Better late than never: mitigating the risks associated late entry into prenatal care

Vanessa Poliquin, MD MSc FRCSC
Reproductive Infectious Diseases
Assistant Professor, Dept. Obstetrics, Gynaecology & Reproductive Sciences, University of Manitoba
Faculty/Presenter Disclosure

* **Faculty:** Vanessa Poliquin

* **Relationships with commercial interests:**
  * None
Objectives

* List appropriate testing to order at time of late entry into prenatal care
* Identify maternal conditions that should prompt consideration for early delivery and/or referral to a tertiary care centre
* Recognize appropriate STBBI testing and management for the third trimester of pregnancy
What is adequate prenatal care?

- Controversial
- No good universal definition
- Current SOGC recommendations:
  - Q4-6 weeks <28-30 weeks
  - Q2-3 weeks 30-36 weeks
  - Q1 week >36 weeks
- “late” entry = initiation of care later than the first trimester

Who isn’t receiving adequate prenatal care in Manitoba and why?

Distribution of prenatal care in Manitoba (2004-2009)
(data extracted from Haeman et al.)

- 11.5% of deliveries in Manitoba have inadequate prenatal care.

Factors Associated with Inadequate Prenatal Care

* Northern > southern rural
* Younger women (esp. adolescents)
* Low SES and receiving social assistance
* Single parent
* Parity > 4
* Substance use and abuse*

What are the risks associated with late entry into prenatal care?

- Many confounders
- Causality is difficult to establish
- Poor pregnancy & neonatal outcomes
  - >3x risk of preterm birth
  - 2x risk of stillbirth and early neonatal death
  - 1.5x risk of late neonatal death and infant death

They’ve made it in… now what?

* Will differ based on:
  * When a patient presents
  * Why a patient was late to present
  * What barriers to care are ongoing

- Common sense
- Safe space
- Opportunistic care
- Harm Reduction
>80% of women with inadequate PN care felt that “Doctors help to have a healthy baby”

- Behavioural and belief factors were associated with failure to seek care:
  - e.g. fear of being “reported”
  - e.g. pregnancy locus of control

- **Non-judgemental approach**
- Avoid assigning or insinuating blame
- Try to explore reasons for not seeking PN care
- Emphasize patient confidentiality (explain limitations)

### Time Sensitive PN Management

<table>
<thead>
<tr>
<th>Time Sensitive PN Management</th>
<th>Typical Timing Window</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision to terminate</td>
<td>typically &lt;20 wk</td>
</tr>
<tr>
<td>Folic acid supplementation to prevent NTD</td>
<td>window &lt;6-8 wk</td>
</tr>
<tr>
<td>ASA and progesterone for prevention of adverse pregnancy outcomes in at-risk pregnancies</td>
<td>window 1\textsuperscript{st} and early 2\textsuperscript{nd} trimester</td>
</tr>
<tr>
<td>Nuchal translucency (AMA)</td>
<td>window 11-13+6 wk</td>
</tr>
<tr>
<td>Placement of elective cerclage</td>
<td>Typically &lt;16 weeks</td>
</tr>
</tbody>
</table>
Opportunistic care

You may delay, but time will not, and lost time is never found again.
– Benjamin Franklin
Keep calm and start at the beginning: first prenatal history

| Estimated date of delivery | Last menstrual period  
|                            | Symphysis-fundal height |
| Pregnancy Risk Factors     | Prior pregnancies (C-section, preE, gDM, PTB, PPH)  
|                            | Past medical and surgical history |
| Current Pregnancy Complications | Blood pressure and symptoms of gHTN  
|                                | Blood glucose and signs of macrosomia |
| Risk factors for infections | STBBI |
|                            | Group B strep, history of UTI, vaginitis, HSV |
| Substance use and abuse     | Delineate type, quantity, opportunities for harm reduction |
Tailored physical exam

* Height, weight, BMI (ask about pre-pregnancy weight)
* Blood pressure
* Cardiac and pulmonary exams
* Symphysis fundal height
* Fetal Heart Rate
* ??? Pelvic exam – use clinical judgement prior to knowing the location of the placenta
Changing gears: risk reduction because harm reduction

- Early PN care → implement management to avoid adverse pregnancy outcomes
- Late PN care → implement management to minimize the harm of adverse pregnancy outcomes
If you were on an island and could only order one investigation…

**Ultrasound!!!**

**Early Prenatal Care**
- Number of fetuses and zygosity
- Detailed anatomy
- Gestational age (+/- 10d)
- Placental location
- Cord insertion
- Cervical length
- Uterine artery dopples

**Late Prenatal Care**
- Number of fetuses
- Gestational age (+/- 2-3 weeks)
- Placental location
- Fetal position
- Fetal growth and well-being

**Critical investigation** → refer to Fetal Assessment or U/S Dept. Use strategies to facilitate access.
Gestational Hypertension

Early Pregnancy

- Screen for risk factors
- Counsel about ASA 161mg od
- Uterine artery dopplers
- Baseline bloodwork

Late Pregnancy

- Treat hypertension
- Ask about symptoms of pre-eclampsia
- Bloodwork (Uric acid, Cr, Liver enzymes, Protein:Cr ratio, CBC) to diagnose pre-eclampsia
- Refer to fetal assessment
- Early induction

Workup is critical to rule-out preE. Investigate on site → consider admission for work-up
Gestational Diabetes

Early Pregnancy

* Counselling
  * ideal weight gain
  * Diet
  * exercise
* Screening for non-gestational DM at first visit
* Early screen for gestational DM

Late Pregnancy

* Identify gDM
* Urgent implementation of sugar control
* Identification of macrosomia → ultrasound
* Identification of complications of DM (HONK, DKA etc.)
* Early induction (38-40 weeks)

Get creative about your 50g OGCT. Don’t wait, Rx supplies for accuchecks if high suspicion.
STBBI screening

Early Pregnancy

* Prenatal panel
* Hep C antibody
* GC/Chlamydia
* Ask about a history of HSV
* Repeat screening at 28 weeks

Late Pregnancy

* Point of care testing \(\rightarrow\) HIV
* See-and-treat on site
  * Cervicitis
  * Exposures
  * Genital ulcer
* +/- Start HSV prophylaxis if Hx
* Repeat STBBI testing (@ delivery)

Manage opportunistically and empirically, if appropriate.
Rh-negative mothers receive Rh immunoglobulin (WinRho) at 28 weeks, 40 weeks and at signs of antepartum hemorrhage.

- Check type+ screen antibodies → if positive, that ship has sailed...
- Even at delivery is not too late to given Rh-immunoglobulin if anti-D antibodies are still negative.
Immunizations

* Point-of-care vaccination
* Recommended to all pregnant women:
  * Influenza (any gestational age during influenza season)
  * Tdap (recommended between 20-32 weeks)
Communicating plans for ongoing prenatal care

- Instructions on recognizing labour and signs of adverse pregnancy outcomes (abruption, PTL, PPROM, decreased fetal movement etc.)
- Identify an obstetrical unit to present for delivery
- Troubleshoot around transport to obstetrical unit
- Communicate additional appointments directly:
  - Appointment with the delivering physician
  - Ultrasound or fetal assessment
  - Any additional referrals or tests
  - Follow-up appointment
Questions?