

Promoting Perinatal HIV Care Coordination: Inside Your Program and Beyond Part A, 4041

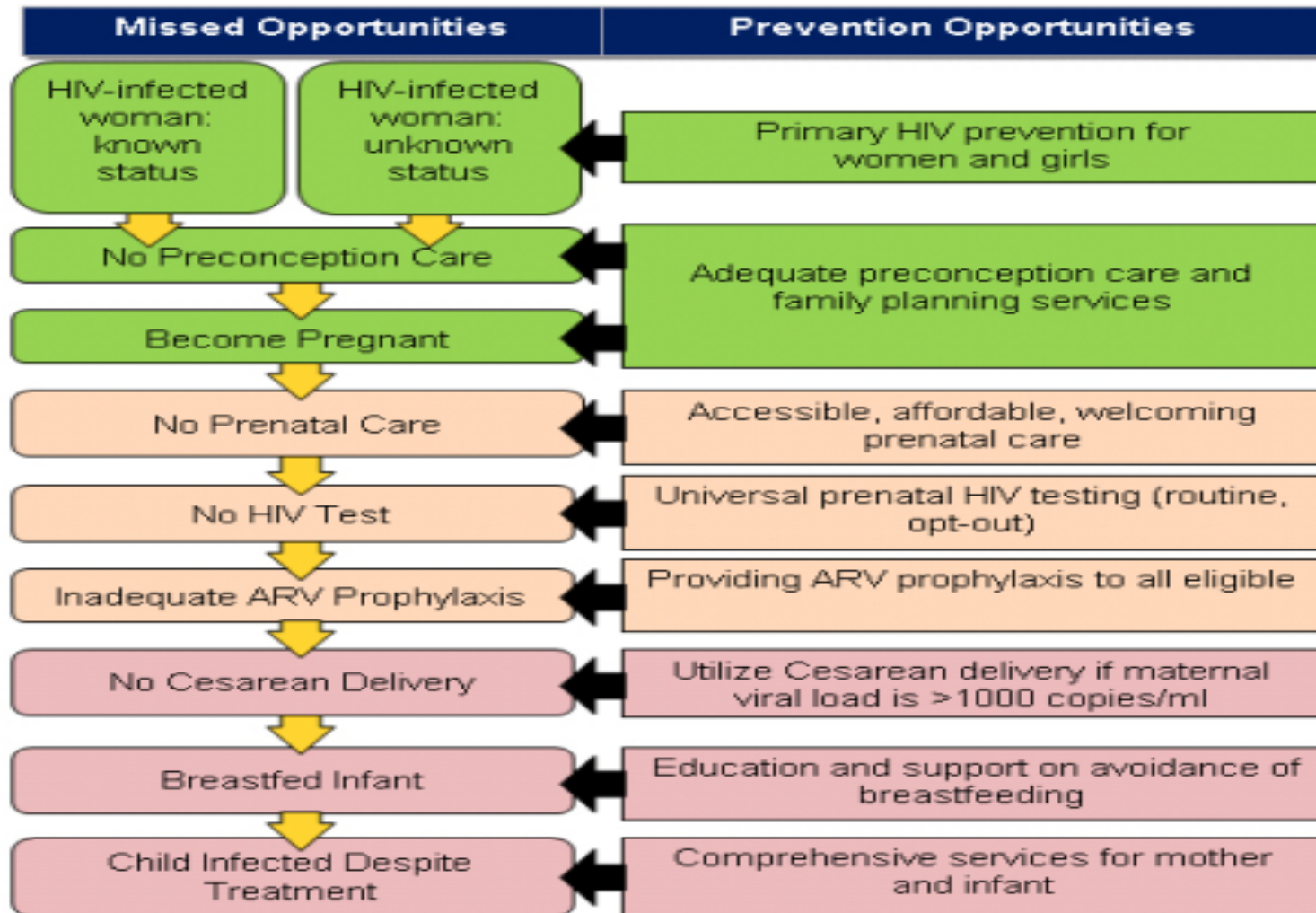
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Objectives

1. Highlight gaps in the perinatal HIV prevention cascade, including post-partum retention in care.
2. Discuss individualized care coordination and treatment strategies for HIV-infected pregnant woman and their infants.
3. Illustrate the role of perinatal HIV service coordination within Ryan White Networks with the goal of elimination of perinatal HIV transmission among Ryan White Part B, C and D and public health partners.

Perinatal HIV Prevention Cascade



DHHS Perinatal Guidelines

Panel on Treatment of HIV-Infected Pregnant Women and Prevention of Perinatal Transmission. Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-1-Infected Women for Maternal Health and Interventions to Reduce Perinatal HIV Transmission in the United States.

Available at

<http://aidsinfo.nih.gov/contentfiles/lvguidelines/PerinatalGL.pdf>.

Approach to the HIV-infected Patient that is Pregnant

- Assume that any female of child-bearing age has the potential to become pregnant until proven otherwise
 - Contraception
 - Initiating antiretroviral therapy prior to conception when possible with goal of viral suppression
 - Serodiscordant couples
- All HIV-infected women that are pregnant should be on antiretroviral (ARV) therapy during pregnancy with goal of viral suppression (Evidence level AI)

Rating of Recommendations: A = Strong; B = Moderate; C = Optional
Rating of Evidence: I = One or more randomized trials with clinical outcomes and/or validated laboratory endpoints; II = One or more well-designed, nonrandomized trials or observational cohort studies with long-term clinical outcomes; III = Expert opinion

Monitoring During Pregnancy

- Screening for sexually transmitted diseases
- Screening for Hepatitis B/C
- If initiating or changing ARV therapy:
 - Viral load 2-4 weeks after initiation (AI)
 - Monthly until undetectable (BI)
 - At least every 3 months during gestation (BIII)
- HIV resistance testing
- Glucose resistance testing 24-48 weeks gestation (All)
- Early ultrasound to confirm gestational age (AIII)
- At initial visit and at least every trimester:
 - Viral load
 - CD4 Lymphocyte count(AI, BIII)

Delivery

- If viral load is ≤ 1000 copies/mL of blood near time of delivery
 - No difference in risk for transmission of HIV in vaginal vs. caesarian section
 - No IV AZT intrapartum needed
- If viral load is >1000 copies/mL of blood or unknown near time of delivery
 - IV AZT infusion intrapartum for mother
 - Scheduled caesarian section at 38 weeks gestation
- If HIV status unknown at delivery
 - Rapid HIV testing
 - IV AZT infusion
 - Rapid initiation of ARV therapy for mom and infant pending testing results

Townsend, AIDS 2014

Immediate Postpartum Care

- Mother

- Linkage to care if new diagnosis (All)
- Clear plan for ARV therapy, supportive services, ideally prior to delivery (All)
- Breastfeeding not recommended in United States (All)

- Infant

- Zidovudine within 6-12 hours for all exposed infants for 6 weeks (All)
- Addition of nevirapine x 3 doses in first week of life in setting of suboptimal suppression, or no therapy

Bluegrass Care Clinic (BCC)

- Established in 1990
- Housed at the University of Kentucky in Lexington, KY
- Serves over 1400 patients primarily from Eastern and Central Kentucky
- Recipients of Ryan White Part B, C, D and F
- In our clinic: HIV care (adult and pediatric), primary care, medical case management, mental health services, pharmacy support, nutrition, HIV testing services
- At the institution, but not necessarily at our clinic: Dental, Ophthalmology, High risk Obstetrics, General pediatrics including neonatal intensive care
- Continuing HIV education

Bluegrass Care Clinic Referral Process

- Outpatient

- Patient Service Coordinator (PSC) Contacted
- Initial Intake
 - PSC and Medical Case Manager
 - Screening labs
- Medical Provider Appointment

- Inpatient

- Inpatient infectious disease team contacted for consultation
- Team notifies PSC and medical case managers of new patient

Perinatal Care at BCC

- Early linkage to medical provider, nutrition
 - Initiation of ARV as soon as possible
 - Referral to Maternal-Fetal Medicine clinic (High Risk Obstetrics)
 - Early communication with Nursery and Pediatric HIV staff
 - Transition support in post-natal period
- Medical Case Management
 - Drug assistance
 - Prevention services
 - Referrals to Women Infant and Children (WIC) services
 - Housing support
 - Transportation
 - Mental Health referrals
 - Addiction services

Case-Based Format

- 3 unique cases from the Case Files of Bluegrass Care Clinic
- Focus on opportunities for care linkage, case management, care coordination
- Maximize resources available in the context of your organization

Case 1 U.K.

U. K. is a 34 year old African Female from the Democratic Republic of Congo

- Diagnosed with AIDS in 2010 but never established care
- Referred to our clinic as a “new diagnosis” by a private Ob/Gyn in 2015; referral placed at 7PM on Friday
- Father of the baby is in France; unable to contact
- Entire family killed in armed conflict in Africa; raped while in a refugee camp prior to moving to United States in 2010
- One previous pregnancy in 2005, healthy; delivered in Ethiopia
- Proficient in English; declines interpretation services, but may misunderstand some idioms

U.K. Continued

- Medical Case management/medical intake on the following Monday
- Tearful about diagnosis, but willing to “do anything to help my baby”
- Living in stable permanent housing in Lexington, KY
- No other known medical problems
- Initiated on tenofovir, emtricitabine and boosted atazanavir in addition to prenatal vitamin
- Initial CD4 88 cells/ μ L blood; viral load 38,000 copies/mL
- 6 weeks later: Viral load \sim 100 copies/mL

U.K. Continued-8 Months Later

- Day before Thanksgiving; you are in a rural WV hotel with plans to celebrate Thanksgiving the next day with your in-laws
- You check your email around 3PM while waiting for your mother-in-law to get off work and note an email from U.K.'s case manager regarding labs
- U.K. is currently 38 weeks pregnant. Her viral load has remained ~100 copies/mL throughout her pregnancy. She is hopeful for a vaginal delivery. Reports adherence to medications at each visit.

U.K. Continued

- During her second trimester, she briefly planned to return to Africa to settle some “family business.” She was advised to postpone this trip until well after delivery by both Maternal Fetal Medicine and our clinic.
- Her pregnancy has been otherwise uneventful. At a recent visit, she mentioned: “I have someone in Africa praying my HIV away.”
- She worries that if she does not breastfeed her infant, “everyone will know that I have HIV.”

U.K. Continued

- U.K. has had labs obtained this week in preparation for delivery
 - CD4 220 cells/ μ L blood
 - Viral load 14, 000 copies/mL blood
- Pediatric HIV and Nursery were informed earlier in the week that she will soon deliver
- What are your next steps?
- What potential opportunities/missed opportunities for care linkage exist?

U.K. Resolution

- Contacted Obstetrician on-call and Pediatric ID immediately via phone
- Contacted medical case manager at clinic; patient contacted and advised to present to Obstetrics Triage immediately
- U.K. admitted to Labor and Delivery for scheduled caesarian delivery the following day; received IV AZT at time of delivery
- Baby initiated on oral zidovudine as per our protocol; Subsequently ruled out for HIV infection
- 3-4 weeks of nausea with emesis of ARV pills prior to delivery without notifying office
- Has attended 1-2 visits post delivery

Opportunities

- Well established network of stakeholders prior to delivery
- Communication
- Nursery and Labor hall protocols
 - Allow for smooth process even in times of low staffing
- Flexibility

Case 2-A.R.

- A.R. is a 24 year old African American female with HIV since birth
- Presented to ER with complaining of cough and pleuritic chest pain , fever. She has been feeling some nausea but attributes this to her current pregnancy. She states that she has moved to Kentucky from Louisiana year ago. She is recently divorced and has no family members. She is not followed by any providers since her move.
- Two previous pregnancies; premature (33 weeks and 35 weeks). Diagnosed with *Pneumocystis* pneumonia during second pregnancy. First child is HIV negative, second is positive.

A.R. Continued: Social

- AR's mother diagnosed with AIDS and passed away at 25 years old from "pneumonia"
- Father not known by AR
- Lived with grandparents since mother passed away
- Lives with uncle, aunt, and her two children since grandparents passed away
- Divorced, but "working it out" with partner
- Wants to move into her own space, father of children planning to move in after
- Works full time; primary care giver for children
- Hopes to go to college to become an accountant

A.R. Continued: Labs

- Total Beta-HCG
180,830 mIU/ml
(Confirms pregnancy)
- CD4 124 cells/ uL blood
- Viral load 368
copies/mL blood
- Respiratory Viral Panel:
Influenza B +
- Imaging
CT Chest: impressions of
atypical presentation of
PCP, Kaposi's Sarcoma,
atypical mycobacteria, or
Rhodococcus equi
US Transvaginal: Live
intrauterine twin gestation

A.R. Continued

Medications:

Admits to forgetting about 4-5 doses per month due to “busy schedule” when on antiretroviral (ARV) therapy in the past

Most recent regimen:

Lopinavir/ritonavir 200mg-50mg 2 tablets twice daily

Abacavir/lamivudine/zidovudine 300-150-300 1 tablet twice daily



The Challenges of Care

- Shows up for both HIV and OB/GYN clinic visit
- CD4 decreases from 368 cells/ μ L
→ 295 cells/ μ L
- Fatigue, nausea
 - Misses second dose of meds daily
 - Viral load 2/9: 368
 - Viral load 4/1: 12,700
- Missed appointments
- Not returning phone calls

What strategies do you use to enhance retention of care?



A.R. Continued

- Gestation Age: 28 weeks 4 days
 - US Transvaginal: No cervix to measure
- Obstetrics Triage
 - Patient denies cramping/contracting
- Adult Infectious Disease Team was consulted
 - An ID attending made ante-, intra-, and post-partum medication changes/recommendations based on genotype resistance panel
 - Viral load 1300 copies/mL; CD4 270 cells/ μ L
- Who was missing from this conversation?
 - What time point do you have pediatric ID/HIV team involved?
 - Who is involved in your clinical team?



A.R. Continued

- Despite changes in therapy made by the team, patient returns to previous regimen once discharged.
- At clinic following week: Reviewed resistance panel with AR and changed back to lopinavir/ritonavir and abacavir/lamivudine/zidovudine; reinforced importance of adherence
- Eight days later, patient (gestation age 29 weeks 4 days) had a cesarean section and delivered twins
- Viral load 199 copies/mL; CD4 347 cells/ μ L

A.R. Delivery

- Patient received zidovudine load 1 hour prior to cesarean section
- Mother: Continue lopinavir/ritonavir and abacavir/lamivudine/zidovudine
- Twins: zidovudine and nevirapine x 6 weeks as per Pediatric ID
- Pediatric ID was consulted



A.R. Postpartum

- Misses appointments due to work and taking care of four children by herself (some support from aunt)
- Partner moves to Lexington a year after children are born but job transfer was unsuccessful. Reports being sexually active without protection.
- Mainly living off supplementary security income with a family of six.

Case 3-H. D.

- 28 y/o Caucasian female diagnosed with HIV for approximately 18 months, Co-infected with HCV
- Risk factors: injection drug use, professional sex work
- Recently moved back into state after leaving for 6 months and reports that she is 8 weeks pregnant
- 3rd pregnancy
- Current substances abused are alcohol, marijuana, cocaine, methamphetamines, hallucinogens, heroin, and prescription drugs (opiates, benzodiazapines)

H.D. and Baby Beginning

- States that she wants “healthy and HIV negative baby”
- Admitted for inpatient detox
- Schedule with High Risk Obstetrics department
- Inform Pediatric ID department of impending delivery
- Ensured that patient has medical insurance
- Declines outpatient addiction services follow up after inpatient detox stating that “this baby is all the motivation I need”

Sex, Drugs, and Jail

- Less than one month after inpatient detox arrested for “Possession of Controlled Substance (Cocaine) and Paraphernalia”
- During incarceration she receives medically supervised detox in jail.
- Medical Case Manager works with jail to arrange for transition to community supported living facility
- Once release, H.D. leaves the state without an established return date for a “family emergency”

H.D. Continued

- 3 weeks later she reported use of benzodiazapines, cocaine, opiates, marijuana, heroin, and heavy alcohol use (1/5th of Vodka within the last 24 hours).
- Referred to inpatient supervised detox again, however she did not report to the hospital for almost one week after conversation and could not be located.
- During this hospitalization she was referred to another rehab facility out of the immediate area pending appropriate opening closer to Lexington.

Complications

- Vaginal bleeding and cramping led to rehab facility encouraging patient to come back to area for high risk prenatal care.
- Returned to the area and was transitioned into rehab program, 1 week after beginning the program patient left after having an altercation with another resident.
- One week later patient incarcerated.
- Hospitalized for 3rd supervised detox because she was intoxicated to the point of being unconscious. The first 24 hours of hospitalization patient was unresponsive. Remained admitted as she was 36 weeks pregnant. Patient delivered at 39 weeks and 4 days.

H.D. and Baby Postpartum

- Baby boy is placed in foster care
- Foster parent brings child in for all follow up appointments. Baby is HIV and HCV negative
- Once H.D. is released from jail she is homeless and continues to participate in sex work as her means of personal support.
- Attempts to follow up but with multiple incarcerations and continued substance misuse
- Remains on antiretroviral medication, missing only 1-2 doses/month

Questions and Opportunities

- What would you have done differently with this case?
- Can anything be done from a policy standpoint?
- Decreased wait times for rehab slots
- Increase community support/vocational rehabilitation

Collaborations in Developing a Prevention Plan

Other HIV Supportive Services

1. Promote HIV care services, especially in women of child-bearing age
2. Develop linkages to other perinatal providers to facilitate rapid referrals (COMMUNICATION)
3. Ensure rapid access to prophylactic antiretroviral drugs (using state ADAP if necessary)

Work Directly with Hospitals

1. Rapid HIV testing in labor and delivery units
2. Linkage to HIV care from emergency rooms, hospital-based clinics

www.cdc.gov

The National HIV Clinicians Consultation Center (UCSF)

Perinatal HIV Hotline

1-888-488-8765 24 Hours/Day, Voicemail

Clinicians' Warmline

1-800-933-3413 Monday-Friday 9AM-8PM EST