“The Well Woman Visit”
Is It Possible to Work Smarter to Achieve Better Pregnancy Outcomes?

Reframing the Prevention Paradigm

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Objectives:

• Link major threats to women’s health with major threats to pregnancy outcomes
• Compare the current paradigm for care and explain the rationale for changing it.
• Develop strategies to impact your own patient care to “work smarter not harder”
Incidence of Adverse Pregnancy Outcomes, 2002

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneous abortion</td>
<td>20%</td>
</tr>
<tr>
<td>Infant Mortality</td>
<td>7.0/1000 live births</td>
</tr>
<tr>
<td>Fetal Mortality</td>
<td>6.6/1000 live births plus fetal deaths (2000)</td>
</tr>
<tr>
<td>Major birth defects</td>
<td>3.3%</td>
</tr>
<tr>
<td>Low Birth Weight</td>
<td>7.9%</td>
</tr>
<tr>
<td>Preterm Delivery</td>
<td>12.3%</td>
</tr>
<tr>
<td>Complications of pregnancy</td>
<td>30.7%</td>
</tr>
<tr>
<td>Unintended pregnancies</td>
<td>49%</td>
</tr>
<tr>
<td>Unintended births</td>
<td>31%</td>
</tr>
</tbody>
</table>
INTERNATIONAL COMPARISONS OF INFANT MORTALITY RATES 2002

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hong Kong</td>
<td>2.3</td>
</tr>
<tr>
<td>2</td>
<td>Sweden</td>
<td>2.8</td>
</tr>
<tr>
<td>10</td>
<td>Czech Republic</td>
<td>4.2</td>
</tr>
<tr>
<td>17</td>
<td>Portugal</td>
<td>5.0</td>
</tr>
<tr>
<td>27</td>
<td>Cuba</td>
<td>6.5</td>
</tr>
<tr>
<td>28</td>
<td>United States</td>
<td>7.0</td>
</tr>
</tbody>
</table>

HEALTHY PEOPLE 2010

- Reduce infant deaths to 4.5 (per 1000 live births) **Illinois 7.4 (2002)**
- Reduce fetal deaths to no more than 4.1 (per 1,000 live births plus fetal deaths) **Illinois 6.3 (2003)**
- Reduce preterm births to no more than 7.6% **Illinois 13.1 (2004)**

Selected Reproductive Outcomes

**Illinois, 2004**

- Spontaneous Abortion 20.0%
- Infant Mortality Rate 7.4%* (7.0)
- Low Birth Weight Rate 8.4% (7.8)
- Preterm Birth Rate 13.1% (12.1)
- Congenital Anomalies 3-6%

* 2002 Data

Source: Peristats (MOD)
IMPORTANCE OF FIRST TRIMESTER ON PREGNANCY OUTCOMES

HUMAN ORGANOGENESIS

17-56 DAYS after conception

(17 = 3 days after first missed menses)
In obstetrics, most of our outcomes are determined before we ever meet our patients.

LEADING CAUSES OF MORTALITY FOR WOMEN
Exami...
1. Heart disease
2. Cerebral Vascular Disease
3. Lung cancer
4. COPD
5. Breast cancer
6. Diabetes
7. Colorectal cancer

Examining the Evidence of Link between Women’s Health Status and Reproductive Outcomes

Starting with the latest “epidemic”...
Overweight / Obesity in Developing Countries and the USA (Women 15-49 years)


NUTRITIONAL STATUS: Obesity

- Obesity and Women’s Health:
  - Diabetes
  - Hypertension
  - Cardiovascular disease
  - Disabilities

- Maternal Obesity and pregnancy complications:
  - Glucose intolerance of pregnancy
  - Pregnancy induced hypertension
  - Thrombophlebitis
  - Neural tube defects
  - Prematurity

Preterm Births and Maternal Pre-pregnancy BMI

N = 56,857 Naeye, RL; AJCN, 1990
NUTRITIONAL STATUS: Specific nutrients

- Inadequate folic acid intake and Women’s Health:
  - Heart disease
  - ? Colon cancer
  - ? Breast cancer
  - ? Some forms of dementia

- Inadequate maternal folic acid intake and reproductive outcomes:
  - Increased incidence of neural tube defects
  - Increased incidence of other birth defects
  - Some anemias—mother and infant

NUTRITIONAL STATUS: Underweight

- Underweight and Women’s Health:
  - Risk of osteoporosis in later life
  - Fragile health status
  - ? Distorted body image

- Underweight and Reproductive Outcomes:
  - Infertility
  - Low birth weight and prematurity

Other examples of the link...
SUBSTANCE USE

• Alcohol Use: Women’s Health
  – Risk for MV and other accidents
  – Risk for unintended pregnancy
  – Risk for addiction
  – Risk for nutritional depletions and inadequacies

• Alcohol Use: Reproductive Health
  – Increased risk of delayed fertility
  – Increased SABs
  – FAS (only occurs with use days 17-56 of gestation)
  – FAE

• Tobacco Use and Women’s Health:
  – Implicated in most of the leading causes of death for women:
    • Heart disease (1)
    • Stroke (2)
    • Lung cancer (3)
    • Lung disease (4)

• Tobacco Use and Reproductive Health:
  – Leading preventable cause of infant mortality
  – Preventable cause of low birth weight and prematurity
  – Associated with placental abnormalities

PERIODONTAL DISEASE

• Periodontal disease Women’s Health:
  – Heart disease
  – Stroke
  – Serious threat to women with diabetes, respiratory diseases, osteoporosis

• Periodontal disease and Reproductive Health:
  – Preventable cause of prematurity
WORKING SMARTER TO MAKE A DIFFERENCE

Changing the paradigm of prevention

Dominant Perinatal Prevention Paradigm

- Features categorical focus with little integration with woman’s preexisting care or with her future health needs
- Initiated at first prenatal visit with
  - Risk assessment
  - Health promotion and disease prevention education
  - Prescription for prenatal vitamins
- Ends with the postpartum visit (if there even is one)

Current Approach to Reproductive Health Care
Features of Current Approach

• Episodic
• Disjointed
• Inefficient
• Often ineffective. . .

...AND IT JUST DOESN’T MAKE SENSE

“As attractive and relatively inexpensive as prenatal care is, a medical model directed at a 6-8 month interval in a woman’s life cannot erase the influence of years of social, economic, [physical] and emotional distress and hardship.”


Integrated care incorporates linkages between childbearing and women’s health during the life span—it includes promoting health, preventing disease and managing chronic illness

Walker and Tinkle, 1995
Features of an Integrative Model

- Builds on a continuum
- Emphasis on health promotion throughout the lifespan
- Emphasis on primary and secondary disease prevention
- Emphasis on woman rather than her reproductive status

What does “integrated woman’s reproductive health care” look like?

An integrated continuum model

- Pregnancy/Well-Woman/Family Planning
- Well-Woman/Family planning/Preconceptional
- Childbirth/Family Planning/Well-Woman
- Postpartum/Family Planning/Well-Woman
- menarche
Examples of Women’s Health Risks Identifiable Before Pregnancy
- Anemias and hemoglobinopathies
- Chronic disease (hypothyroidism, hypertension, glucose intolerance, PKU, thromboembolic disease, etc)
- Unintended pregnancy
- Depression, social stresses, partner violence
- BMI deviations from norm (over and under)
- Smoking, alcohol or other drug exposures
- Immune status
- Exposure to teratogenic drugs

Examples of Women’s Health Risks Identifiable from a Previous Pregnancy
- Anemias and hemoglobinopathies
- Glucose intolerance
- Hypertensive disorders
- Thromboembolic disease
- Depression, Domestic violence
- Preexisting obesity/Excessive weight gain
- Smoking, alcohol or other drug exposures
- Immune status
- Repeat of poor pregnancy outcome
- Others ????

An integrated continuum model

Pregnancy/Well-Woman/Family Planning

Well-Woman/Family planning/Preconceptional

Childbirth/Family Planning/Well-Woman

Postpartum/Family Planning/Well-Woman

menarche
EXAMPLES OF HEALTH PROMOTION OPPORTUNITIES THAT WILL BENEFIT WOMEN AND ANY FUTURE PREGNANCIES THEY MAY HAVE:

- Does every woman (including the 13 year old and the 45 year old) leave your unit/practice with a clear message of the benefits of exogenous folic acid? And a clear message to start taking NOW?

What about clear messages on:
- Intentions regarding becoming pregnant
- Nutritional status (are you calculating and explaining BMIs on every woman at every visit—and offering meaningful strategies to impact?)
- Tobacco cessation
- Other substance use and exposures
- Exercise habits
- Calcium intake
- Periodontal disease
- STI Risks
Tobacco Use

- Are you incorporating evidence based strategies in your practice to help every woman who smokes or who quit recently leave your unit/practice with:
  - a clear message of the benefits of smoking cessation
  - a clear strategy to promote successful cessation?
  - a clear plan for maintaining cessation?

Other Substance Use

- In your practice/community is equal energy applied to every woman, irrespective of gestational status, about substance exposures?
- Or, is the energy great in pregnancy and greatly diminished the moment the pregnancy ends?

HOW ARE WE DOING???
If we are to make a difference we must shift the paradigm from rescue to prevention

• Opportunities for prevention exist
• Missed opportunities abound
• There is evidence of backward progress in public awareness

Women and Preventive Services

• 1996 report (Wynn & Yu)
  – 50% of women received preventive services every year
• 2001 report (NCHS)
  Women ages 15-44 average 3.8 medical visits annually

Points of Assessment During Routine GYN Care

• Prescription drug use 30%
• Medical history 15%
• OTC drug use 10%
• Domestic violence 10%
• Nutritional assessment 9%
• Dietary supplements 3%

Bernstein, et. al, 2000
More Evidence of Missed Opportunities

• In 2005 KFF report:
  – Just over 50% of women surveyed had talked to a health care professional in the last 3 years about diet, exercise or nutrition
  – Fewer than 50% had talked about calcium intake (43%), smoking (33%) and alcohol (20%)
  – Less than 50% of had talked to a health care three years about smoking

• Only 31% of women ages 18-44 had talked with a provider about their sexual history in the preceding three years.
• Discussion of more specific topics was even more rare:
  – STDs (28%)
  – HIV/AIDS (31%)
  – Emergency contraception (14%)
  – Domestic and dating violence (12%)

Is there anything you can do to prevent birth defects? (based on women who believe there is something that can be done)

<table>
<thead>
<tr>
<th></th>
<th>’95</th>
<th>’02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoid alcohol</td>
<td>73%</td>
<td>65%</td>
</tr>
<tr>
<td>Avoid tobacco</td>
<td>63%</td>
<td>60%</td>
</tr>
<tr>
<td>Take folic acid</td>
<td>1%</td>
<td>6%</td>
</tr>
<tr>
<td>Proper diet</td>
<td>33%</td>
<td>31%</td>
</tr>
<tr>
<td>PNV/multivits</td>
<td>12%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Number in sample 1786 1832
MARCH OF DIMES DATA 1995, 2002
Who on the health care team is the expert on health promotion and disease prevention?

Some Thoughts on Changing the Prevention Paradigm

Can we really do More with Less time?

Absolutely: if we are creative and focused
Promoting Integrated Well Woman Services

• Avoid creating new silos such as promoting another categorical service: “the [routine] preconception visit”
• Overcome boundaries of existing silos
  – Family planning care
  – Pregnancy care
  – Postpartum care
  – STI care
  – Chronic disease care
  – Acute disease care

Promoting Integrated Well Woman Services

• Promote the “well woman visit” (to replace the “annual visit”)
  – Use the well established and well respected “well child visit” as the model
  – Expectation of well child visit includes extension beyond the traditional medical model, a focus on prevention, an assessment of milestones and anticipatory guidance.

Promoting Integrated Well Woman Services

• Expect the well woman visit to:
  – Address nutritional health
    • BMI
    • Nutrient consumption
  – Address substance use
  – Include an individually constructed “wellness prescription”
  – Introduce/update/reinforce/address “reproductive life plan”
Encourage women (and men) to become deliberate about conception decisions
• Reproductive Life Plan
• Social Marketing

Example of a “Reproductive Life Plan” Approach
1. Do you hope to have any (more) children?
2. How many children do you hope to have?
3. How long do you plan to wait until you (next) become pregnant?
4. How much space do you plan to have between your pregnancies?
5. What do you plan to do until you are ready to become pregnant?
6. What can I do today to help you achieve your plan?
Example of Social Marketing
Message to Impact
Unintendedness

If you choose to have sex without using a method of birth control you have made a decision to become pregnant

Use Existing Encounters Wisely

Example: Woman presents for a pregnancy test

- If no desire for conception, provide contraceptive counseling, agreed upon contraceptive method and education/prescription for EC
- If desires conception, thoroughly assess preconceptional health status and refer for intensive services, if needed

Exploit the opportunities of technology

- Test innovations to facilitate integrated care
  - Use of computer to track health profile across life span with built in alerts regarding reproductive risks
  - Use of computerized prompts to guide clinician to appropriate routine counseling based on woman’s age, health profile and reproductive life plan
But Don’t Wait for Technology to Catch Up With Need

• Empower and engage women by having them carry their own health profile cards and expecting their providers across all silos to address and update

Promoting Integrated Care by Increasing Utilization of Postpartum Visit

• Do active marketing/outreach for postpartum visit
• At postpartum visit
  – Address reproductive health plan
  – Address health risks identified in pregnancy
  – Address interconceptional issues, especially if a poor pregnancy outcome

Why We Need to Do It Differently

• Quality improvement efforts generally not focused on improving postpartum visit rates, rather on prenatal care visits
• Rate for postpartum check-ups in 2003
  • Commercial plans: 80.3 (74.1% in 2000)
  • Medicaid: 55.3 (49.8% in 2000)
Examine Our Current Clinic Processes for “Roadblocks to Integrated Care”

• Silo organization (without shared records and shared goals)
• Restrictive scheduling system
• Staff who insist “not my job”
• Clinical tools that undermine integrated care

Crossing Silos to Promote Higher Levels of Health

• Authorize WIC to include interconceptional messages in all counseling to postpartum women
• Expand expectations of well baby visits to promote advantages of interconceptional spacing; to promote targeted interconceptional care for mothers of special needs infants, etc
• Engage pharmacists in more active “outreach” to women with known risks for poor pregnancy outcomes (e.g. women with diabetes, women taking teratogenic drugs, etc)
The Benefits of Higher Levels of Women’s Wellness

- It is very likely that we will achieve better preconceptional health by addressing women’s wellness irrespective of reproductive plans
- Higher levels of women’s wellness will result in healthier pregnancy outcomes
- Higher levels of women’s wellness will result in healthier women across the lifespan

Well-Women’s Care for Women of Reproductive Age

- Promotion of Lifelong Wellness
- Promotion of Healthy Future Planned Pregnancies
- Promotion of Healthy Future Offspring

Challenge you to move to an integrated system of care for your area of patient interactions:

What are three changes you can make?