Correctional Medicine is Public Health

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Disclaimer

- While I am an employee of California Prison Health Care Services, my comments have not been reviewed or approved by CPHCS and do not necessarily reflect the views of the Receiver.
Correctional Medicine in California
State Prisons

- California Prison Health Care Services – under Federal Court Receivership (CPHCS)
- State of California Department of Corrections and Rehabilitation (CDCR)
- National Commission on Correctional Health Care (NCCHC) -“Partners in Public Health”
Objectives

1. Present how many D.O.s work in CPHCS
2. Define Correctional Medicine and present the history behind it all
3. Present the Population Profile
4. Present the Medical Profile – five “popular” Infectious Diseases
5. Raise awareness of how Correctional Medicine impacts Public Health
D.O.s in CPHCS

- 38 of 324 Physicians
- 3 of the 33 Chief Physician and Surgeons
- 5 of the 38 Chief Medical Officers
- 1 of the 4 Regional Medical Executives
What is Correctional Medicine?

- Medical Care to the Incarcerated Population
- Only Population with a Constitutional Right to Medical Care
- Medicine with Unique Challenges
- Public Health – 10,000 inmates are released each month into the communities…
CPHCS Physicians and Community Physicians Partners

- The majority of physical and mental health problems of inmates originate in the community
  - Prior to incarceration majority receive medical care in ERs and “free clinics”
- The majority of the inmates are released yearly, which can cause a great impact on the public health
Correctional Public Health Opportunities

- Diagnosis
- Education
- Prevention of Complications
- Management of Co-morbid illnesses
- Treatment
- Prevention of Transmission
Correctional Public Health
Legal Issues

• Supreme Court Case: Estelle v Gamble 1976: legal foundation for medical care behind bars
• 8th Amendment prohibition against cruel and unusual punishment was applied to prison health care
• Court held that deliberate indifference to serious medical needs violates the 8th amendment
Correctional Public Health: Health Care Rights

- Timely access to care
- Right to professional medical judgment
- Right to receive treatments that are ordered
- Right to a specialist opinion
- Right to have the recommendations of a specialist considered
CDCR Population Profile

- 170,000+ at any one time with 300,000+ admitted each year
- 11,401 Females and 159,668 Males
- Factors:
  - Poor Education
  - Socio – Economic Challenges
  - Lack of Parental Supervision
  - Mental Health or Developmental Delay Challenges
CDCR Population Profile

Demographics

- Hispanic
- Black
- White
- Other
CDCR Population Profile (Cont’d)

- 10,000 inmates are released to the communities every month
- Recidivism: Return to Prison from Parole within
  - 1 year: 38%;
  - 2 years 53%;
  - 3 years 57%
- 22,400 Life Sentences
- 650 Condemned
Medical Profile

- The five “popular” infectious diseases:
  - TB
  - MRSA
  - HIV
  - Hepatitis C
  - Flu Outbreaks

- Chronic Diseases: Asthma; Hypertension; Diabetes Mellitus; Cardiovascular Disease, etc
Why care about the Health of the Inmate Population?

- 40% of Americans with active Tuberculosis have been incarcerated
- ~25% of HIV infected Americans have been incarcerated
- ~30% of HCV infected Americans have been incarcerated
Why care about the Health of the Inmate Population?

- 75% of inmates have axis I or II mental disorders
- 75% of inmates have alcohol or other substance abuse disorders
- 10,000 inmates are released to the communities every month
Screening for Infectious Disease

- On every admission: Syphilis, Gonorrhea, Chlamydia, and Tuberculosis
- Yearly inmate population and staff are tested for Tuberculosis
- HIV – Opt out testing
- HCV – on request – information provided on admission
Infection Control Challenges in Prison

- Crowded Living Conditions
- Limited access to soap, water, clean laundry
- Rare access to condoms and needle exchange
- Frequent Inmate movement from one facility to another, often without clinical staff input
Infection Control Challenges in Prisons (cont’d)

- Ideal environment for the transmission of contagious diseases
- High Prevalence of HIV, HBV, HCV, Tuberculosis, skin parasites, Syphilis, Gonorrhea, Chlamydia, MRSA
Tuberculosis

- Always on high suspicion/high alert
- Screening consistent with CDC Guidelines
- Every inmate has a TB code
- Strict protocols for suspect patients with monitored treatment
- Negative Pressure rooms
Methicillin Resistant Staphylococcus Aureus
MRSA

- Loves Prison
  - Crowded conditions
  - Inadequate laundering – water or drying process not high enough temperatures
  - Self – draining of boils
  - Delayed access to care for the “spider bite”
  - Limited use of the Antimicrobial hand sanitizer due to abuse potential (70% ETOH)
MRSA (cont’d)

- Most MRSA infections are minor infections of the skin (pustules, furuncles, cellulitis)
- Generally mild, self – limited, and do not require aggressive treatment
- Drainage of abscess important for treatment
MRSA Treatment

- Incision and Drainage
- Appropriate Wound care
- Use of antimicrobials known to be effective against MRSA
  - Trimethoprim – sulfamethoxazole
  - Some add Rifampin 600 mg once daily
  - Clindamycin
  - Due to rapid development of resistance, Rifampin monotherapy should not be used
HIV

• Prevalence of HIV among US incarcerated populations is five to seven times that of general population
• In California a blinded serosurvey suggested prevalence of 1.5 – 2.5% in the inmate population
• Many are living in our prisons undiagnosed, or may have been diagnosed in community but we are unaware…
HIV – CA law

- Existing CA law may actually dissuade inmates from testing or disclosing their HIV status:
  - Permits treating physician to disclose a person’s HIV status to that person’s spouse or any person reasonably believed to be the sexual or needle sharing partner (CA Health and Safety Code (CHSC) 12101)
  - Allows an HIV+ person who engages in unprotected sex to be charged with a felony (CHSC 120291)
HIV CA law

- CA law:
  - Requires medical personnel to disclose the HIV status of all inmates to the “officer in charge” of the detention facility, employees, and visitors (California Penal code (PC) 647)
  - Elevates any subsequent prostitution conviction among those known to be HIV+ from a misdemeanor to a felony (PC 647)
HIV CA law

- CA law:
  - Directs correctional officials that they must notify parole and probation officers when an HIV+ inmate is released (PC 7520)
  - Allows parole and probation officers to inform the spouse of paroling inmates of their HIV status (PC 7520)
HIV Treatment

- Diagnosis
- Laboratory Evaluation: CD4 count < or > 350?
- Consultation with HIV expert via in-house encounter or telemedicine
- Antiretrovirals prescribed and determine need of prophylaxis medication for opportunistic infections
- Followed closely by providers in the chronic care program
Hepatitis C (HCV)

- 34% of the CA inmate population is HCV+
- Hepatitis C and its complications = the third leading cause of death in this population
- Prevalence: greatest in African Americans, followed by Caucasians, and then Hispanics
- Risk Factors within the institutions:
  - Needle sharing
  - Tattooing
  - Risky Sexual Behavior
HCV Transmission

- HCV is not spread by casual contact
- Percutaneous Transmission
  - Within one year of sharing needles, ~70% of individuals will acquire HCV
- Occupational Transmission
  - Risk for transmission following accidental needlestick – 1.8% = 6 times greater than HIV
- Sexual Transmission
- Maternal to Infant Transmission – uncommonly transmitted (0 – 8%)
Hepatitis C

- Screening:
  - All new arrivals are given information
  - Providers on identifying risk factors may recommend testing
- Once diagnosed patient is enrolled into Chronic Care Program
- Primary Care Provider cares for patient but may consult specialist
- Consultation done by Telemedicine
Hepatitis C Treatment

- Primary Care Provider works within the Hepatitis C Program Guidelines
  - Treatment Algorithm
    - When to Biopsy
    - When to initiate combination therapy
      - Pharmacy & Therapeutics Committee Clinical Pathway
    - Warmline available for assistance
Hepatitis C Treatment

• Exclusion Criteria
  ◦ Absolute Contraindications: Decompensated Cirrhosis; Upcoming Parole date; Poorly controlled depression; Poorly controlled medical conditions; renal, heart, or lung recipient; Allergy to the medication; unwilling or unable to abstain from alcohol; ongoing substance abuse; inability to cooperate with treatment; inability to give informed consent; Pregnancy
Hepatitis C Treatment

- Numbers treated:
  - Three month September – November 2009
    - 381 patients started therapy
    - 2870 patients received ongoing therapy
    - 252 patients completed therapy
    - 135 patients stopped therapy prior to completion
Death Rate for HCV in Corrections 2009

Total of 396 deaths

- 124 listed as Hepatitis C infected: Average Age 55
  - 37 listed ESLD from HCV as Primary Cause of Death: Average age was 53
  - 27 listed in the Secondary Cause of Death: Average age was 55
  - 12 listed in the Tertiary Cause of Death: Average Age was 57
  - 48 listed as a Coexisting Disease: Average Age was 54
Seasonal Influenza

- Mass Influenza Vaccination Program
  - Vaccinations begin in early October to be completed by December for inmates and “front – line” staff
- Screening inmates prior to transfer from one institution to another
- Stay at Home Directive for staff with fever
- Visitor Education
H1N1 Influenza

- Mass Immunization scheduled to roll out based on receipt from federal supply
- Screening inmates for ILI prior to transfer from one institution to another
- Stay at Home Directive for Staff with fever
- Visitor Education
H1N1 Outbreaks

- Fewer than 30 patients per outbreak
- Median Size of the confirmed H1N1 influenza outbreaks in CA prisons is 9 cases
- Of the 170,000+ inmate population, there have been 65 hospitalizations for H1N1 influenza complications.
H1N1 Outbreaks (Cont’d)

- Statewide, 1.1% of persons of the general population hospitalized have died.
- The death rate among the inmate population in CA has been fewer than 5% among the patients hospitalized for H1N1 complications. Actually – 3.
Financial Burden

- 2008 – 2009 Fiscal Year
  - The Ca Prison Health Care budget was $1.8 Billion
  - $487 million overbudget due to Contract Medical Services that are not available within the institutions:
    - Hospitalizations for the ESLD patients
    - Surgeries
    - Specialty Consults not available via telemedicine
Health Care Cost Improvements

- InterQual Guidelines and Criteria
  - Evidence – Based Medicine Clinical Decision Support
  - Used in over 40 states, Military Health System; 21 Veterans Integrated Service Networks and now in CPHCS
  - Criteria must be met for approval of Specialist Referrals, Diagnostic Studies, Procedures
Health Care Cost Improvements

- New Contracts negotiated with hospitals and specialists
- Telemedicine Available for variety of specialty appointments
- Newly improved Formulary
Health Care Developments

- UptoDate now available to the providers in clinics for immediate reference
- CME lectures for providers on standardized, evidence–based clinical guidelines
Summary

- 324 “front – line” physicians provide medical care to 170,000+ inmates
- 120,000 + individuals are released yearly into the communities statewide
- Once released many have arrangements for Continuity of Care in the community
  - Contributes to overall financial savings
Summary

- Correctional Medicine impacts public health by:
  - Reduced disease rates
  - Financial savings
  - Improved public safety
  - Better use of health care systems and resources
Summary

- The collaboration of public health and correctional health lead to the best outcomes.
Questions?
References

- Credentialing Department Listing of Physicians and Physician Managers
- Hepatitis C Chronic Care Program Guidelines CPHCS Volume 7, Chapter 12 Chronic Care Program
- Hepatitis C Tracking Report
- Death Review Committee 2009 Review
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