Elizabeth Lorde-Rollins, M.D., M.Sc.
Assistant Professor of Obstetrics and Gynecology
Assistant Professor of Pediatrics
Mount Sinai Adolescent Health Center

POST-TRAUMATIC STRESS, DEPRESSION, AND HIV IN WOMEN: CONNECTING THE DOTS
CASE: CC

Complaint:
19 year old Go presents after five months lost to follow up; she c/o “wicked headaches” and “feeling tired all the time”, “ever since I got out of the hospital.” She was hospitalized for a gunshot wound.

PMH:
Physically abused by mother age 3-12; ACS involved, case closed
Treated for ADHD from age 8-13
Suicidal ideation following the violent death of her brother (pt was 13 yo); CC placed in juvenile residence
Diagnosed with depression age 14; 2 more psych hospitalizations
Placed in residential center following knife assault on SO, age 15 - 16

Gyn Hx:
Sexually abused by mother’s ex-SO, age 5
Sexually abused by best friend’s uncle, age 11
Hospitalized for Pelvic Inflammatory Disease, age 14
+ history of Chlamydia, gonorrhea, and condyloma
> 100 partners in life; 4 female partners; 1 partner in last 6 months (male); patient denies history of sex work; + h/o “initiation sex”
Social History:
Lives with 34 yo SO
SO takes methadone daily, is an ex-IVDU
1 PPD cigarette smoker but quit three months ago (on admission to ICU)
Used to smoke marijuana daily, but hasn’t at all for three months
History of non-habitual ecstasy, PCP, cocaine use
Drinks alcohol on weekend evenings, typically “splitting a bottle of Hennessy”
Completed GED program and plumber’s training during last juvenile detention
Currently enrolled at BMCC; wants to be a social worker

Review of Systems:
Pelvic pain
Headaches
Bloating and digestive problems
Difficulty sleeping; awakens easily and is easily startled
since her discharge from the hospital
Reports difficulty concentrating on her studies
CC DROPS A BOMB

- CC tells you of the incident, a drive-by in her Bronx neighborhood. She was shot in the left chest twice, narrowly missing her heart and major arteries, and had a chest tube for weeks during her hospitalization.

- You’re very dismayed to hear about CC’s brush with death, but glad she’s alive. When she sees that you are almost in tears, CC drops her head, then looks at you.

- “OK,” she says, “but you can’t tell this to anyone, don’t even write it down. He shot me. My man. It was my fault, really. We were arguing over something stupid, like always, he wanted to watch a DVD and I wanted to take a shower first. I’m the one who picked up the gun --- his cousin left it over at our apartment --- and I waved it at him, like, come on, mutha, and he took the gun away from me and shot me.”

- CC tells you how she went outside to the corner and called the police on her cell from there so her SO would not be arrested.

- You fear for CC’s safety, and tell her so. “You don’t understand, Rollins,” she says. “He stood by me. He was there for me while I was in the hospital, and things have been good since I got out.”
POST-TRAUMATIC STRESS DISORDER

Characterized by:

- Having experienced an event in which body integrity and life are threatened
- Reactions of extreme fear, helplessness, and horror
- Symptoms related to re-experiencing the event, avoidance of reminders of the event, and hyperarousal
- Symptoms must be present one month after event, and must cause functional impairment

DEPRESSION

DSM-IV Definition:

- Depressed mood
- Anhedonia
- Appetite disturbance
- Sleep disturbance
- Physical agitation or psychomotor retardation
- Fatigue, decreased energy
- Feelings of worthlessness or inappropriate guilt
- Decreased concentration or inability to make decisions
- Recurrent thoughts of death or suicidal ideation

PREVALENCE OF DEPRESSION IN HIV+ WOMEN

- Depression rates higher in women than in men
- Similar rates of depression have been documented in pregnant and non-pregnant women
- HIV diagnosis is often associated with increased depressive symptoms
- Individuals with HIV have higher depression rates than HIV negative counterparts

RISK FACTORS FOR DEPRESSION IN HIV+ WOMEN

- **Demographic**
  - Female
  - Low-income
  - HIV positive

- **Psychosocial**
  - Personal or family history of psychiatric illness
  - Social stress

- **Medical**
  - HIV-related: Low T-cell counts, high viral load, high symptom level
  - Thyroid abnormalities
  - Nutritional deficiencies

- **Substance use in pregnancy**

WHAT DO WE MEAN BY “SOCIAL STRESS”? 

- Domestic violence and intimate partner violence
- Marital problems
- Financial problems
- Inadequate housing or threat of losing housing
- Lack of transportation
- Lost or threatened custody of children
- Recent death of loved one
- Incarceration of spouse or other family member
- Sick family member, especially if caretaker

DEPRESSION: WOMEN’S BURDEN OF DISEASE

WHAT CONSTITUTES RISK FOR AT-RISK WOMEN?

- HIV
- STIs
- Risky sex
- Substance Use
- Mental Illness
- Violence
- Incarceration
- Environment/ Macrosystem
# Risk Issues for HIV+ Women

<table>
<thead>
<tr>
<th>Risk Domain</th>
<th>Ever/Remote Experience</th>
<th>During Pregnancy</th>
<th>Following Pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of Social Support</td>
<td>1. Increased risk of comorbidities</td>
<td>1. Associated with lack of resources</td>
<td>1. Poor parenting</td>
</tr>
<tr>
<td></td>
<td>2. No framework for positive interactions with medical, mental health, and social</td>
<td>2. Nutritional risk</td>
<td>2. Decreased ability to get to medical visits</td>
</tr>
<tr>
<td></td>
<td>service organizations</td>
<td>3. Less access to care, especially if pt has other children</td>
<td>3. Increased incidence of PP depression</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Increased incidence of depression</td>
<td>4. Stress-related effects on immunity</td>
</tr>
<tr>
<td>Trauma</td>
<td>1. Risk of poor parenting</td>
<td>1. Substance use</td>
<td>1. Unprotected sex, increasing risk of acquiring resistant strains and rapid</td>
</tr>
<tr>
<td></td>
<td>2. Brain damage</td>
<td>2. Direct harm to mother and fetus</td>
<td>repeat pregnancy</td>
</tr>
<tr>
<td></td>
<td>3. PTSD, anxiety disorder</td>
<td>3. Unprotected sex with non-monogamous partner; subsequent increased risk of</td>
<td>2. Morbidity and mortality to mother and baby</td>
</tr>
<tr>
<td></td>
<td>4. Self-tx with SA, EtOH, cigs</td>
<td>other STIs</td>
<td>3. Increased isolation</td>
</tr>
<tr>
<td>Substance Use</td>
<td>1. Low educational attainment/occupational readiness</td>
<td>1. LGA, SGA, prematurity</td>
<td>4. Decreased academic pursuit/occupational fulfillment</td>
</tr>
<tr>
<td></td>
<td>2. Poor financial resources</td>
<td>2. Poor adherence to medication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Liver damage and/or overly-induced cytochrome systems (may affect pain control)</td>
<td>3. Placental abruption</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>4. Neonatal addiction and withdrawal syndromes</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>1. Increased risk of later depression</td>
<td>1. Self-tx with substance use</td>
<td>1. Poor adherence to meds, visits</td>
</tr>
<tr>
<td></td>
<td>2. Uncompleted developmental tasks</td>
<td>2. LGA, SGA, prematurity</td>
<td>2. Poor parenting</td>
</tr>
<tr>
<td></td>
<td>3. Delays in starting ART upon dx</td>
<td>3. Increased incidence of hypertensive disorders</td>
<td>3. Developmental delay in offspring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Poor adherence to medication</td>
<td>4. Nutrition/cognitive effects of MDD, HIV, ART</td>
</tr>
</tbody>
</table>
HIV: RISK MODIFIER, RISK CONSEQUENCE, AND TRAUMATIC EVENT

- **Avoidance symptoms of PTSD or PTSS**
  - Failure to return to health care setting
  - Unwillingness to adhere to medical regimen
  - Refusal to disclose status to others

- **Hyperarousal**
  - Sleep interference
  - Relationship interference

- **PTSD likely significantly interferes with adjustment to HIV diagnosis**

- **PTSD affects resulting lifestyle changes necessary for health maintenance and reduction of secondary infection to others**

*Radcliffe J et al. AIDS Pt Care & STDs 2007; 21(7): 501-508*
SEXUALLY TRANSMITTED INFECTIONS

- Highest rates of STIs found in AA population
- Presence of inflammatory or ulcerative STIs increases HIV risk 3-5 fold
- Individuals infected with both HIV and some STIs have a greater chance of spreading HIV to partners
- Recently recognized that AAs report less risky sexual activity and drug use than white counterparts
  - SEXUAL NETWORK PATTERNS

RISKY SEX

- Sex work
  - Typically begins at age 13 or 14
  - 81% of prostitutes wish to leave “the life”
  - 66% have PTSD
  - Almost half have attempted suicide
  - Workplace homicide rate is 51X the next most dangerous occupation

- Substance use prior to sexual activity
- Sexual exploitation and victimization

Farley M. Viol Against Women 2004; 10(10): 1087-1125
WOMEN AS A PROPORTION OF NEW AIDS DIAGNOSES, 1985-2007

Kaiser Family Foundation. HIV/AIDS Policy Fact Sheet September 2009
NEWLY DIAGNOSED HIV IN THE U.S., 2006

Total Cases
Female Cases

- All age groups
- 40 and older
- 30-39
- 13-29

www.cdc.gov/hiv/topics/surveillance/resources/reports/2007_report
FEMALES AS A PROPORTION OF NEW AIDS DIAGNOSES, 2005

- All ages: 27%
- 25 and older: 26%
- 20 - 24: 28%
- 13 - 19: 43%

Kaiser Family Foundation. HIV/AIDS Policy Fact Sheet July 2007
Substance abuse is most prevalent psychiatric disorder among female prisoners.

Both male and female adolescents with histories of childhood sexual abuse (CSA) were more than 4 times as likely to have sexual activity after drug use than those without CSA.

MENTAL HEALTH RISKS OF CHILDHOOD SEXUAL ABUSE SURVIVORS

- Depression
- Dissociative Disorders
- PTSD and other anxiety disorders
- Suicidal ideation and attempts
- Poor self-esteem
- Self-inflicted injury
- Substance abuse
- Eating Disorders

VIOLENCE

- Destroys assumption of safe space
  - Intimate partner violence
  - Family violence
  - Community violence exposure
- Commission of violent crimes by victims of PTSD
- Negatively affects health
  - Associated with post traumatic stress, even if individual was not victimized him/herself
  - Doesn’t have to be current to affect health outcomes
  - Damage may be emotional, cognitive, or physical
- Gender differences in response to violence
  - Girls have less denial around community violence
  - More likely to report trouble in school; less likely to report carrying weapon in self-defense
INCARCERATION

- Incarcerated women in the United States
  - 60% not employed full time
  - 37% have incomes <600$/month
  - 66% are parents of a minor child
- Mental health rates of incarcerated women
- HIV in incarcerated women
- Transition advocacy for the incarcerated woman

ENVIRONMENT/MACROSYSTEM

- Growing poverty
- Under-education
- Unemployment and underemployment
- Housing
- Food availability and quality
- Environmental racism/classism

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>White</th>
<th>Black</th>
<th>Asian &amp; Pacific Islander</th>
<th>Average Household Income</th>
<th>Persons Below Poverty Line</th>
<th>Associate/Bachelor's Degree</th>
<th>Graduate or Professional Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Site (72nd ST.)</td>
<td>65,042</td>
<td>84.4%</td>
<td>8.0%</td>
<td>2.8%</td>
<td>$123,172</td>
<td>8.5%</td>
<td>34.4%</td>
<td>33.7%</td>
</tr>
<tr>
<td>Actual Site (145th ST.)</td>
<td>56,173</td>
<td>15.5%</td>
<td>60.6%</td>
<td>1.3%</td>
<td>$26,123</td>
<td>33.7%</td>
<td>10.4%</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

www.umich.edu/~snre492/ny.html
There is a growing body of knowledge that links various types of violence exposure to increased HIV sexual risk factors among adolescents. Such findings call for research that empirically investigates the pathways linking these two interrelated phenomena.

Dr. Dexter Voisin, 2005
CONSEQUENCES OF CHILDHOOD SEXUAL ABUSE

- Somatization
- Mental illness
- Survivor violence and aggression
- Adult sexual revictimization
- Disrupted educational and vocational pursuit
- Unemployment and underemployment

UNDERSTANDING ADULT SEXUAL REVICTIMIZATION

- **Predictors**
  - ASR more highly associated with contact sexual abuse than non-contact
  - Force and violence; also correlates with age of CSA

- **Theories**
  - 1960s-1980s: Social development theory
  - Finkelhor and Browne: Traumagenic Dynamics
  - Koss and Dinero: Vulnerability hypothesis
  - Grauerholtz: Ecological Approach
  - Chu: PTSD-like symptoms

HOW UNDERSTANDING PTSD MAY GUIDE INTERVENTIONS

- Clinician behavior
  - Explain all therapeutic and medical procedures
  - Ask permission before touching patient
  - Beware lithotomy position

- Therapy
- Group therapy and peer support
- Pharmacotherapy

- Serious support for serious needs
  - In-facility individual needs assessment
  - Intensive programming; duration of support to depend on patient/client requirements
  - Housing, employment, and education
BENEFITS TO TREATING PTSD AND DEPRESSION HEAD-ON

- Compliance
- Adherence
- Patient acting out / transference issues
- Clinician acting out / countertransference issues
- Awareness of our own traumatic experiences allows greater empathy but also informs a non-judgmental approach
RECOMMENDATIONS FOR BEST PRACTICE

- Remove barriers to access
- Emphasize personal empowerment
  - Provide assistance in coping with life stressors and improving self esteem
  - Create alternative treatment modalities consistent with the cultural backgrounds of the target population
  - Emphasize family preservation, promoting (re)unification and parent effectiveness training
- Provide services that have a positive lifestyle impact
- Services address multiple issues where encountered

TAKING CARE OF OURSELVES AS HEALTH PROFESSIONALS

- Beware vicarious traumatization
- Beware unresolved abuse in our own histories
- Are we doing our own work?
  - Class/race issues and judgments can affect screening and treatment decisions
  - Have we internalized societal myths about CSA survivors?
  - Supervision for our reactions to patient boundary testing and trespass
POST TRAUMATIC STRESS IN CC

- The Set-Up
  - Physical abuse
  - Sexual abuse prior to or during adolescence
  - History of mother’s incarceration
  - Two brothers killed with gunfire; one witnessed by CC

- The Fallout
  - Depression
  - Educational underachievement
  - Substance use
  - Violent aggression leading to incarceration
  - Somatic symptoms

- Risks to her future
  - Continued morbidity from unaddressed depression and PTSD
  - Death from violent intimate relationship
  - Nutrition and overweight
  - Possible tubal factor infertility
CC is diagnosed HIV positive

- Just after final exams in her second year at BMCC, CC comes to clinic complaining of a sore throat and swollen glands.
- After the exam, which is unremarkable except for some cervical and inguinal lymphadenopathy, she has HIV testing as a routine because she hasn’t tested in over a year. The results are positive.
- CC is tearful, but says she’s not surprised because she and her SO have been not using condoms in an effort to get pregnant.
- “This is not going to stop me,” she tells you. “I’m starting my four year degree at Hunter in September.” You encourage her and refer to the HIV specialist at the clinic. CC’s T-cells are high, but so is her viral load, and a course of meds are started.
CC’S ACCOMPLISHMENTS... SO FAR

- Has dreams and aspirations
- Graduated GED program while incarcerated
- Graduated BMCC; currently in her first semester at Hunter for social work
- Currently off most illicit drugs (occasional MJ)
- Is still abstinent from cigarettes
- Considering anger management group
- IS ALIVE
Although the world is full of suffering, it is also full of the overcoming of it.

Helen Keller
THANK YOU!

elizabeth.lorde-rollins@msnyuhealth.org