

ACCEPT Addiction & Co-morbid Conditions: Enhancing Prevention & Therapeutics

Agenda

Zoom link to join from PC, Mac, iOS or Android: https://echo.zoom.us/j/156261634

Joining by phone ONLY: +1 646 558 8656 or +1 669 900 6833 (US Toll) Zoom Meeting ID: 156 261 634

For attendance, purposes please text the following code: TENFUH to 608-260-7097

Session Date: Friday March 27, 2020

Didactic Topic and Presenter:

Injection Drug Use and Soft Tissue/Skin Infections Amelia Baltes, MPH Candidate and Research Coordinator, University of Wisconsin

Content Experts:

Ritu Bhatnagar, MD and Susan Mindock, CSAC; and Sheila Weix, MSN, RN, CARN

- 12:30 PM: Attendance text-in Brief Introductions
- 12:35-1:00 PM: Case Presentation
 - Presenter: Melinda Holt, RN, CARN
- 1:00- 1:15 PM: Didactic Presentation
 - o Presenter: Amelia Baltes, Research Coordinator, MPH Candidate
- 1:15- 1:30 PM: OBOT and COVID, Discussion
 - o Presenter: Dr. Randall Brown
- 1:30 PM: End of session

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ACCEPT Addiction & Co-morbid Conditions: Enhancing Prevention & Therapeutics 2018-2020

Injection Drug Use and Soft Tissue/ Skin Infections Friday March 27, 2020 Amelia Baltes – UW Madison MPH Candidate

Melinda Holt, RN, CARN

Provided by the University of Wisconsin–Madison Interprofessional Continuing Education Partnership (ICEP)

Intended Audience:

Physicians, Physician Assistants, Nurses, Social Workers, Pharmacists and Counselors.

Objectives:

As a result of this educational regularly scheduled series, learners will be able to:

- 1. Review appropriate opioid prescribing and monitoring practices.
- 2. Participate in office-based management of substance use disorders.
- 3. Seek, with greater frequency, overdose prevention education.
- 4. Identify the role of medication-assisted therapies, such as methadone, naltrexone, and buprenorphine in the management of substance use disorders.

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Name/Role	Financial Relationship Disclosures	Discussion of Unlabeled/Unapproved uses of drugs/devices in presentation?
Melinda Holt, RN, CARN, Presenter	No relevant financial relationships to disclose	No
Amelia Baltes, Presenter	No relevant financial relationships to disclose	No
Kathleen Maher, RSS Coordinator	No relevant financial relationships to disclose	N/A
Briana Kleinfeldt, RSS Coordinator	No relevant financial relationships to disclose	N/A
Randy Brown, RSS Chair	No relevant financial relationships to disclose	Yes
Paul Hutson, Planner, Pharmacy	Consultant for Projections Research Inc.	Yes
Ritu Bhatnagar, Planner, Psychiatrist	No relevant financial relationships to disclose	Yes
Melissa Ngo, Planner, Pharmacist	No relevant financial relationships to disclose	N/A
Susan Mindock, Planner, AODA Counselor	No relevant financial relationships to disclose	No
Sheila Weix, Planner, Nurse	No relevant financial relationships to disclose	No
Lindsey Peterson, MS, CRC, Planner	No relevant financial relationships to disclose	No
Kim Sprecker, OCPD Staff	No relevant financial relationships to disclose	No

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Predictors of Skin and Soft Infections Among People Who Inject Drugs

Amelia Baltes UW MPH Student

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Overview

- Introduction
 - Skin and soft tissue infections
 - Impact on health care and public health
- Methods
 - Question development, administration
- Results
 - Data analyses
- Discussion
 - Similarities/Differences of existing research
 - Recommendations
- Conclusion
 - Future Directions



Introduction

- Opioid epidemic disproportionately affects rural areas¹
- Skin and soft tissue infections (SSTIs) are a leading cause or morbidity and mortality among people who inject drugs (PWID)²
- Common SSTIs: skin abscesses, cellulitis, osteomyelitis, infection endocarditis³
- Primarily caused by Staphylococcus aureus in skin flora⁴



Methods

- Part of the greater Rural Opioid Initiative Study (PI: Westergaard)
- Six rural Vivent Health syringe exchange programs
- Loosely based off of Bacterial Infections Risk Scale for Injectors (BIRSI)⁵
- 13 SSTI-specific questions added May-July 2019
- Topics:
 - Skin cleaning, water sources, anatomical location, injection type, drug choice, infection history, treatment types



Analysis

- 80 responses
- Chi-square tests for categorical, non-ordered variables
- Regression models for categorical, ranked variables
- SSTI prevalence estimated
- SSTI prevalence compared to participant characteristics and injection practices



Results

- Demographics
 - Caucasian (77.5%)
 - Males (60%)
 - Between the ages 30-39 (42.5%)
 - Received high school diploma or GED (38.75%)
 - Covered by Medicaid (70%)
 - Unstably housed within 6 mo prior to response (65%)
- 50% methamphetamine; 25% heroin
- 22.5% reported hx of SSTI
- Females 3x more likely to have hx of SSTI (p=0.038, OR=3.07)



Results

Behavioral practices

- Sterile skin cleaning practices less likely for SSTI hx (p=0.073)
- Infrequent hand washing more likely for SSTI hx (OR=1.29 for each decrease in frequency away from always)
- Sterile water sources less likely (p=0.093)

Injection sites

- Subcutaneous (p=0.038, OR=6.00), intramuscular (p=0.001, OR=17.4), intravenously (p=0.333, OR=0.41)
- Inject on first attempt less likely for SSTI hx (p=0.037)
- No anatomical correlation (p=0.831)
- No frequency of injection correlation (p=0.892)



Results

- Treatment methods (n=18)
 - At-home warm compress (56%)
 - OTC medications (22.5%)
 - Draining abscess at home (27.8%)
 - ED or urgent care (55.5%)
 - Prescribed medications (33.3%)
 - Procedure in ED (11.1%)
 - Surgical intervention (11.1%)
 - Hospital stay (5.5%)



Discussion

- Higher-risk injection practices were common among participants reporting hx of SSTI
- Educational materials should target PWID not in treatment
- Future studies
 - Understanding socio-demographic and cultural factors influencing risky injection practices
 - General barriers of safer injection practices to prevent SSTIs
 - Increasing prevalence of methamphetamine

Discussion

- Rural PWID populations partake in similar risky behaviors as urban counterparts
- Health care practices should implement tailored education
 - Wound education
 - At home vs medical treatment
- Public health implications
 - Syringe exchange programs serving as cornerstone to prevention
 - Potential avenue for education implementation



Conclusion

- Limitations
 - One-time cross sectional approach, recall bias
 - SSTI prevalence estimation could be skewed
 - Small sample size
- PWID reported a variety of risky injection practices related to SSTI hx
- PWID not in treatment should be targeted for intervention
- Health care practices, prevention programs, and public health efforts should work together



References

- 1. National Center for Health Statistics. Urban-rural differences in drug overdose death rates, by sex, age, and type of drugs involved, 2017. *NCHS Data Brief*. 2019;345.
- 2. Harris M, Brathwaite R, McGowan C, Ciccarone D, Gilchrist G, McCusker M, O'Brien K, Dunn J, Scott J, and Hope V. 'Care and Prevent': rationale for investigating skin and soft tissue infections and AA amyloidosis among people who inject drugs in London. *Harm Reduction Journal*. 2018;15:23.
- Hartnett KP, Jackson KA, Felsen C, McDonald R, Bardossy AC, Gokhale RH, Kracalik I, Lucas T, McGovern O, Van Beneden CA, Mendoza M, Bohm M, Brooks JT, Asher AK, Magill SS, Fiore A, Blog D, Dufort EM, See I, Dumyati G, Centers for Disease Control and Prevention (CDC). (2019). Bacterial and Fungal Infections in Persons Who Inject Drugs – Western New York, 2017. MMWR Morb Mortal Wkly Rep. 2019;68(26):583-586.
- 4. Bassetti S and Battegay M. *Staphylococcus aureus* infections in injection drug users: Risk factors and prevention strategies. *Infection*. 2004;32:163-169. doi: 10.1007/s15010-004-3106-0.
- 5. Phillips KT and Stein MD. Risk practices associated with bacterial infections among injection drug users in Denver, Colorado. *The American Journal of Drug and Alcohol Abuse*. 2010;36(2):92-97.



DSM-5 Substance Use Disorder ("Addiction")

- Tolerance
- Physical Dependence \neq Use Disorder
- Withdrawal
- Larger amts/longer periods than intended
- Persistent desire/failed attempts to quit/control use
- Much time obtaining/using/recovering
- Important activities sacrificed
- Continued use despite known adverse effects
- Failure to fulfill major obligations
- Recurrent hazardous use
- Craving
- Ongoing use despite interpersonal problems
- 2-3 = mild4-5 = moderate $\ge 6 = severe$





ACCEPT

Addiction & Co-morbid Conditions: Enhancing Prevention & Therapeutics

Patient Case Presentation

*Please do not attach any patient-specific files or include any Protected Health Information.

- 1. Date: 3-27-20 (completed 3-13-20)
- 2. Presenter Name: John McAuliffe MD and Melinda Holt RN
- 3. Presenter Organization: Prairie Clinic
- 4. ECHO ID: 7457
- 5. Have you presented this patient during this teleECHO clinic before? no
- **6.** PLEASE STATE YOUR MAIN QUESTION FOR THIS PATIENT CASE: Having trouble with infections at Sublocade injection sites in one patient any ideas?

Patient Demographic Information:

- 7. Age: 39
- 8. Sex: female
- 9. Education/Literacy: some college
- 10. Income source: disability; had a payee for a time (due to mental health?)
- 11. Social Factors/History: divorced, lives with mom

12. Substance Use History:

Polysubstance use per history Opioid Use Disorder OD 2014 - ?accidental or intentional?

13. Consequences of Substance Use:

- Social/occupational/educational:
- Divorced, has a child?; unemployed, on disability

Jail January 2019 and again x60 days starting January 2020

• Physical

Ongoing pain issues; Obesity with BMI 36.5

14. Interventions that have been tried:

Multiple psychiatric admissions for depression and suicidal thoughts/attempts. AODA treatment 2-3 times – IOP and outpatient Suboxone during IOP 2014.

Suboxone 2/2019 – fired for "noncompliance issues" (multiple hospitalizations for SI; not returning phone calls; bringing films to count)

Transitioned to Suboxone at Prairie Clinic 12/2019; RN with 1 year Sublocade experience = Sublocade started prior to 60 day jail sentence 1/2020, 2nd injection 2/2020, 3rd planned for earlier this week.

15.		
Current Addiction and Mental Health-related Medications:	Medical/Behavioral Health Diagnosis:	
Sublocade/Suboxone	Opioids for chronic pain	
Sertraline - mood Depakote – mood	Migraine	
Mirtazepine - depression	Scoliosis Renal stones	
Guanfacine - ADHD Metoprolol – beta blocker for heart	GERD	
Rizatriptan prn - headache	Irritable Bowel Syndrome	
Imitrex prn -headache Ondansetron prn - nausea Metoclopramide prn – GERD	Blood clots – caused chest pain?	
	Asthma	
Vitamin D Acetaminophen prn – pain	Long hx of depression, anxiety, suicidal ideation Remote hx of eating disorder	
EpiPen prn	Dad with alcohol use d/o, died 12/2019	
Albuterol inhaler prn - asthma	-Sister with bipolar d/o	

16.

Patient Strengths/protective factors:	Risk factors:
 Mom and step dad supportive Smart and willing to learn new things Likes to read Looks for the positive 	 Mental health issues-Axis II? Troubled relationships Limited support network

17. Labs (as indicated), include summary of urine testing or last urine drug screen results:

No issues.

18. Patient Goals/Motivations for Treatment:

Wants to never go back to jail again.

19. Proposed Diagnoses:

Infection requiring antibiotics at #1 RUQ and #2 LUQ injection sites of Sublocade.

Possibly related to extra adipose tissue in abdominal region?

20. Proposed Treatment Plan:

Prophylactic antibiotics? Additional cleansing and/or bandaging? Resume sublingual buprenorphine?

By initialing here ____MH____ you have acknowledged that Project ECHO case consultations do not create or otherwise establish a provider-patient relationship between any ECHO clinician and any patient whose case is being presented in a teleECHO clinic.

DSM 5 Criteria for Substance Use Disorder

A use disorder is characterized by maladaptive use resulting in repetitive consequences over the previous 12 months. A minimum of 2-3 criteria is required for a mild substance use disorder diagnosis, while 4-5 is moderate, and 6-7 is severe (American Psychiatric Association 2013)

- 1. Taking the substance in larger amounts and for longer than intended
- 2. Wanting to cut down or quit but not being able to do it
- 3. Spending a lot of time obtaining the substance
- 4. Craving or a strong desire to use
- 5. Repeatedly unable to carry out major obligations at work, school, or home due to use
- 6. Continued use despite persistent or recurring social or interpersonal problems caused or made worse by use
- 7. Stopping or reducing important social, occupational, or recreational activities due to opioid use
- 8. Recurrent use in physically hazardous situations
- 9. Consistent use despite acknowledgment of persistent or recurrent physical or psychological difficulties from using
- 10. *Tolerance as defined by either a need for markedly increased amounts to achieve intoxication or desired effect or markedly diminished effect with continued use of the same amount. (Does not apply for diminished effect when used appropriately under medical supervision)
- 11. *Withdrawal manifesting as either characteristic syndrome or the substance is used to avoid withdrawal (Does not apply when used appropriately under medical supervision)