

⊙ Infertility

⊙ Summer 08

⊙ 4235

⊙ Learning Objectives

⊙ Explain factors that impair a couple's ability to conceive

⊙ Specify evaluations that may be performed when a couple seeks help for infertility

⊙ Explain the use of procedures and treatments that may aid a couple to conceive and carry a fetus to viability

⊙ Discuss the nurse's role in families needing care related to infertility

⊙ Concepts

⊙ Psychosocial

⊙ Communication

⊙ Role of the Nurse in Infertility care

⊙ Nurse often seen as the person who can answer questions and refer them to appropriate resources when they have problems conceiving

⊙ Infertility defined

⊙ Inability to conceive after 1 year of unprotected regular sexual intercourse

⊙ Also defined as involuntary inability to conceive at the time desired

⊙ Primary infertility

■ Never conceived

⊙ Secondary infertility

■ May have conceived before, but unable to conceive again

⊙ Rate has not increased, but more couples seeking help

⊙ Male Factors contributing to infertility

⊙ Abnormal sperm

■ Abnormal number, structure or function

■ Alterations d/t hormones, acute or chronic illness, infections, toxins, chemo or radiation therapy, drugs and alcohol

⊙ Abnormal erections

■ Reduces ability to deposit semen in upper vagina

- ⊙ Abnormal ejaculations
  - Retrograde or premature
- ⊙ Abnormal seminal fluid
  - Seminal fluid nourishes, protects and carries sperm into vagina, seminal fluid must be thin
- ⊙ Varicocele
  - Varicose vein on testicle - raises temperature
- ⊙ Cryptorchidism
  - Undescended testis



Female Factors contributing to infertility

- ⊙ Disorders of ovulation
  - Anovulation d/t problems in hypothalamus or pituitary gland
  - Failure of ovaries to respond to hormones
  - Stress, obesity, anorexia, systemic disease, endocrine problems
- ⊙ Abnormalities of fallopian tubes
  - Blocked because of STIs, adhesions from endometriosis & tubal or pelvic surgery, ovarian cysts
- ⊙ Abnormalities of cervix
  - Thick mucus
  - Scarring from past surgery
- ⊙ Endocrine abnormalities
  - Hypothyroidism and hyperthyroidism
  - Diabetes
- ⊙ Immunologic factors
  - Antibodies produced by woman causes sperm to clump

- ⊙ Evaluating Infertility
- ⊙ Start with simple and least expensive, move to complex and costly testing
- ⊙ Begin with thorough history and PE of both partners
- ⊙ Basic tests - many test for ovulation
  - Basal body temperature
  - Ovulation predictor kits
  - Hormone evaluations (thyroid, FSH, LH, estrogen, progesterone)
  - HSG
  - Ultrasound

- Endometrial biopsy
- Semen analysis

- ⊙ Infertility Therapy
- ⊙ Medications to improve semen quality, induce ovulation, prepare endometrium, reduce endometriosis
- ⊙ Ovulation induction
  - Clomiphene citrate (Clomid)
  - May result in multiple births
  - May cause ovarian hyperstimulation syndrome
    - Enlarged ovaries, fluid shift into abdominal cavity, results in ascites, pleural effusion, hypovolemia
- ⊙ Surgery
  - To correct tubal obstruction, release adhesions
  - To ligate varicocele
- ⊙ Therapeutic insemination & intrauterine insemination
- ⊙ Egg donation
- ⊙ Advanced reproductive techniques
  - IVF
  - Gift
  - Zift
- ⊙ Must monitor closely for multiple fetuses
- ⊙ Other options - adoption, surrogacy, remaining childless
- ⊙ Other meds
  - Insulin sensitizing agents
    - Metformin - to bring insulin levels back to normal
  - Gonadotropins
    - Stimulate ovulation
  - Bromocriptine (Parlodel)
    - Treats women with high prolactin level which inhibits ovulation
  - Danazol (Danocrine)
    - Treats endometriosis by causing atrophy of endometrium, resulting in amenorrhea
  - GnRH agonists and antagonists
    - Agonists - leuprolide (Lupron) used to treat endometriosis, stimulates FSH and LH to induce ovulation
    - Antagonists - reduces endometriosis, adjunct to drugs given to stimulate ovulation by suppressing LH and FSH

- ⊙ Seeking help for infertility
- ⊙ Must consider financial resources
- ⊙ Also consider ethical issues
- ⊙ Infertility treatment requires commitment of time, energy and money
- ⊙ Couples often have different reactions to treatment
  - Based on cost, difficulty of treatment, social, cultural and religious values, probability of success
  
- ⊙ Psychologic reactions to infertility
- ⊙ Shock
  - Couple does not anticipate problems conceiving
- ⊙ May feel
  - Guilt
  - Isolation
  - Depression
  - Stress in relationship
  - Threaten self images
  - Feel like failures
  - May withdraw from others
  
- ⊙ Nursing Care of the infertile couple
- ⊙ Meeting emotional needs huge part of care
- ⊙ Newly diagnosed clients still hopeful, long time infertility results in pessimistic outlook
- ⊙ Evaluate how infertility has affected relationships with each other
- ⊙ Ask about support systems
- ⊙ How is couple coping with stress of treatment?
- ⊙ Use a variety of communication techniques to encourage couple to explore feelings
- ⊙ Be nonjudgmental, accept their feelings
- ⊙ Discuss differences in ways men and women communicate
- ⊙ Reinforce positive coping skills, introduce new ones (relaxation, visualization, etc)
- ⊙ Explain procedures
- ⊙ Help couple to explore options
- ⊙ Refer to support groups (Resolve)
- ⊙ Reinforce positive attitudes, self image
- ⊙ Discourage smoking
- ⊙ Encourage well balanced diet, exercise, folic acid, health maintenance and disease prevention