Recent Epidemiology of Neonatal Abstinence Syndrome.

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Recent Epidemiology of Neonatal Abstinence Syndrome

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**BACKGROUND**
- Neonatal Abstinence Syndrome (NAS) refers to opioid withdrawal symptoms in prenatally exposed newborns.
  - Potential short-term outcomes: high-pitched cry, fever, loose or watery stools, tremors, extended hospital stay.
  - Potential long-term outcomes: hyperactivity, short attention span, memory and perceptual problems.
- LVHN experienced a doubling of NAS cases between 2014-2016.
- A multidisciplinary group of LVHN Pediatric and Obstetrics providers assembled in Fall of 2016 to explore gaps in departmental care, NAS epidemiology, and potential interventions.
- An online database was created to provide a central location and tracking tool for maternal, infant, and pediatric information.
- Demographics and personal circumstances of opioid-dependent pregnant women can greatly impact the type of treatment they require.

**Purpose:** Populate and tailor a database to inform LVHN’s response to opioid use in pregnancy.

**METHODS**
- Each case entered individually and given record number in online database called REDCap.
- Under one record number, 3 database instruments connect data fields related to maternal, infant, and pediatric data.
- Fields completed using maternal and pediatric electronic medical records from EPIC, supplemented by CAC files.
- Positive urine drug screen, self-report, or a ‘yes’ to a prenatal screening tool question established substance use in pregnancy.
- A literature review and availability of information in EPIC and from the CAC informed database additions and modifications.

**OUTCOMES**
- 90 total records in the REDCap database.
- 93 total data fields between maternal, infant, and pediatric instruments.
  - 22 data fields were added.
  - 8 fields were modified.
- Instruments united obstetric and pediatric information in a common database.
- Existing records produced preliminary data.
- Database entries contributed to a grant proposal intended to fund developing programs designed to meet needs of substance dependent women.
- Project coordinator hired to manage database and use as case management tool to track future patient progress.

**RESULTS**

**RECOMMENDATIONS**
- Answer future research questions using the online database.
- Promote a mobile program to reach patients beyond Lehigh county.
- Communicate across departments to prevent fragmented care.
- Enhance awareness of services that already exist and plan for what is still needed.

**REFERENCES**


**Figure 2:** Pregnant women from surrounding counties with substance use in pregnancy. 80% come from Lehigh, Carbon or Northampton county (n = 90).

**Figure 3:** Ethnic/racial backgrounds of pregnant women with substance use in pregnancy (n = 90).