Culture and Infection: Understanding Risk-Taking Among Heroin Users in San Francisco

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Objectives

• Understanding of the culture of injection drug use
  – Macro forces
  – Micro practices of injection drug users
• “Moral economy” of homeless heroin addicts
• Subcultures of medicine
  – Different priorities: public health versus clinical versus homeless survival
• Cultural case study of treatment and prevention of soft tissue infection (abscesses)
Heroin: Micro and Macro

A Mexican opium poppy
Black Tar Heroin

Most common form of heroin west of Mississippi
–Market dominance (95%) in California since 1993

Drug Enforcement Agency
Heroin Distribution in the US

Geographic Distribution of Heroin Type and HIV in Injection Drug Users Versus Men Who Have Sex With Men

Source: See Table 1. Excerpts as noted in Table 1
Heroin Price & Purity
San Francisco 1990-98

Source: Drug Enforcement Administration - Domestic Monitoring Program
Moral Economy of Sharing

Obligation of reciprocity

Gift or favor

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Gift or favor
Black Tar Heroin

Most common form of heroin west of Mississippi
–Market dominance (95%) in California since 1993
Conceptions of Sharing

Public Health:
Sharing = irrationality + ignorance + self-destruction

versus

Street Culture:
Sharing = generosity + community responsibility
Conceptions of Risk

Public Health:
Sharing = HIV + Hepatitis + Abscesses

versus

Street Culture:
Sharing = generous reputation = insurance against being “dope sick”
Four victims in S.F. contracted disease after injecting drugs

Private, roomy facilities perfect for heroin users

These are your kids on drugs
Bacterial Complications

- Endocarditis
- Pneumonia
- Osteomyelitis
- STI: minor complication of IDU
Soft Tissue Infections

- Definition
- Includes:
  - Abscesses
  - Cellulitis
  - Necrotizing fasciitis
  - Wound botulism
Soft Tissue Infections at SFGH, 1996–2000

Epidemiology

Among street-recruited IDUs:
• 19% had a probable or definite abscess on exam
• 27% reported having an abscess in the past year

Higher prevalence with black tar heroin use:
• New York City: only 10% of IDU reported a soft tissue infection in the past 6 months (Vlahov)

Ciccarone D, APHA 2000
Why all the abscesses?

Poorly understood
– no reports of BTH testing
• Public Health: Poor hygiene

Versus

• Street culture: “Dirty dope”
Risk Factors for STI among IDU

• INCREASED risk
  – Skin-popping\textsuperscript{1,2} and frequent skin-popping\textsuperscript{1}
  – Dirty needles\textsuperscript{2} and Speedballing (heroin and cocaine)\textsuperscript{2}

• DECREASED risk
  – Duration of IDU\textsuperscript{1}
  – Wiping skin with alcohol before injection\textsuperscript{2}

• NOT associated
  – Sex, age, homelessness, education\textsuperscript{1}
  – HIV status\textsuperscript{1,2}

\textsuperscript{1}Binswanger IA et al. CID 2000;30:579-81. \textsuperscript{2}Murphy EL et al. CID 2001;33:35-40
Ethnographic-Clinical Observations

Fire in The Vein
- Dirty dope theories
  - Scarring and burning
  - Cut of heroin versus type of heroin

Shooting Dirty, Shooting Clean
- Observations on the risk factors for STI
  - Bacterial contamination
  - Routes of injection
  - Reuse of syringes
Microbiology of Abscesses

• Aerobic Bacteria – skin commensals
  ▶ Staphylococcus
  ▶ Streptococcus

• Anaerobic Bacteria- contaminants?
  ▶ Oral, G.I, and soil flora
  ▶ Clostridium
BTH and Clostridium

BTH associated with tetanus, wound botulism, myonecrosis

Wound Botulism

- 99 of 114 cases (87%) of U.S. wound botulism cases found in California
- 104 of 105 patients reported BTH use
  - Skin-popping is the primary risk factor for WB

1Passaro DJ et al. JAMA 1998;279;859-63.  2Werner SB et al. CID 2000;31:1018-24
!!! WARNING !!!

Injection Drug Users:

If You Skin Pop or Mainline—there’s a harmful germ killing injectors! It can cause severe infection that destroys muscle and tissue ("flesh eating bacteria")

AVOID BLACK TAR HEROIN

We think the infection is associated with Black Tar Heroin but it has also occurred with shooting speed.

DON’T SHARE needles, syringes, water, filters, or cookers. Always clean injection sites with soap & water or with alcohol swabs.

If you develop any skin or wound infection, (redness, swelling, tenderness, pain or warmth) it should be evaluated by a physician immediately.

"City Issues Warning to Injection Drug Users; Outbreak of Deadly Bacteria Suspected," news release, June 16, 1999

For More Information Call: The San Francisco Department of Public Health, 554-2830. 6/99
Tale of Two Cultures

- **Injection Drug Users**
  - Last abscess: 18% self-lanced abscess
  - Oral tradition - stories of mistreatment
  - Fear of scarring - wound size matters

- **Hospital Medical Culture**
  - Medical conservatism
  - Resident burden
  - Improve care while saving cost
Tale of Two Cultures

• ISIS: Integrated Soft Tissue Infection Service
  • Convergence of hospital and community interests
  • 273 patient visits/month
  • 170 procedures/month
  • Triple winners:
    ✓ IDU approval
    ✓ Resident satisfaction
    ✓ Cost saving
Heroin Price & Purity
San Francisco 1990-98

Source: Drug Enforcement Administration - Domestic Monitoring Program
Following the lead set by McDonald's with their new "healthier" French fries, the organization of worldwide heroin manufacturers announced that a new "low-calorie" version of the popular narcotic would hit the streets by January.

A spokesperson for the organization said, "Like McDonald's, we have learned that just because your product is highly addictive and deadly, doesn't mean you have to kill your customers off quickly. Healthier heroin is just good for business!"
Summary

- Understanding macro forces enables us to visualize the epidemic
  - Reflect on micro practices
- A culture-based understanding of risk-taking can lead to:
  - Better prevention messages
  - Improved access to care
  - Greater acceptance of care
- Interdiction vs. demand reduction vs. improved access to treatment
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