The Ups and Downs of Substance Use Disorder

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January 26, 2017

2017 NCSBN Annual Institute of Regulatory Excellence Conference
Clearwater Beach, Florida
How Many Nurses Do You Know?

1:10
Objectives

• Discuss the neurobiology of substance use disorders;
• Identify nurses’ risks for substance use disorders;
• Describe nursing leaders’ roles in working with nurses, with substance use disorders.
Paradigm Shift

1930’s Understanding
- Substance Abuser
- Moral flaw, lacking willpower
- Punish, rather than treat

New Understanding
- Substance Use Disorder
- Chronic brain disease, treatable health problem
- Prevent and treat

Sources: https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/preface
http://www.npr.org/sections/health-shots/2016/02/25/468085130/treating-addiction-as-a-chronic-disease
• How do we know that SUD is a chronic disease?

• Research
  • i.e. Adverse Childhood Experiences (ACE)

Source: http://www.cdc.gov/violenceprevention/acestudy/;
## ACE vs Wellness

### VERY NEGATIVE CHILDHOOD EXPERIENCES

<table>
<thead>
<tr>
<th>Experience</th>
<th>HEALTH IMPACT</th>
<th>LONG-TERM EFFECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abuse of child</td>
<td>* Neurobiological effects</td>
<td>Disease and disability</td>
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<tr>
<td>Recurrent severe emotional abuse</td>
<td>* Disrupted neuro-development</td>
<td>Ischemic heart disease</td>
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<tr>
<td>Contact sexual abuse</td>
<td>Difficult controlling anger</td>
<td>Cancer chronic lung disease</td>
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<tr>
<td>Recurrent physical abuse</td>
<td>Depression</td>
<td>Chronic emphysema</td>
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<tr>
<td>Trauma in child's household</td>
<td>Hallucinations</td>
<td>Asthma</td>
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<tr>
<td>Substance abuse</td>
<td>Anxiety- panic reaction</td>
<td>Liver disease</td>
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<tr>
<td>Parental separation or divorce</td>
<td>Multiple (6+) somatic c/o</td>
<td>Skeletal fractures</td>
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<tr>
<td>Depressed or suicidal household</td>
<td>Sleep problems</td>
<td>Poor self-rated health</td>
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<tr>
<td>Mother treated violently</td>
<td>Impaired memory</td>
<td>Sexually transmitted diseases</td>
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<tr>
<td>Imprisoned household member</td>
<td>Flashback</td>
<td>HIV/ AIDS</td>
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<tr>
<td>Loss of parent</td>
<td>Dissociation</td>
<td>SERIOUS SOCIAL PROBLEMS</td>
</tr>
<tr>
<td>Neglect of Child</td>
<td></td>
<td>Homelessness</td>
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<tr>
<td>Unmet physical/emotional needs</td>
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<tr>
<td>Abandonment</td>
<td></td>
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<tr>
<td></td>
<td>Severe obesity</td>
<td>Delinquency, violence, crimes</td>
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<td></td>
<td>Physical inactivity</td>
<td>Inability to sustain employment</td>
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<tr>
<td></td>
<td>Suicide attempts</td>
<td>Re-victimization: rape, DV</td>
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<tr>
<td></td>
<td>* Alcohol/drug abuse</td>
<td>Compromised ability to parent</td>
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<td></td>
<td>50+ sex partners</td>
<td>Intergenerational transmission of abuse</td>
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<td></td>
<td>Eating disorders</td>
<td>Long-term behavioral health</td>
</tr>
<tr>
<td></td>
<td>Interpersonal violence</td>
<td>Correctional and social services</td>
</tr>
</tbody>
</table>

### HEALTH RISK BEHAVIORS

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<tr>
<th>Source:</th>
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How Do We Know What We Know?

- How do we know about neuro bio and developmental changes?

  Brain Research
  
  ...Imaging advances
What has research taught us about the brain’s limbic system?

Advances in Scientific Technology, such as a \textit{positron emission tomography} (PET) scan and the magnetic resonance spectroscopy (MRS), gave new views of the limbic system.

Source: https://cnx.org/contents/_Io4zP0c@7/The-Brain-and-Spinal-Cord
Neurobiological Advances Give Insight into the Limbic System

Source: http://brainsinsight.com/limbic-system-emotional-brain/
Dopamine Receptor Sites in the Brain

Rich Supply of Dopamine

Normal Brain

Pet Scan Simulation

Much Less Dopamine Production

Addicted Brain

• Key Point:
  • Our *limbic system* is impacted by genetics and environmental triggers.

Nature and Nurture Challenges

- Negative experiences
  - Children - risk factors
  - Adults - risk factors
    - What are nurses’ environmental risk factors?
Note to Nursing Leaders

• We don’t know how to remediate the environmental and developmental trajectories...

• But as nursing leaders, we CAN
  • Prevent / teach nurses about SUD
  • Learn nurses’ patterns of behaviors, risk factors, and ways diversions occur
Know Patterns of Behaviors

- Three phases for developing substance abuse disorder:
  - Misuse
  - Dependency
  - Addiction to alcohol or other drugs (legal/illegal)

Source: NCSBN, 2011
Know the Top Risk Factors for Nurses

- Access
- Attitude
- Stress
- Lack of education

Source: NCSBN, Substance Use Disorder in Nursing, 2011
Know the Possible Signs of Drug Diversion

- Behaviors – changes
- From normal emotional patterns
  - Mood swings, leaving unit for long periods
  - Pinpoint pupils, needle marks, blood on clothing
  - Giving narcotics to other patients’ nurses
Know the Other Signs of Possible Drug Diversion

- In medication documentation
  - Signing out narcotics, not documenting
  - Pain c/o from pts, who usually have pain resolved
  - Volunteers to medicate other pts’ patients
  - Patients continuing to c/o pain after being medicated by “x” nurse.
Additional Strategies to Consider

- **Create a safe environment**
  - Consider 8 hr rather than 12 hr staffing patterns
  - Monitor for bullying
  - Note staff’s c/o (pain, family, sleep difficulties)
  - Educate risks, aftercare

- **Intervene timely**
  - Caution for suicide
  - EAP, HR interventions
  - DPHMP
  - **Understand, teach**
    
    *SUD is a treatable, chronic brain disease.*
DPHMP is administered by DPR, and services are provided by Reliant Behavioral Health (RBH), an independent behavioral health services organization.

www.delawaremonitoring.com
DPHMP Enrollment Options

- Self-Referral
- Third Party Referral
- Order from the Delaware Board of Nursing

- What is available in your settings?
Key Points

- Brain changes in the addicted brain are irreversible.
- Relapse is a reoccurrence / exacerbation of the chronic disease. (NCSBN 2011)
- Relapse is always possible. (NCSBN 2011)
- We don’t know how to remediate the environmental and developmental trajectories, but we know how to be nursing leaders in this health challenge.
- Let’s partner together.
• Introduction to Substance Abuse Prevention

“This foundational course offers practitioners new to the field of prevention, or working in related fields, an introduction to the history of prevention, key concepts and definitions, specific drug effects, and an exciting glimpse into the effects of substance use and addiction on the brain. Regardless of the settings where you work, this information will help to prepare you to prevent substance abuse and promote wellness.”

Source: https://captonline.edc.org/mod/page/view.php?id=19630
Thank you

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References


References


