Reproductive Hormone Dysfunction in Women with Substance Abuse Disorders

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Population Demographics
Premenopausal women with a history of abusing alcohol and/or illicit substances such as methamphetamine, cocaine, or opiates who are in a 3 month residential recovery program.

Nursing Diagnosis
Population at risk for impaired fertility planning related to substance abuse mediated endocrine dysfunction as evidenced by 71% prevalence rate of menstrual irregularity and unintended pregnancies comprising 86% of total pregnancies.

Web of Causation

Summary of Evidence

Clinical Site Evidence
- 71% noticed irregularity in their menstrual cycle while using drugs or alcohol
- 50% use contraception during every sexual encounter
- 88% do not desire pregnancy in the next year
- 37% reported at least one lifetime pregnancy
- 100% of these pregnancies were unintended

Methods of Contraception Used

Research Evidence
- Exogenous opioids interfere with the biosynthesis, release, and pulsatile nature of GnRH, leading to suppressed ovulation
- Causes menstrual irregularities, infertility, depression, anxiety, and osteoporosis
- Return of normal ovulation after abstaining from drug use is not predictable
- Chronic stimulant users (cocaine, methamphetamine) experience hyperprolactinemia
- Results in menstrual irregularity, infertility, and bone loss
- 50% of social drinkers (~3.84 drinks/day) and 60% of heavy drinkers (~7.81 drinks/day) have disturbances in reproductive hormones and menstrual cycle
- Anovulatory cycles, hyperprolactinemia, and number and quality of oocytes
- Positive effects of stimulants (drug attraction, euphoria) are increased during the follicular phase of the menstrual cycle
- Exogenous and increased luteal phase progesterone attenuate this effect
- Among pregnant, drug-abusing women, 86% of pregnancies are reported to be unintended

Healthy People 2020 Objectives
- Increase the percentage of women aged 15-44 years that adopt or continue use of the most effective methods of contraception
- Increase proportion of intended pregnancies

Site Specific Outcome
Increase the percentage of women using progestrone-only contraception by 50% within three months.

References