Multidisciplinary Treatment for Pregnant Persons with Opioid Use Disorder

Kodiak R. S. Soled, MSN, RN*,[1] Lauren E. Greenwood*, MSN, RN,[2] Erica Ramirez-Kuykendall, MSN, RN*,[3]
Laura S. Lucas, DNP, APRN-CNS, RNC-OB, C-EFM,[4] Nancy S. Goldstein, DNP, ANP-BC, RNC-OB[4]
[1]COLUMBIA UNIVERSITY SCHOOL OF NURSING, NEW YORK, NY; [2]INSPIRA MEDICAL CENTER, WOODBURY, NJ; [3]METHODIST HOSPITAL, SAN ANTOIO, TX;
[4]JOHNS HOPKINS UNIVERSITY SCHOOL OF NURSING, BALTIMORE, MD

BACKGROUND

- The increasing prevalence of opioid use disorder (OUD) during pregnancy in the United States has contributed to increased morbidity and mortality for pregnant persons and their neonate
- First-line treatment for pregnant persons with OUD, is opioid agonist treatment (OAT); however, a common contributor of opioid abuse is past trauma and co-occurring mental health disorders:
  - 50-80% of women with OUD have experienced trauma
  - 45% of women with OUD have a co-occurring mental health disorder
- Multidisciplinary treatment (MDT) teams that include a variety of professionals, including mental health, may address the root cause of OUD
- Preliminary evidence suggest MDT services may improve perinatal outcomes for pregnant persons with OUD as well as their neonate

PURPOSE

To conduct a systematic review of the literature to establish whether MDT services improves perinatal outcomes for pregnant persons with OUD

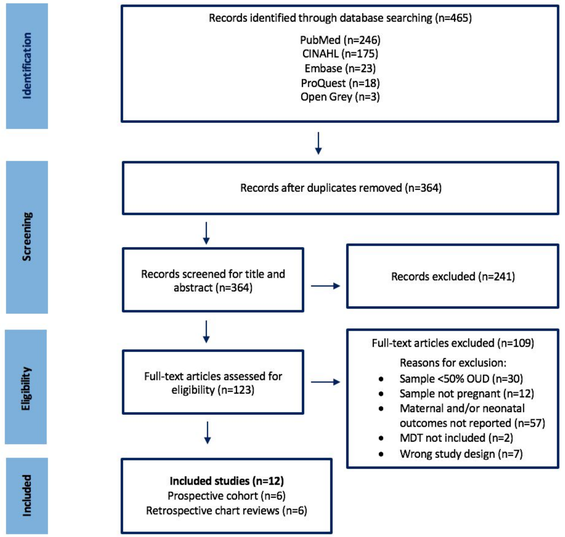
METHODS

DATABASES
PubMed, CINAHL, Embase, Grey Literature Report, and Open Grey
KEYWORDS
Maternal health services, interprofessional relations, opioid related disorders, harm reduction, pregnancy complications

ARTICLE SELECTION CRITERIA

Inclusion	Exclusion
• Original research or systematic review • MDT consists of ≥3 providers from different disciplinary backgrounds • >50% sample includes pregnant persons with OUD • Maternal and/or infant outcomes reported	• Non-research evidence (e.g., expert opinions, editorials, case reports) • >50% of sample exclusively used substances other than opioids • Non-English • Non-human species

RESULTS



Author (year)	NEWCASTLE-OTTAWA QUALITY ASSESSMENT SCALE			AHRQ Standards *(Good, Fair, or Poor)*
	Selection bias	Comparability	Outcomes	
Adeniji et al. (2010)	+ − + +	− +	+ + +	Good
Chang et al. (1992)	− + + +	+ +	+ + +	Good
Dryden et al. (2009)	+ − + +	− +	+ + +	Good
Fisher et al. (1998)	+ − + +	− +	+ + +	Good
Jha et al. (1997)	+ − + +	− +	+ + +	Good
Lander et al. (2016)	− − + +	− +	+ + +	Fair
Metz et al. (2014)	+ − + +	− +	+ + +	Good
Meyer et al. (2012)	+ − + +	− +	+ + +	Good
Ordean et al. (2013)	+ − + +	− +	+ + +	Good
Pinto et al. (2010)	+ + + +	+ +	+ + +	Good
Suffet et al. (1984)	+ − + +	− +	+ + +	Good
Toner et al. (2008)	+ − + +	− −	+ + +	Poor

− = no star awarded + = star awarded

DISCUSSION

IMPROVED PREGNANT PERSON OUTCOMES

- Evidence suggests MDT may decrease the rate of drug use and increase the rate of sustained recovery
- Pregnant persons individuals receiving MDT treatment report improved living conditions and improved life satisfaction

IMPROVED NEONATAL OUTCOMES

- Evidence suggests MDT may increase participation in and adherence to antenatal care which has a positive effect on gestational age and birthweight (decreasing preterm births and need for hospital interventions)
- Increased antenatal care is also associated with a decreased incidence in neonatal abstinence syndrome and neonatal intensive care unit admittance

IMPROVED DYAD OUTCOMES

- The rate of infants discharged with the postpartum individual increases when MDT is employed
- Subsequently, this leads to a decreased involvement of child protection services
- Evidence suggests a MDT approach may improve bonding in the early postpartum period

CONCLUSIONS

Although reported outcomes and MDT teams varied between studies, evidence suggests a MDT approach generally yields better patient and neonatal outcomes than OAT

Recommendations for future research:

- Determine which MDT services are most effective in improving childbearing outcomes
- Perform cost-effectiveness analyses of MDT
- Use of consistent outcome variables in MDT studies (to enable synthesis of outcomes) including:
  Childbearing person: adherence to prenatal care and relapse rate, and duration of hospital stay
  Infant: gestational age, birth weight, and number of hospital interventions

Acknowledgements: K. Soled is funded by a Jonas Philanthropies, The Morton K. and Jane Blaustein Foundation, and Columbia University School of Nursing.
Contact: kodiak.soled@columbia.edu, greenwoodl@ihn.org, llucas@jhmi.edu, and ngoldst1@jhmi.edu

**K. Soled, L. Greenwood, and E. Ramirez-Kuykendall are all primary authors*

JOHNS HOPKINS
SCHOOL of NURSING