Insofar as there will always be a number of women who become exposed to a medication while pregnant, it is important to know if a medication affects fetuses or affects pregnant women differently. This can better be determined by testing the medication in a small number of pregnant women, than for medications to be used by many women during pregnancy without reliable information on their maternal and fetal effects.

IMPROVING RECRUITMENT AND RETENTION OF WOMEN

Researchers cite many reasons why recruitment of women fails, including patient noncompliance, lack of incentive to seek alternative therapies, poor access to health care, lack of transportation, lack of child care, and mistrust of medical systems. However, NIH requires that all funded studies include an outreach plan for recruiting women as participants.

STRATEGIES FOR RECRUITING AND RETAINING WOMEN IN A CLINICAL TRIAL

Address Logistical and Financial Needs

- Maintain extended and flexible clinic hours.
- Provide at-home follow-up for participants.
- Offer childcare and transportation or reimburse patients for these services.
- Reimburse patients for their time.
- Network with emergency rooms, state and county assistance offices, primary care givers, and mental health centers.
- Post bulletin board ads in beauty salons, laundromats, churches, and grocery stores.

Staff Your Team Right

- Often women investigators and educators can foster greater trust among female participants.
- Include women on your clinical trial staff, particularly women with the same ethnic or racial background as the target population.
- Sensitize staff to unique needs of women in clinical trials.

Involve the Patients

- Include women patients in designing the research and preparing study materials to be sure they meet their needs and expectations and are culturally and linguistically sensitive.
- Create a participant advisory board to give feedback on forms used, recruitment activities, study procedures, etc.
- Recruit patient volunteers to assist with daily tasks associated with running a trial.

Improve Communication

- Women with young children can be distracted and older women on medication may need clear information about what is required of them.
- Allow extra time to review the study's risks and benefits with female subjects.
- Inform participants about the study protocol, treatment, trial outcomes, and implications through meetings, newsletters, or other updates.
- Acknowledge the contributions of patients in ways that are meaningful to them (such as certificates of appreciation or recognition).

For more information on the National Drug Abuse Treatment Clinical Trials Network, visit the NIDA website at ***www.drugabuse.gov***

For information on other clinical trials, the National Institutes of Health (NIH) has created a website to help patients, family members, and the general public obtain information about government sponsored clinical trials. You may log on to ***www.Clinicaltrials.gov*** to learn about ongoing or new trials for all types of health related conditions.

National Institute on Drug Abuse
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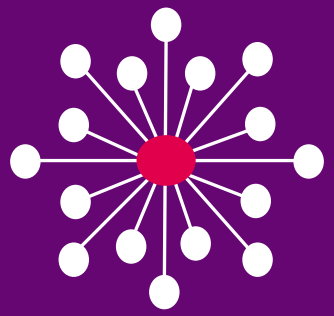
www.drugabuse.gov

NIDA NATIONAL INSTITUTE ON DRUG ABUSE

National Drug Abuse Treatment Clinical Trials Network

Successfully Including Women in Clinical Trials

A Guide for Researchers



National Institutes of Health
U.S. Department of Health and Human Services

WHY INCLUDE WOMEN IN A CLINICAL TRIAL?

Federal regulation and NIH policy require that women, including women of childbearing potential, be included in all NIH-supported biomedical and behavioral research involving human subjects unless there is a clear and compelling rationale that inclusion would harm the subjects or the purpose of the research.

Research has provided evidence of sex differences in many biological systems of the body. A woman's menstrual cycle can also significantly change the effect of drugs a woman takes. In addition to sex differences in biological systems, there are cultural expectations for both men and women which have an effect on behavior, sense of self, and relationships.

While these differences may make the design of a research study a greater challenge, the findings also have strong implications for the way that women should be treated. Simply put, research findings on men cannot be presumed to have any significance for women.

WHY CONDUCT GENDER ANALYSIS?

Including women is just the first step. Conducting a gender analysis of your data is the next. If sex differences in the way a treatment works are identified in early phases of research, then subsequent studies can be designed so that researchers can determine how the treatment should be used to benefit both men and women. In fact, any proposal submitted to NIH for a Phase III clinical trial must review the evidence to show whether or not clinically important sex/gender differences in the intervention effect are expected.

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THROUGH GENDER ANALYSIS, WE KNOW THAT:

- Women who smoke are 20-70% more likely to develop lung cancer than men who smoke the same number of cigarettes.
- 30-50% of women in drug abuse treatment suffer from comorbid Post Traumatic Stress Disorder. This rate is two to three times greater than for men in treatment.
- After consuming the same amount of alcohol, women have a higher blood alcohol content than men, even allowing for size differences, women metabolize alcohol differently.
- The same medication can cause different reactions and have different side effects in women and men — even common medications like antihistamines and antibiotics.
- During unprotected intercourse with an infected partner, women are ten times more likely than men to contract HIV.
- Women are more likely than men to be daily users of cocaine, heroin, sedatives, and barbiturates.
- Depression is two to three times more common in women than in men, in part because women's brains make less of the hormone serotonin.
- Women are more likely than men to terminate early from drug abuse treatment programs.
- Males and females relapse for different reasons.
- There are sex differences in HIV progression.

MEETING THE CHALLENGE

Researchers have traditionally avoided including women in clinical trials. In addition to concerns about the effect of gender differences and hormonal fluctuations during the menstrual cycle on study outcomes, they are worried about possible fetal exposure to drugs and difficulties recruiting women. However, these challenges are far outweighed by the importance of including women in our research and they are not insurmountable.

REDUCING THE RISK OF FETAL EXPOSURE

Between 1977 and 1993, the FDA prohibited the inclusion of women of childbearing age in the early phases of research studies that tested new medications unless the woman had a life-threatening disease. However, recent laws and court decisions suggest that women should have the right to make their own risk-benefit choices about their pregnancies and are entitled to know all the risks.

THREE WAYS TO MINIMIZE THE RISK OF FETAL EXPOSURE IN A CLINICAL TRIAL

1. When recruiting women for your study, remember that many women of childbearing age are unlikely to get pregnant — for instance, women using a reliable method of contraception, women whose partners have had vasectomies, and women who are not sexually active.
2. Include all available information regarding the potential risk of fetal toxicity and potential effects on fertility in the informed consent document and investigator's brochure. If no relevant information is available, the informed consent should explicitly note the potential for fetal risk.
3. Reduce the risk of fetal exposure through study design. By administering treatment during or immediately following a woman's menstrual period or after a pregnancy test or by counseling women in trials about the need to use reliable forms of contraception, the risk to fetuses can be avoided.