

OUR PIECE OF THE  
COALITION -  
PERINATAL HEPATITIS B

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# 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
- ½ 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

# CHARLES B WANG CLINIC NEW YORK CITY

- 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

# CB WANG – PERINATAL HEP B

- Widespread screening
- Universal screening in preg women
- 3<sup>rd</sup> 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



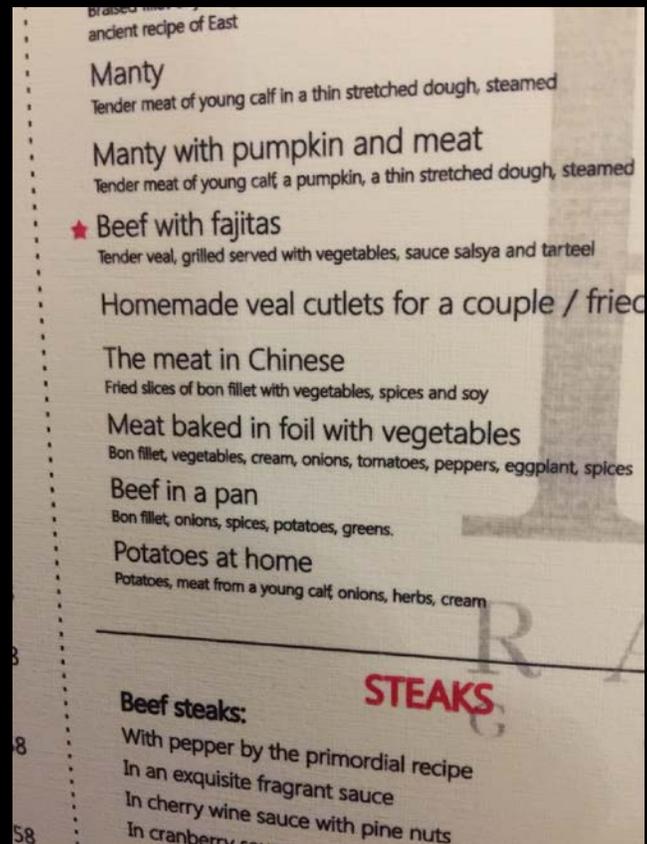
# KAZAKHSTAN MAP



# MARBLE MOSQUE



# MENU HUMOR



# NATIVE GARB



# NURSE, NOT CHEF



# RESOURCES/SOURCES

- 1) CDC slides by M Favorov & L Musina, at [http://www.vhpb.org/files/html/Meetings\\_and\\_publications/Presentations/IST41EngFavorov.pdf](http://www.vhpb.org/files/html/Meetings_and_publications/Presentations/IST41EngFavorov.pdf), downloaded 7/10/2016
- 2) Overview of global HBV prevention activities <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3321493/>
- 3) 2015 report by Chinese CDC on prevalence & incidence [http://news.xinhuanet.com/english/2015-07/28/c\\_134456247.htm](http://news.xinhuanet.com/english/2015-07/28/c_134456247.htm)
- 4) China seroprevalence study 2014, <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0097474>
- 5) correspondence about Liu et al article on China hbv seroprevalence [http://thelancet.com/journals/laninf/article/PIIS1473-3099\(15\)00545-9/fulltext](http://thelancet.com/journals/laninf/article/PIIS1473-3099(15)00545-9/fulltext)
- 6) Zhang et al, Perinatal hep B prevention program in 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>
- 8) Cui & Ja, Update on epidemiology of hep B & C in China, J Gastroenterol Hep Aug 2013, <http://www.ncbi.nlm.nih.gov/pubmed/23855289>
- 9) Protecting newborns from hep B in Vietnam, PATH.org document about Vietnam's hep B situation, [https://www.path.org/publications/files/CP\\_vietnam\\_hep\\_b\\_fs.pdf](https://www.path.org/publications/files/CP_vietnam_hep_b_fs.pdf)
- 10) Protecting newborns from hep B in Vietnam Feb 2014, [https://www.path.org/publications/files/CP\\_vietnam\\_hep\\_b\\_fs.pdf](https://www.path.org/publications/files/CP_vietnam_hep_b_fs.pdf)
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