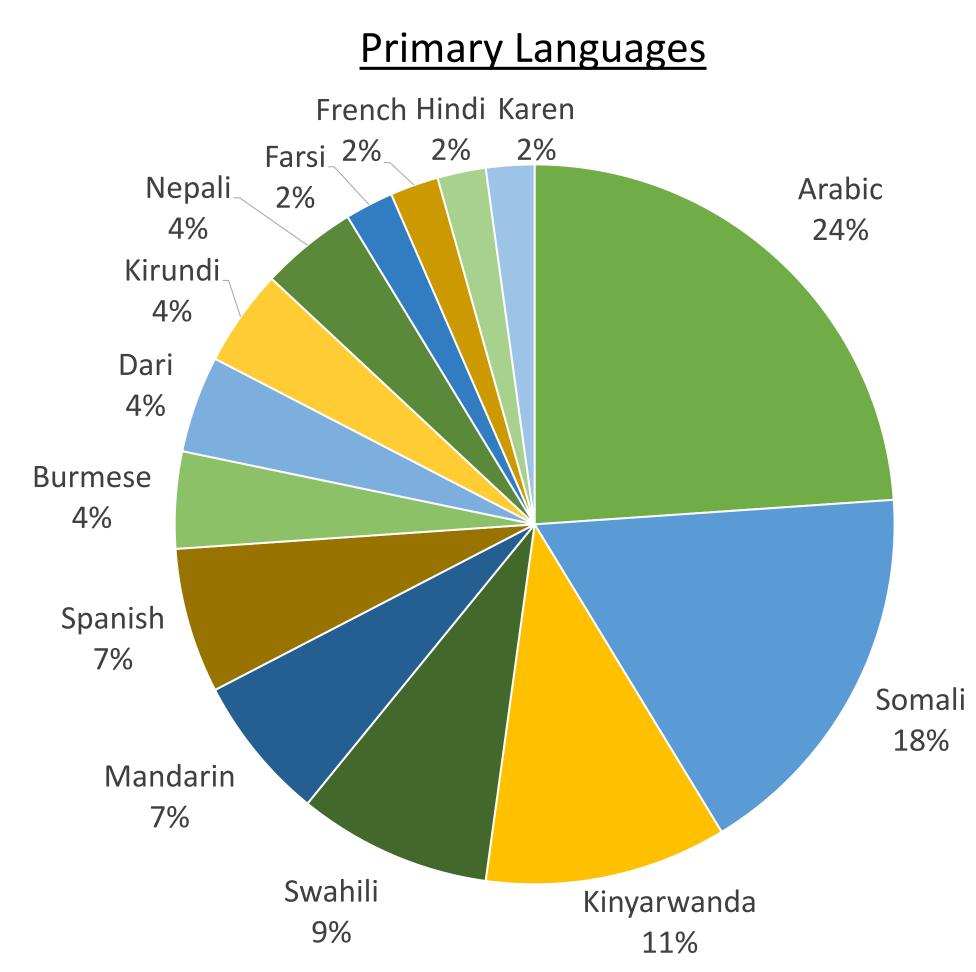


Figure 1: Primary languages spoken by patient population

Reasons for admission included active labor (60.87%), induction of labor (19.57%), scheduled cesarean section (8.70%), and other (10.87%). Other indications for admission included non-reassuring fetal status, maternal complications of pregnancy, or fetal anomalies. Vaginal delivery occurred for 67.39% of patients and 32.61% delivered via cesarean section. All cases included live births.

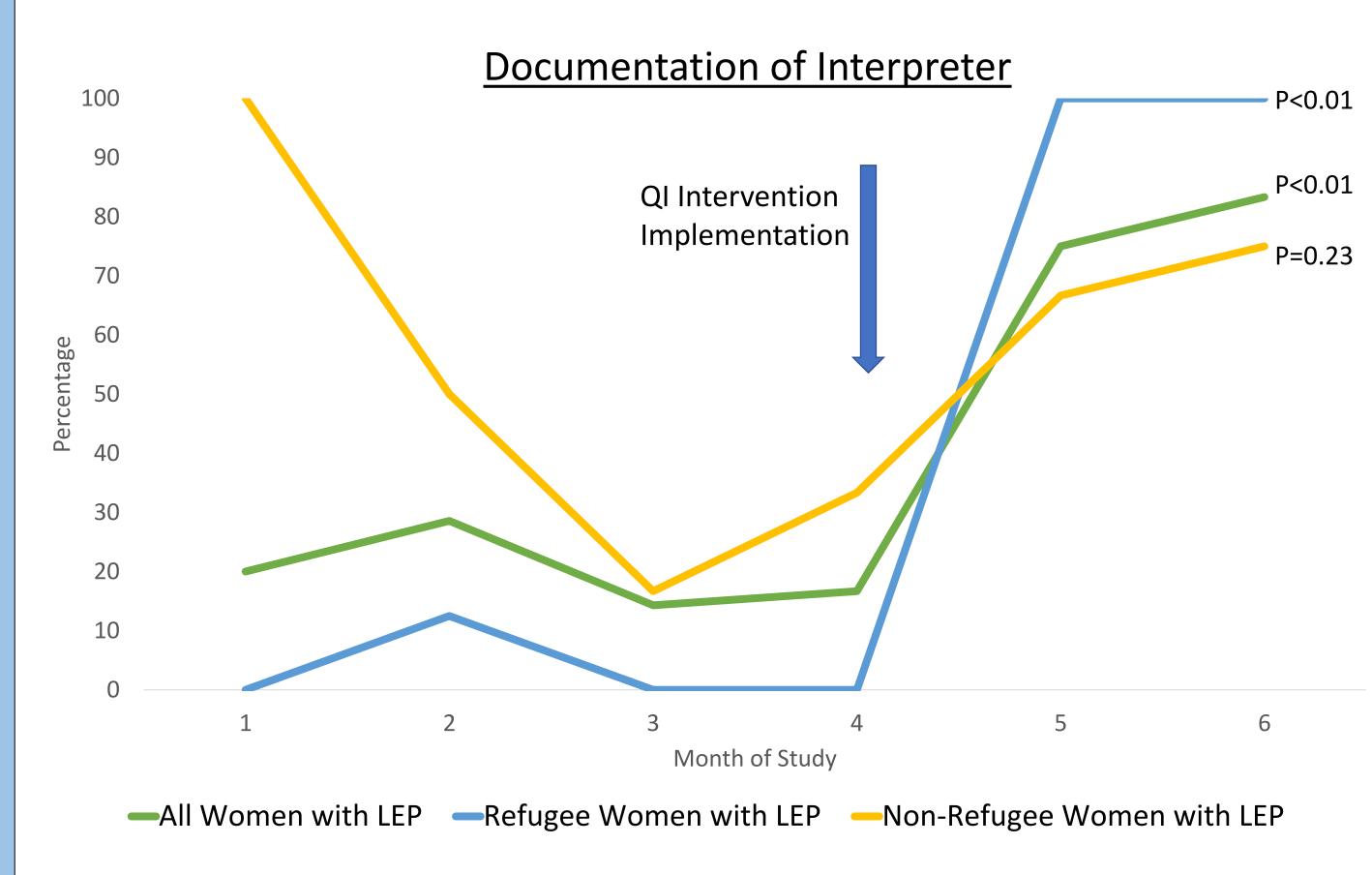


Figure 2: Percentage of documentation of Interpreter on H&P by month, significant increase in documentation noted with intervention implemented after month 4 of study.

This QI intervention demonstrated an overall increase in documentation of interpretation services from 21.9% to 78.6% (p<0.01) seen in green in Figure 2. Twenty women with LEP (43.5% of study population) had documented refugee status. Overall, refugee women had interpretation services documented less frequently than women without documented refugee status (25% vs 50%, p=0.13). Sub-analysis of refugee women with LEP had the most notable increase in interpreter documentation with the QI intervention (6.25% to 100%, p<0.01), seen in blue in Figure 2. Non-refugee women with LEP (yellow in Figure 2) did not have a statistically significant increase in interpreter documentation with the QI intervention (37.5% to 70.0% (p=0.23).

required readmission after delivery. One of these five women (20%) had documentation of an interpreter with initial admission. In comparison, 17 of the 41 women with LEP did not require readmission (41.5%) had an interpreter documented at admission (Figure 3). While not a primary outcome of our study, this difference is notable (20% vs 41.5%, p=0.63). After QI intervention implementation, no women with LEP were readmitted.

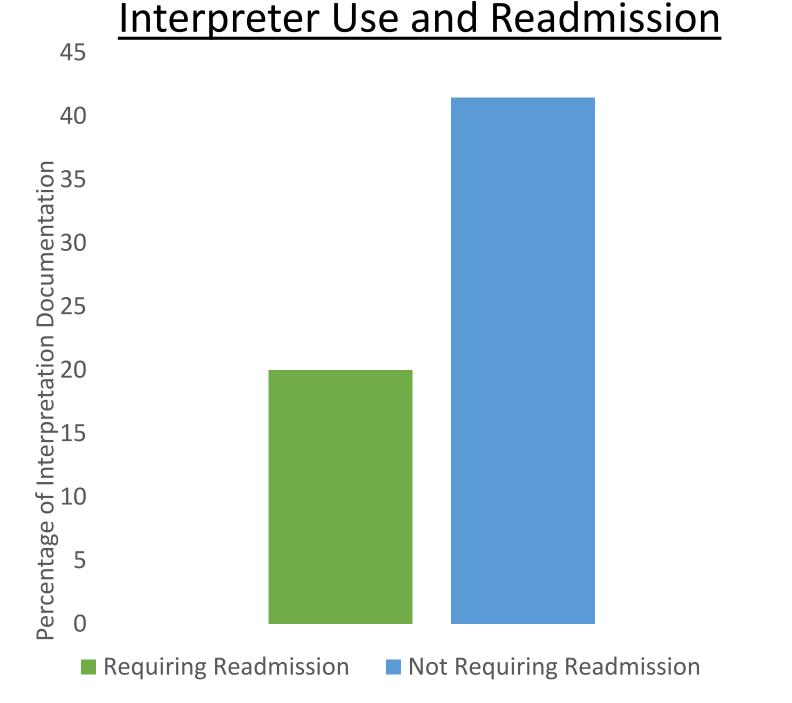


Figure 3: Percentage of Interpreter documentation for LEP women requiring readmission and not requiring readmission, notable decreased use of interpreters for women requiring readmission postpartum.

Discussion

Half of all U.S. patients have difficulty understanding health information [6]. Race, institutionalized racism, stereotypes, and discrimination can negatively affect patient care [7]. The American College of Obstetricians and Gynecologists states interpreter services should be provided for all patient interactions when the patient's language is not the clinician's language [7]. Literature review shows interpretation usage for hospitalized patients ranges from 17-34% [8,9]. In this study, the frequency of interpreter documentation prior to the intervention was similar at 21.9% and increased significantly to 78.9% after the QI intervention.

This study uses documentation of interpreters as a proxy for interpreter usage, with the goal to increase interpreter usage and documentation. Documentation of interpreters increased over the course of the study for women with LEP. The QI intervention, demonstrated in Image 1, served as a friendly reminder to both use and document an interpreter. One study limitation includes the possibility that interpreters were used but not documented for the patients in this study.

Refugee women accounted for 43.5% of the study. This intervention appeared to be most successful at increasing the use of interpreters for refugee women with LEP (Figure 2). While there is conflicting evidence regarding maternal and infant outcomes among refugee women, some studies have demonstrated poorer outcomes among refugee women [10]. This study demonstrated readmission rates were similar among refugee women (10%) and non-refugee women (12%). LEP women who required readmission after delivery were less likely to have an interpreter documented during initial admission for delivery (Figure 3). Data are limited by small sample size, but results indicate a favorable effect as no readmissions occurred after QI intervention.

Sustainability Plans:

- Educational Session for Obstetrics Department on effective use of interpreters
- Posted signage in most used languages informing patients of interpreters.
- Due to the success of this intervention (Image 1), it was implemented in admission documentation across all specialties. Additional studies needed to evaluate impact on interpreter usage and documentation in other departments.

Conclusion

The QI intervention demonstrated a statistically significant increase in documentation of interpretation services for women with limited English proficiency.

References

- 1. Flores G. The impact of medical interpreter services on the quality of health care: a systematic review. *Med Care Res Rev.* 2005;62(3):255-299. doi:10.1177/1077558705275416

 2. Lee JS, Pérez-Stable EJ, Gregorich SE, et al. Increased Access to Professional Interpreters in the Hospital Improves Informed Consent for Patients with Limited English Proficiency. *J Gen*
- Intern Med. 2017;32(8):863-870. doi:10.1007/s11606-017-3983-4

 3. Lindholm M, Hargraves JL, Ferguson WJ, Reed G. Professional language interpretation and inpatient length of stay and readmission rates. J Gen Intern Med. 2012;27(10):1294–1299.
- Bagchi AD, Dale S, Verbitsky-Savitz N, Andrecheck S, Zavotsky K, Eisenstein R. Examining effectiveness of medical interpreters in emergency departments for Spanish-speaking patients with
- limited English proficiency: results of a randomized controlled trial. *Ann Emerg Med*. 2011;57(3):248–256.e1-4.

 5. Karliner LS, Jacobs EA, Chen AH, Mutha S. Do professional interpreters improve clinical care for patients with limited English proficiency? A systematic review of the literature. *Health Serv*
- Res. 2007;42(2):727-754. doi:10.1111/j.1475-6773.2006.00629.x

 6. Health literacy to promote quality of care. Committee Opinion No. 676. American College of Obstetricians and Gynecologists. Obstet Gynecol 2016;128:e183–6.
- 7. Importance of social determinants of health and cultural awareness in the delivery of reproductive health care. ACOG Committee Opinion No. 729. American College of Obstetricians and Gynecologists. Obstet Gynecol 2018;131:e43–8.
- 8. López, Lenny et al. "Use of interpreters by physicians for hospitalized limited English proficient patients and its impact on patient outcomes." *Journal of general internal medicine* vol. 30,6 (2015): 783-9. doi:10.1007/s11606-015-3213-x
- 9. Schenker, Yael et al. "Patterns of interpreter use for hospitalized patients with limited English proficiency." Journal of general internal medicine vol. 26,7 (2011): 712-7.
- 10. Annamalai, Aniyizhai. (2014). Refugee Health Care: An Essential Medical Guide. 10.1007/978-1-4939-0271-2

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