Objectives
Discuss the current scope of maternal substance use and abuse
List examples of interdisciplinary strategies to ensure the best outcomes for mothers and babies.
TN's Prescription Drug Problem

Painkiller Prescriptions, 2012


Painkiller Prescriptions, 2012

TN: Tied for top state in country for painkiller prescriptions per 100 people

Number of painkiller prescriptions per 100 people

- SD: 75
- 75-84.5
- 80-89.5
- 90-100

Medication Use During Pregnancy

- % using: For more medications at any time during pregnancy
- % using: For more medications at any time during the first trimester

Medication Use During Pregnancy

- % using: For more medications at any time during pregnancy
- % using: For more medications at any time during the first trimester

Reference: Author's name, Date. Source: Journal Name. Volume, Issue: Page numbers, publication year.

Medication Use During Pregnancy

- % using: For more medications at any time during pregnancy
- % using: For more medications at any time during the first trimester

Medication Use During Pregnancy

- % using: For more medications at any time during pregnancy
- % using: For more medications at any time during the first trimester

Medication Use During Pregnancy

- % using: For more medications at any time during pregnancy
- % using: For more medications at any time during the first trimester

Medication Use During Pregnancy

- % using: For more medications at any time during pregnancy
- % using: For more medications at any time during the first trimester

Medication Use During Pregnancy

- % using: For more medications at any time during pregnancy
- % using: For more medications at any time during the first trimester
Screening

Part of complete obstetric care
Should apply to all women in the context of comprehensive care
Confidentiality
Nonjudgmental
Urine drug testing only with consent and in keeping with state laws

ACOG Committee Opinion #524, Opioid Abuse, Dependence, and Addiction in Pregnancy, 2012

Prescribed versus Non-prescribed

More women being prescribed opioids during pregnancy
With opioid prescription, women more likely to:
  - Have depression
  - Have anxiety
  - Smoke
Infants with NAS if mother was prescribed opioid in pregnancy
  - NAS symptoms more likely with smoking, SSRI and/or anti-anxiety medication use
  - More likely to be low birth weight


Opioid-assisted Therapy

Purpose: prevent complications and withdrawal, encourage prenatal care and drug treatment, reduce criminal activity, avoid risks of associating with drug culture (ACOG, 2012)

Methadone or Buprenorphine
Titrated until asymptomatic, increased only if needed
Licensed treatment program required for methadone
Accredited physicians with specific credentialing may prescribe buprenorphine
Advantages of Buprenorphine

Lower risk of overdose
Fewer drug interactions
Outpatient options for treatment
Less severe NAS?
Emerging evidence here (Jones et al, 2010)
Infants (n=175) needed 89% less morphine to treat NAS
43% shorter hospital length of stay
58% shorter duration of treatment

Pain Relief in Labor and after Birth

Women should be offered options as if they were not taking opioids
Epidural or spinal should be offered if available
Avoid butorphanol ([Stadol]), nalbuphine ([Nubain]) and pentazocine ([Talwin])
Narcotic agonist-antagonist drugs
May precipitate withdrawal
Higher opioid doses will be required for analgesia
Consider short acting opioids with injectable NSAID (ketorolac)

Tobacco, Marijuana, E-Cigarettes

No establishment of safe limits during pregnancy
Marijuana, e-cigarette evidence still emerging, but enough evidence to recommend abstinence in pregnancy
AAP suggests marijuana use contraindicated in breastfeeding
NAS Incidence

Rate of admissions increased from 7/1000 to 27/1000 from 2004-2013
Percentage of NICU days for NAS infants increased from 0.6% (2004) to 4.0% (2013)
Median length of stay 13 days (2004), 19 days (2013)
More than 10% of NICU admissions in 23 centers nationwide with more than 100 admissions per year (n=157) (2013)
More than 20% in 8 centers
More than 40% in 2 centers

20% of all NICU admissions in the U.S. represented by this study


WHO Guiding Principles

I. Prioritizing prevention
II. Ensuring access to prevention and treatment services
III. Respecting patient autonomy
IV. Providing comprehensive care
V. Safeguarding against discrimination and stigmatization

WHO (2014) Guidelines for the identification and management of substance use and substance use disorders in pregnancy

Interventions

Recognition of NAS symptoms
   - Reliability testing and standard training for scoring tools
   - Annual competency assessment
Cultural competence and sensitivity
   - Addiction as a chronic disease
   - Need for family bonding
Breastfeeding not contraindicated
   - Swaddling and skin to skin may decrease symptoms
   - Social services as needed
Treatment options

Substance abuse and mental health services administration (SAMHSA)
http://dpt2.samhsa.gov/treatment/directory.aspx
23 in Washington as of 8/31/2015
How many treat pregnant women?

HELLO
my name is

Tennessee
(and I have a problem)
Opioid Prescription Rates by County—TN, 2007-2011

Data source: Tennessee Department of Health; Controlled Substance Monitoring Database.

NAS Hospitalizations in TN:
1999-2012

Data sources: Tennessee Department of Health; Office of Health Statistics; Hospital Discharge Data System (HDDS) and Birth Statistical System. Analysis includes inpatient hospitalizations with age less than 1 and any diagnosis of drug withdrawal syndrome of newborn (ICD-9-CM 779.5). HDDS records may contain up to 18 diagnoses. Infants were included if any of these diagnosis fields were coded 779.5.

NAS—Reportable Disease

Add NAS to state’s Reportable Disease list
Effective January 1, 2013
Reporting hospitals/providers submit electronic report
Reporting Elements
Case Information
Diagnostic Information
Source of Maternal Exposure
Drug Dependent Newborns (Neonatal Abstinence Syndrome) Surveillance
Summary For the Week of November 9 – November 15, 2014

Cases Reported: 841
Male: 445
Female: 396
Unique Hospitals Reporting: 49

1. Summary reports are archived weekly at: http://health.tn.gov/MCH/NAS/NAS_Summary_Archive.shtml
2. Total percentage may not equal 100.0% due to rounding.
3. Multiple maternal substances may be reported; therefore the total number of cases in this table may not match the total number of cases reported.

### Maternal County of Residence (By Health Department Region)

<table>
<thead>
<tr>
<th>County</th>
<th>Cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davidson</td>
<td>46</td>
<td>5.5</td>
</tr>
<tr>
<td>East</td>
<td>230</td>
<td>27.4</td>
</tr>
<tr>
<td>Hamilton</td>
<td>12</td>
<td>1.4</td>
</tr>
<tr>
<td>Jackson/Madison</td>
<td>3</td>
<td>0.4</td>
</tr>
<tr>
<td>Knox</td>
<td>86</td>
<td>10.2</td>
</tr>
<tr>
<td>Mid-Cumberland</td>
<td>74</td>
<td>8.8</td>
</tr>
<tr>
<td>North East</td>
<td>121</td>
<td>14.4</td>
</tr>
<tr>
<td>Shelby</td>
<td>34</td>
<td>4.0</td>
</tr>
<tr>
<td>South Central</td>
<td>31</td>
<td>3.7</td>
</tr>
<tr>
<td>South East</td>
<td>19</td>
<td>2.3</td>
</tr>
<tr>
<td>Sullivan</td>
<td>67</td>
<td>8.0</td>
</tr>
<tr>
<td>Upper Cumberland</td>
<td>94</td>
<td>11.2</td>
</tr>
<tr>
<td>West</td>
<td>24</td>
<td>2.9</td>
</tr>
<tr>
<td>Total</td>
<td>841</td>
<td>100.0</td>
</tr>
</tbody>
</table>

### Source of Maternal Substance (if known)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervised replacement therapy</td>
<td>453</td>
<td>53.9</td>
</tr>
<tr>
<td>Supervised pain therapy</td>
<td>119</td>
<td>14.2</td>
</tr>
<tr>
<td>Therapy for psychiatric or neurological condition</td>
<td>54</td>
<td>6.4</td>
</tr>
<tr>
<td>Prescription substance obtained WITHOUT a prescription</td>
<td>327</td>
<td>38.9</td>
</tr>
<tr>
<td>Non-prescription substance</td>
<td>180</td>
<td>21.4</td>
</tr>
<tr>
<td>No known exposure but clinical signs consistent with NAS</td>
<td>3</td>
<td>0.4</td>
</tr>
<tr>
<td>No response</td>
<td>16</td>
<td>1.9</td>
</tr>
</tbody>
</table>

### The Levels of Prevention

<table>
<thead>
<tr>
<th>PRIMARY Prevention</th>
<th>SECONDARY Prevention</th>
<th>TERTIARY Prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>An intervention implemented before there is evidence of a disease or injury.</td>
<td>An intervention implemented after a disease has begun, but before it is symptomatic.</td>
<td>An intervention implemented after a disease or injury is established.</td>
</tr>
<tr>
<td>Intent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce or eliminate causative risk factors (risk reduction)</td>
<td>Early identification (through screening) and treatment</td>
<td>Prevent sequela (stop bad things from getting worse)</td>
</tr>
<tr>
<td>NAS Example</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevent addiction from occurring</td>
<td>Prevent pregnancy for substance use during prenatal visits and refer for treatment</td>
<td>Treat addicted women</td>
</tr>
<tr>
<td>Prevent pregnancy</td>
<td></td>
<td>Treat babies with NAS</td>
</tr>
</tbody>
</table>
TennCare Prior Authorization Form

Controlled Substance Monitoring Database

Prescription Safety Act of 2012
TCA 53-10-300
Required prescribers to register
“Shall check” provision

CSMD Successes:
4.5M searches (240% increase from 2012)
50% decrease in doctor shopping

Change in provider behavior:
71% have changed tx plan after viewing CSMD report
73% more likely to discuss substance abuse issues or concerns with a patient
Additional Legislative Actions

Pregnant women get priority for state-funded substance abuse treatment:

- Child cannot be removed solely due to maternal substance use if treatment initiated by 20 weeks gestation
- Opioid antagonist to people at risk of overdose
- Immunity for people who administer opioid antagonist
- Allowance for misdemeanor prosecution if women illegally uses narcotic during pregnancy and baby harmed as a result
- Required 2-hr CME on controlled substance prescribing
- 30-day dispensing limit for opioids and benzodiazepines

References:
1. TCA § 33-10-104; 2. TCA § 63-1-152; 3. TCA § 39-13-107; 4. TCA § 63-1-402; 5. TCA § 53-11-308

AWHONN Position Statement

Developed after Tennessee legislation
Allows a national voice
"Criminalization of Pregnant Women with Substance Abuse Disorders"