OUR PIECE OF THE COALITION - PERINATAL HEPATITIS B

RICHARD ANDREWS, MD, MPH
HOPE CLINIC, HOUSTON TX

2016 PERINATAL HEP B SUMMIT, AUSTIN TX
CONFLICTS OF INTEREST

• None to declare
MY BACKGROUND

- Grew up in southern Spain
- Bilingual, “sesqui-cultural”
- Univ of Connecticut medical school
- Georgetown Univ – family medicine residency
- Migrant farmworker clinic on Virginia’s Eastern Shore, Spanish, Haitian
COMMUNITY HEALTH CENTERS

• In community health centers since 1990

• Mostly foreign born, non English-speaking patients

• 1999 → preventive medicine residency at Johns Hopkins, Baltimore

• MPH, focus on international health

• 2008 → to Houston, Asian clinic
HEALTH DEPARTMENTS

• Soft spot in my heart for health departments

• Whenever possible we work with the Houston Health Department

• Also with Harris County’s health system

• And with DSHS
MY CURRENT CONTEXT

• Hope Clinic in southwest Houston

• Begun 12 years ago by the Asian-American Health Coalition

• Focus on foreign-born populations

• $\frac{1}{2}$ or more of the patients are from high hep B prevalence countries

• Near universal screening, free if uninsured
HOPE CLINIC STRUCTURE

- CHC/FQHC, private non-profit
- Competitive federal grant, other public funding, much private funding
- Patients are charged, sliding scale
- 3 sites, 100 employees, 15 providers: NP’s, FM, IM, pedi, obgyn, psych
- 340-B pharmacy (cheap Baraclude/entecavir), pharmacy assistance
HOPE CLINIC & HEPATITIS

- High risk population, we try to screen nearly everybody

- Everyone on the planet has a “hep B status”

- Many uninsured / underinsured – can’t go to hepatologists

- Treating adult non-pregnant hep B since 2011, hep C since 2015

- 500-600 hep B patients in our system
FOCUS ON HEPATITIS B & C

• Get funding from CPRIT to do free hepatitis B & C screening

• Get limited free lab services from a local hospital → hep care

• Narrowing my own practice – predominantly viral hepatitis

• National Hepatitis B Taskforce – Asian American focus
  South central USA coordinator

• Love working in coalitions
LOCAL HOSPITAL IN HOUSTON

• Spoke with the neonatologist

• They screen ALL women in labor regardless of prior testing

• +HBsAg reflexes to pharmacy → nurse order for hep B vax & HBIG

• “I don’t think we have missed anyone …”

• L&D has a completely separate EMR, and a handwritten log
GLOBAL HBV PREVENTION

• efficacy of combo passive/active immunization at birth is > 80%

• But HBIG is expensive for poor countries

• Hep B shot without HBIG still very effective

• Often more feasible in developing world
WHERE WE GET OUR PATIENTS

- Vietnam
- China
- Taiwan
- Myanmar (Burma)
- Iraq
- Central America
- South America
- Nigeria & Congo
- Other sub-Saharan countries
THE VIETNAM HEP B PICTURE

- Later than most other Asian countries in addressing the problem
- Estimated 8% chronic hep B prevalence overall
- Prevalence was increasing, while decreasing in other Asian countries
- 1997 hep B vaccine introduced
VIETNAM PERINATAL HEP B

- By 2006 64% of newborns got hep B shot within 24 hours of birth
- Rumors about the vaccine causing deaths, no evidence found
- By 2008, only 20% of newborns were getting the shot
- After a 2011 national action plan, rates improved to 84%
- Pregnant women now are asking if the vaccine will be available
- Vaccine sometimes not available in CHC’s, cold chain problems
THE CHINA HBV PICTURE

• Roughly 7-8% prevalence of HBsAg overall

• But China now reports much lower rates in infants & toddlers, <1%

• Chinese officials now estimate 90 million chronically infected

• Getting antiviral treatment is often costly, with a thriving black market for antiviral drugs
PERINATAL HEP B POLICIES

• Universal vaccination started in 1992, but often not free in adults

• In 2010 Chinese government guidelines encouraged using both Hep B vaccine and HBIG in within 12-24 hours of birth

• But adherence to this standard varies by region

• 2014, Western Shandong Province, 19% of at risk newborns did not get HBIG

• Reasons given: premature/low birth weight, illness
In lower Manhattan, Chinatown
Community health center, FQHC
Almost entirely Chinese & Chinese-American patients
Large hepatitis B population
Standing protocol for hep B:
- Screening
- Prevention
- Management of active cases
- Perinatal hep B
Widespread screening

Universal screening in preg women

3rd trimester hep B viral load

If PCR > 200,000 IU, patient advised to start antiviral medication, tenofovir

Hep B & HBIG shots within 12-24 hours of birth
ICHS CLINIC, SEATTLE

- In Seattle
- Community health center, FQHC
- Large, diverse Asian population
- Large hepatitis B population
- Standing protocol for hep B:
  - screening
  - prevention
  - management of active cases
  - perinatal hep B
ICHS, SEATTLE, PERINATAL HEP B

• Advises antiviral tx for > 10 million copies

• Otherwise similar to CB Wang
HOPE CLINIC IN HOUSTON

• In SW Houston, “Asia Town”
• Community health center, FQHC
• Fairly large hepatitis B population
• Standing protocol for hep B:
  • - screening
  • - prevention
  • - management of active cases
  • - perinatal hep B protocol
HOPE CLINIC, HOUSTON

- Used to refer out all pregnant hep B cases
- Now manage many in-house, unless complicated
- Especially uninsured/CHIP patients - not covered
- Greatest challenges -

- Communication between specialties: ob, adult med, L&D, pedi

- Communication between institutions: clinic ➔ hospital ➔ clinic
HOPE CLINIC, PREGNANT HEP B

- Start tenofovir if 28 week viral load is > 200,000
- Seeking better communication between the clinic and the delivery hospital
- Our main hospital (WHMC) does universal screening of all women in labor
- Positive HBsAg triggers automatic orders for hep B shot and HBIG
- Data on effectiveness must be manually gathered
HOPE CLINIC PROCESS

• Engaging the hep B affected pregnant patient

• need to improve hep B active/passive immunization rates at delivery

• Simple form made for mom to show L&D staff, confirming 2 shots given

• Mom keeps the completed form, then shows it to pediatrician
CLOSING THOUGHTS

• Comparing different models is useful

• Developing regional (or statewide) approaches & tools should help

• Example: a standardized survey tool to send to hospitals asking what their current protocols (and outcomes) are, including data format/sharing

• National Hep B Taskforce: Focus on Asian-Americans is working on sharing best practices from FQHC’s that are experienced with managing hep B
KAZAKHSTAN – ON THE OTHER SIDE OF THE WORLD

- used to be in the Soviet Union
- independence in 1991
- relatively well off for a Central Asian country
- but dependent on the price of oil

Public health problems: hep B, hep C, MDR-TB, accidental injury
KAZAKHSTAN
UNIVERSAL HEP B VACCINATION

- CDC & WHO assistance
- Implemented universal vaccination in 1998
- Acute hep B incidence in 15-19 year olds:
  - year 2000 = 95/100,000
  - year 2005 = 12/100,000
- Acute hep B incidence in 20-29 year olds:
  - year 2000 = 180/100,000
  - year 2005 = 35/100,000
MOUNTAIN-FED FOUNTAINS
TOILET + RECEPTACLE
WARM WATER FROM BELOW
FIRE EXIT, SORT OF
KAZAKH FACES, & SKYLINE
KAZAKHSTAN FOOD
KAZAKHSTAN MAP
MARBLE MOSQUE
MENU HUMOR

Manty
Tender meat of young calf in a thin stretched dough, steamed

Manty with pumpkin and meat
Tender meat of young calf, a pumpkin, a thin stretched dough, steamed

Beef with fajitas
Tender veal, grilled served with vegetables, sauce saliye and tarteel

Homemade veal cutlets for a couple / fried

The meat in Chinese
Fried slices of bon filet with vegetables, spices and soy

Meat baked in foil with vegetables
Bon filet, vegetables, cream, onions, tomatoes, peppers, eggplant, spices

Beef in a pan
Bon filet, onions, spices, potatoes, greens.

Potatoes at home
Potatoes, meat from a young calf, onions, herbs, cream.

Beef steaks:
With pepper by the primordial recipe
In an exquisite fragrant sauce
In cherry wine sauce with pine nuts
In cranberry sauce
NATIVE GARB
NURSE, NOT CHEF

2) Overview of global HBV prevention activities [http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3321493/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3321493/)


6) Zhang et al, Perinatal hep B prevention programin Shandong Province, China, Human Vaccines & Imm-Ther Nov 2014

7) Evans et al, Prevention of perinatal hep B transmission in Haimen City, China, [http://dx.doi.org/10.1016/j.vaccine.2015.01.054](http://dx.doi.org/10.1016/j.vaccine.2015.01.054)


11)