

Pregnancy and Addiction: A World View of the Problem, Current Treatments and Future Research

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Outline

I. World view of the problem

II. Current treatments

III. Future research

Drug Addiction During Pregnancy

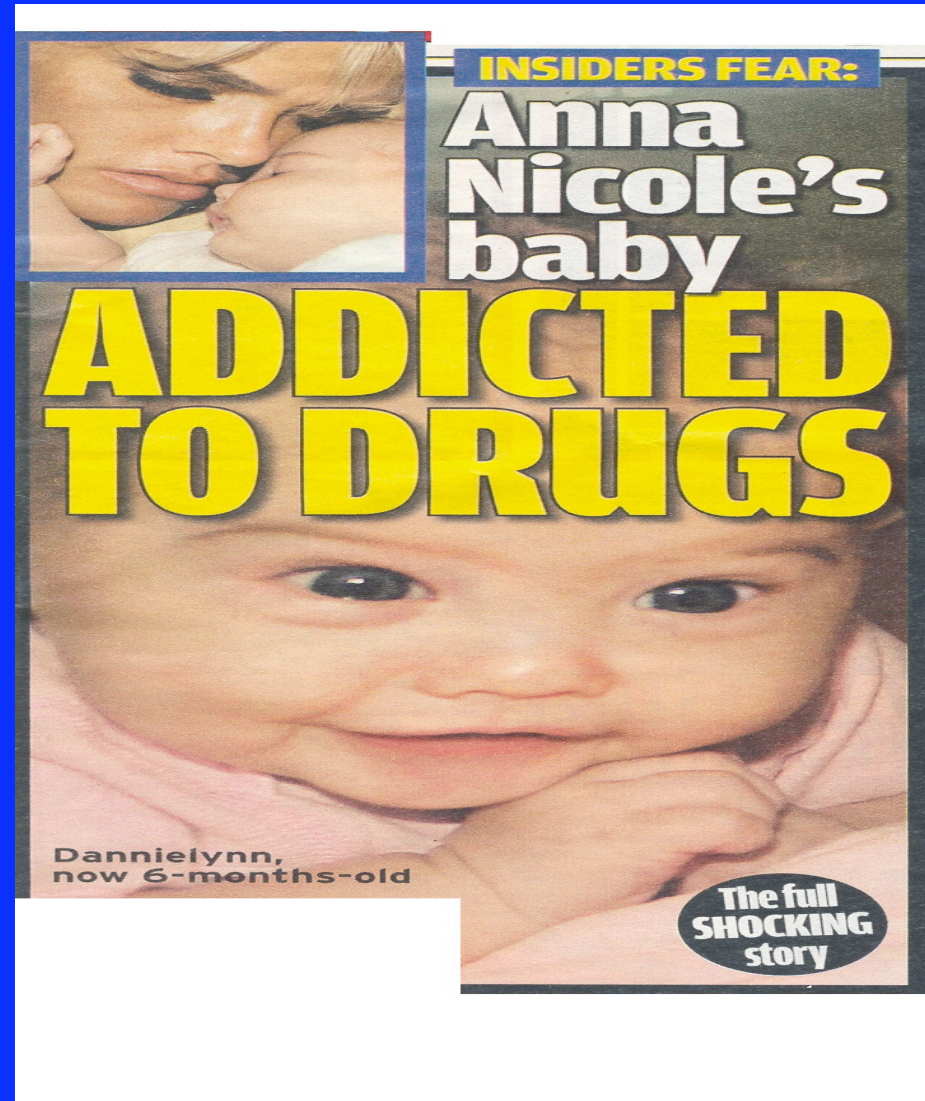
- A universal public health problem
- Alcohol, tobacco and illicit drugs
- There is an absence of systematic solid prevalence data

Examples of Data from Around the World

- **France:** 28% women smoke during pregnancy (Ducret 2005)
- **Italy:** FASD rate 20-40 per 1,000 children (2006)
- **Nova Scotia:** 25% smoking during pregnancy (Ebrahim et al., 2000)
- **Philippines:** 21% methamphetamine meconium positive rate N=393 (Ostrea et al., 2004)
- **United States National Survey on Drug Use and Health 2004/5:** 17% women smoke during pregnancy, 12% drink alcohol, 3% use marijuana
- **South Africa:** FASD rate 65-74 per 1,000 children (Viljoen et al., 2005)

Stigma and Misunderstanding

- A problem in every society at all socioeconomic levels
- Drug addiction of the pregnant mother is often met with concern, fear, anger and frustration by society
- Public needs education about the difference between physical dependence and addiction



Drug Addiction During Pregnancy

- Collective goals of wanting to rid the world of drug addiction and have healthy mothers, children and families
- Approaches to achieving these goals differ
 - Legal/punitive methods to prosecute women into submission
 - Treatment and empowerment, providing the care and education to support women in making choices appropriate for a healthy pregnancy

Interdisciplinary approach

Evidence from around the world shows the positive effects of comprehensive care

- Psychiatry, Obstetrics, Pediatrics, Nursing



Drug use during pregnancy

elicits ^{stronger} strong opinions

dependence with medications during pregnancy elicits even stronger opinions

- Both the mother and the child deserve our compassion and evidence-based treatments



Current Treatments Examined

- Medication
 - Opioid dependence: buprenorphine, methadone, naltrexone
 - Nicotine dependence: nicotine replacement products, bupropion
- Behavioral Treatments
 - Comprehensive care approach
 - Motivational Interviewing
 - Contingency management
 - Community Reinforcement Approach

Current Research

The advancement of substance abuse treatment for opioid-dependent pregnant women is best served through a close, multi-site international collaborative randomized controlled trial network

MOTHER N=370

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Providence, RI

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Opportunities for Research in Drug Addiction and Pregnancy



Maternal

Fetal

Neonate

Child



Future Research

Maternal, fetal, neonate and child

- Safety and efficacy trials
- Effectiveness trials of other medications or medication combinations (e.g., NRT, SSRIs)
- Post-marketing surveillance

Future Research

Maternal

- Pharmacokinetics and pharmacodynamics of medications pre- and post-partum
- Matching mothers to agonist medications
- Transitioning mothers to another medication
- Pain management pre- and post-partum
- HIV risk behaviors in agonist treated pregnant women
- Tools to better quantify drug use

Future Research

Fetal

- Systematic evaluation of fetal safety with different medications, dosing regimens and medication-assisted withdrawal or transfers
- Fetal effects of medication combinations

Neonate

- Development of tools to examine NAS in premature neonates
- Develop tools to assess and determine treatment for withdrawal from benzodiazepines, alcohol and combinations of drugs
- Systematic comparisons of medication protocols to treat NAS

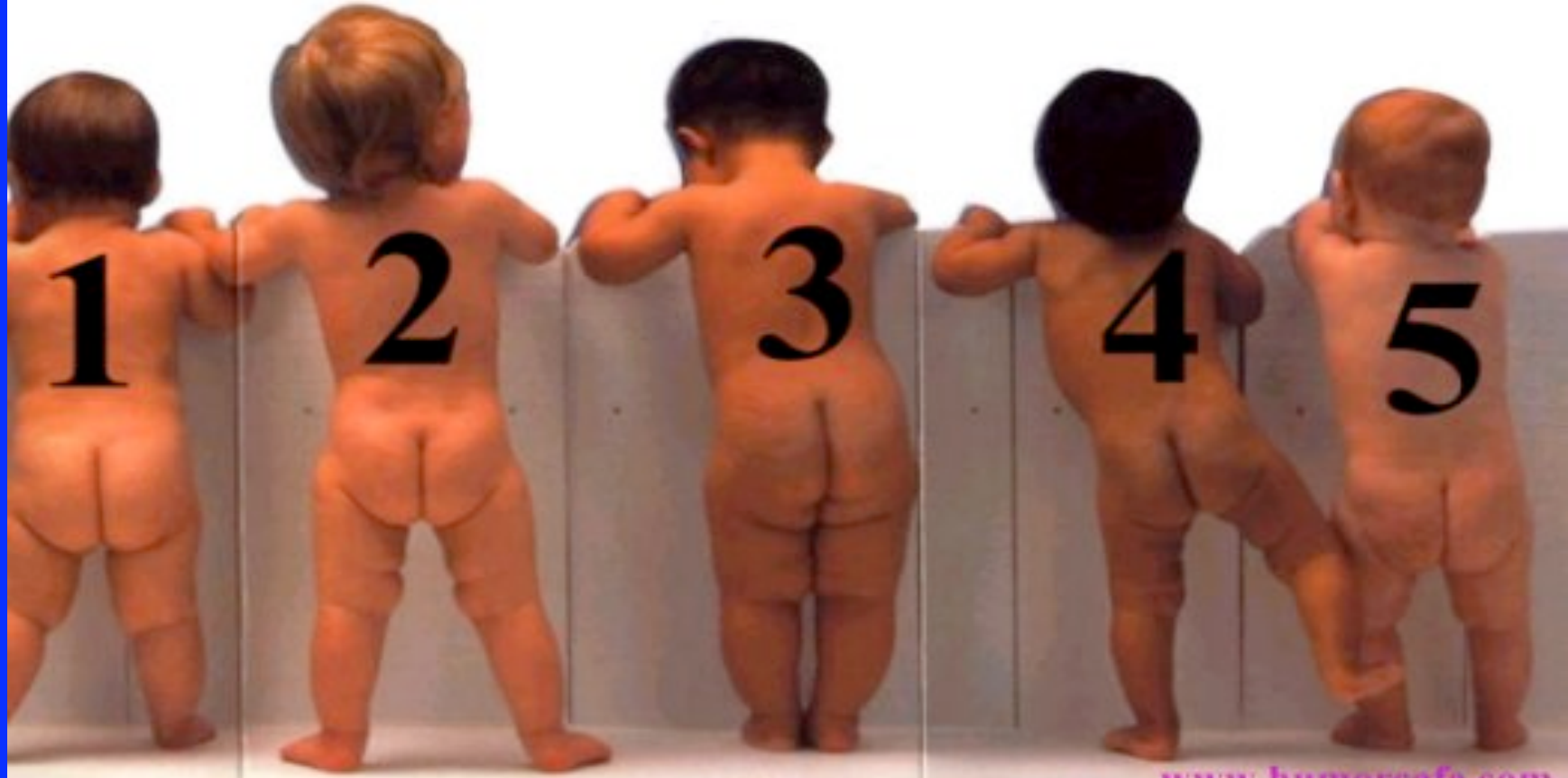
Future Research

Child

- Systematic long-term follow-up of children prenatally exposed to medications to treat drug dependence or other co-occurring conditions in this population

Future Direction

- Establishment of a consortium of researchers around the globe dedicated to the prevention and treatment of drug addiction during pregnancy
- Utilization of a collaborative flexible network approach to develop and answer research questions
- Pool collective data, knowledge and experience to develop evidence-based best practice guidelines on a global level



THE END