Preconception counseling in congenital heart disease.

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Introduction

Preconception Counseling – Why

Morbidity and mortality in CHD

- approaches 50% in women w/ high risk lesion

Unintended Pregnancies

- Unintended pregnancy rate in U.S. approaches 40% annually;

- **Congenital Heart Disease (CHD)**
  - Degree of unintended pregnancies is not known
  - Mean age of first sexual intercourse 17.7 (12-32)*
    - In general US population: 15 yrs (girls: 17; boys 16)

Preconception Counseling – Why

- Internationally, *preconception care* is recognized as a critical component of maternal and child health promotion
- In CHD, preconception counseling is now recognized as vital to successful pregnancy outcomes
  - No specific guidelines of who, when, what….

Preconception Counseling

What
Who
When
How

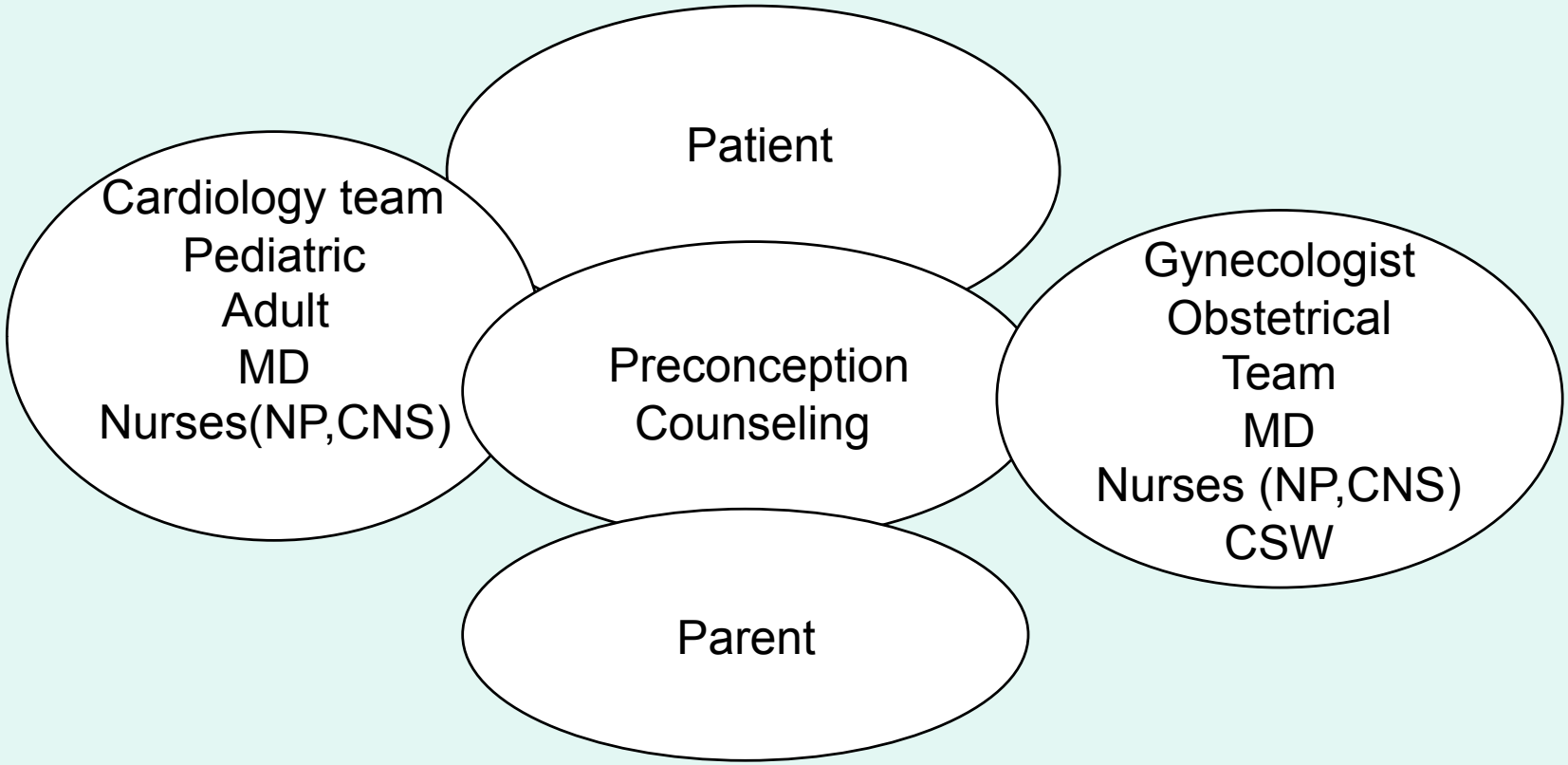
Preconception Care: What

- Interventions aimed at identifying and modifying, medical, behavioral, and social risks to a woman's health or pregnancy outcome through prevention and management.

- Is the means by which health care providers inform the female with congenital heart disease about potential and actual risks of pregnancy for both the mother and her fetus

Preconception Counseling: Who

It takes a village!



Preconception counseling: HOW

Preconception counseling: HOW

Through a formalized Preconception Counseling program

Components of a preconception counseling program

Assessment: determine pregnancy risk profile

Life time education and counseling

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Reproductive Life Plan

Components of a preconception counseling program

Assessment: Determine risk profile of female w/ CHD

- Family history and genetic risk
- Primary Cardiac Defect:
- Surgical intervention:
  - Palliative
  - Corrective
    - Integrity of prosthetic valves
    - Patency of baffles/conduits
- Medications (e.g. ace inhibitors, anticoagulants)
- Co-morbidities (e.g diabetes,-morbidities (eg diabetes, thyroid)
- Presence of devices: pacemaker, internal defibrillator
- Residual and/or sequelae associated w/th lesion/surgery
  - Cyanosis
  - Pulmonary hypertention
  - Obstruction
  - Arrhythmias
  - Systemic hypertension
  - Ventricular dysfunction

Components of a preconception counseling program

Determine risk profile of female w/ CHD (cont)

- Social assessment
  - Family/spousal support
  - Financial security
  - Access to care: Insurance, tertiary center to manage HR pregnancy
- Health risk behaviors
  - Smoking
  - Drugs
  - Alcohol
  - History of unplanned pregnancies
- Mental health assessment
  - Maturity
  - Cognitive deficit
  - Depression/anxiety disorders

Components of a preconception counseling program (cont)

Determine risk profile of female w/ CHD (cont)

- **Gynecologic history**
  - **Menarche**
  - **Hx of dysfunctional bleeding**
  - **Contraceptive history – type and compliance**
- **Past pregnancy history**
  - **Review old records for obstetrical complications**
  - **Determine cause of prior adverse events**
  - **Assess behavioral risk associated w/ prior pregnancies**

Components of a preconception counseling program

Development of a "Reproductive life plan" (RLP)

- A life time plan developed between patient and provider
- Initiated at onset of reproductive life cycle and continues throughout childbearing years
- Addresses
  - Pregnancy – importance of planned pregnancies
  - Contraception – options

Components of a preconception counseling program

Reproductive life plan (RLP)

- Personal goals about having/not having children
- Assess fears, concerns, misconceptions
- Risk profile relative to heart defect, medications, need for interventions
- Addresses “at risk behaviors” i.e. smoking, drugs; offer referral resources

Preconception Counseling Who and When

- Females of all reproductive age
- Women considering pregnancy
- Women at high risk for adverse pregnancy outcomes

Preconception counseling: when

Milestones of opportunities

Preconception counseling: adolescents

- Opportunities to begin dialogue
  - Menarche
  - the "first boyfriend
- Make it known that issues like sex, contraception and pregnancy are OK
- Don't put teen off when questions comes up
- Parents: talk to them, how comfortable are they w/ talking to teens

Preconception counseling: For adolescents

- Initial visit: Meet with parent and teen
  - To introduce topic RLP "age appropriate"
  - To obtain parental consent

- Meet with teen alone at <u>each visit</u> : explore
  - Understanding about pregnancy & heart defect
  - Desire for pregnancy
  - Sexual activity
  - Contraception
    - Available resources – "contraceptive clinic"
    - Referrals

Preconception counseling: The young adult

- **New patient visit**
  - Assess level of understanding of pregnancy: CHD, meds
  - Develop RLP
  - Begin teaching
    - Pregnancy planning
    - Contraception

- **Every visit – annually**
  - Review and update risk profile & RLP
  - Contraception
  - Adolescents: look for milestone
- **Life milestones**
  - Engagements
  - Marriage
    - Review reproductive life plan but with partner

Preconception counseling:

- For couple desiring to become pregnant
  - Meet 6-12 months prior to conception
  - Review risk profile
  - Schedule
    - Diagnostic testing
    - Medical Interventions
    - Changes in medication

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Congenital Heart Disease & Pregnancy

Pregnancy Planning : Important steps to ensure a healthy mom and baby.

When: look for other opportunities

- Teen camps
- Parent conferences
- Patient conferences

SUMMARY
Preconception counseling

- **When**: all the time; look for milestones
- **Who:** Everyone
  - Patient, Parent, Spouse
  - Teams: Cardiology, Gynecologist, Obstetrics
- **What**: Reproductive life plan
  - Risk assessment
  - Education and counseling

WHY

Reduce maternal-fetal morbidity and mortality

To Ensure Happy Families: