

Title: Drug Testing Interpretation in the Peripartum Setting: Results of Clinician Survey

INTRODUCTION

- Correct interpretation of peripartum maternal and neonatal drug tests is important as results can lead to mandated reporting to child protective services
- Previous studies show a low level of clinician confidence and knowledge in interpreting drug tests
- **Study aims:**
 1. Describe experience, confidence and professional education on peripartum drug test interpretation
 2. Quantify knowledge around interpreting maternal and neonatal drugs tests
 3. Identify predictors of drug testing knowledge

METHODS

- **Cross-sectional online survey** of clinicians from obstetrics, nurse midwifery, family medicine, pediatrics, neonatology, social work
- Collected demographic information about specialty, title, years in practice, professional education, buprenorphine X-waiver status
- Assessed experience ordering and confidence interpreting maternal urine and neonatal umbilical cord/meconium tests
- Evaluated drug testing knowledge using 11 clinical questions
- **Statistics:** descriptive for respondent characteristics and unadjusted multinomial logistic regression for predictors of knowledge score categories (0-2 poor (reference); 3-5 fair; >6 good)

RESULTS

- **103 respondents** (response rate 40%)
- Respondents represented: obstetrics/nurse midwifery (n=60, 58.3%), family medicine (n=18, 17.5%), pediatrics/neonatology/triple board (n=22, 21.3%), social work (n=3, 2.9%)
- Trainees (n=48, 46.6%)
- X waiver (n=23, 22.3%)

While use of drug testing in labor & delivery, postpartum unit, newborn nursery, and newborn intensive care unit is common, most clinicians demonstrated a low level of knowledge in interpreting drug tests.

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Dr. Smid has research funding paid to the institution from Gilead Sciences Inc and Alydia Health/Organon and serves as a consultant for Rhia Ventures

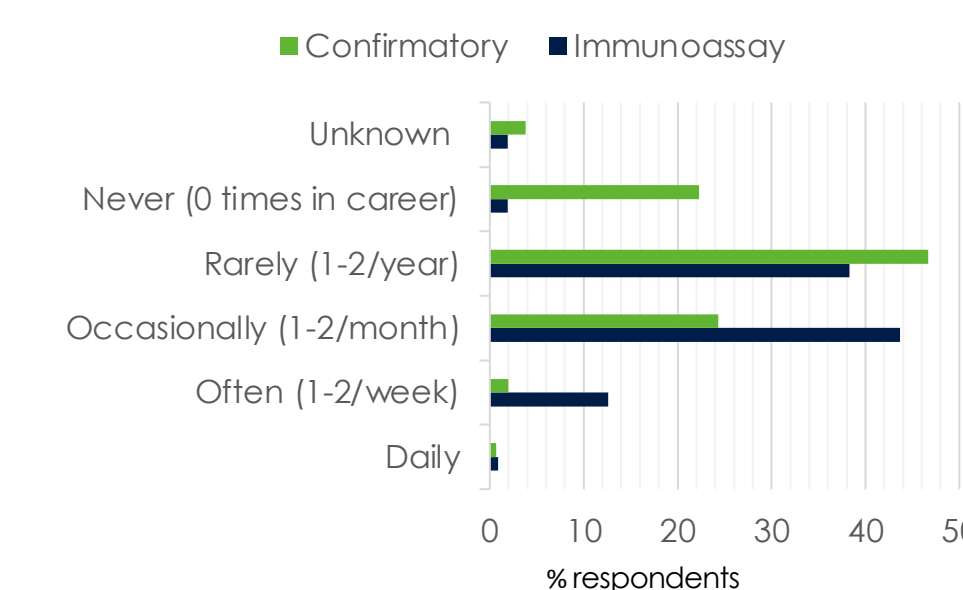


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RESULTS

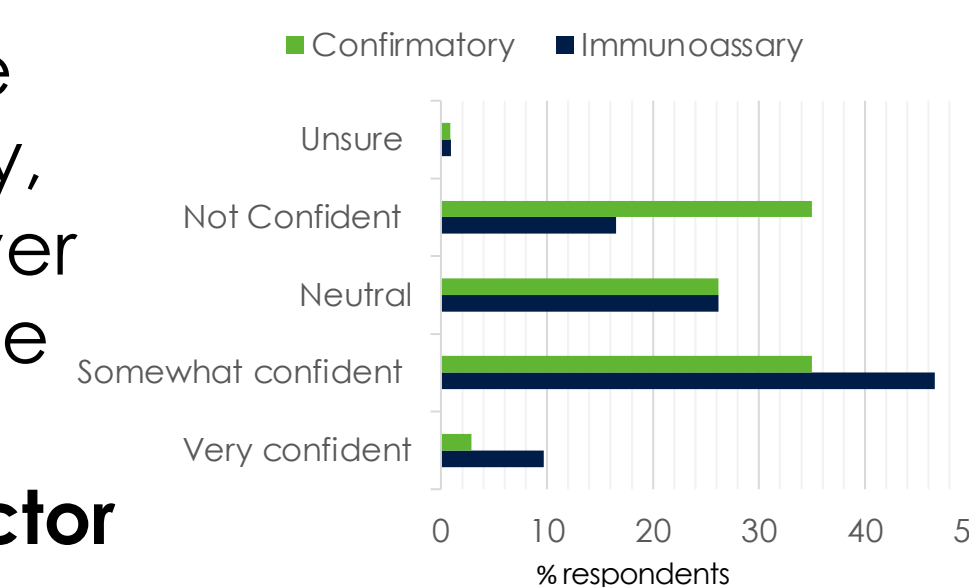
- Less experience and comfort with infant versus maternal testing

Fig 1: Experience with Maternal Urine Drug Tests



- **Knowledge**
 - Mean score 4.1 (SD 2.17, Range 0-11)
 - Categories:
 - Fair (n=47.6%)
 - Good (n=28.2%)
 - Poor (n=24.3%)

Fig 2: Confidence with Maternal Urine Drug Tests



- **No differences** in knowledge category based on specialty, attending vs. trainee, X-waiver status, years in training, or title

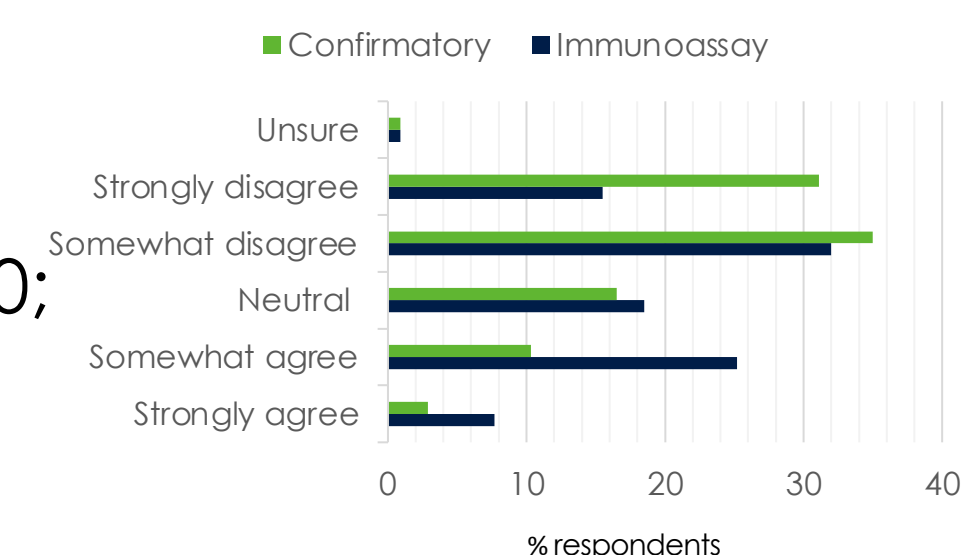
- **Knowledge category predictor**
Confidence

Ref: poor
Fair: RRR=2.10, 95CI 1.13-3.90
Good: RRR=3.38, 95CI 1.68-6.81

Professional education

Ref: poor
Fair: RRR=3.98, 95CI 1.80-8.80;
Good: RRR=5.49, 95CI 2.37-12.72

Fig 3: Professional Education Prepared for Drug Test Interpretation



DISCUSSION

- **Professional education and confidence**, but not title, years in training, or experience, were predictive of better knowledge scores
- Clinicians could improve knowledge about drug testing with further education and training

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