Mental Health Problems in Individuals with Prenatal Alcohol Exposure and Fetal Alcohol Spectrum Disorder

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Session Goals
- Brief introduction to FASD and mental health
- Review of research that has been done in this area
- Presentation of specific research projects conducted in the Edmonton area
- Discussion regarding how we respond to the identified need through provision of mental health services to those affected by FASD
- Questions

Introduction to FASD and Mental Health
- Mental Health and Illness
- Fetal Alcohol Spectrum Disorder (FASD)
- Mental Health in FASD
Mental Health and Illness

Mental Health
Mental Illness
- Mood Disorders
  - Depression
  - Bipolar

Mental Health and Illness

Mental illness (continued)
- Anxiety Disorders
  - Generalized Anxiety Disorder (GAD)
  - Post Traumatic Stress Disorder (PTSD)
  - Panic attacks
  - Specific phobias

Mental Health and Illness

Mental illness (continued)
- Externalizing Disorders
  - Oppositional Defiant Disorder (ODD)
  - Conduct Disorder (CD)
  - Attention Deficit Hyperactivity Disorder (ADHD)
Mental Health and Illness

Mental illness (continued)

- Others
  - Substance abuse/dependence
  - Sleep disorders
  - Reactive Attachment Disorder (RAD)

Traditionally, diagnosis serves two main purposes:

- Define clinical entities to ensure common understanding
- Determine treatment

Diagnosis is often made using the DSM-IV which classifies mental disorders

However, it does not classify individuals as a given disorder may present very differently in each individual
Fetal Alcohol Spectrum Disorder (FASD)

Prenatal alcohol exposure (PAE) produces a range of effects including:
- Fetal Alcohol Syndrome (FAS)
- Fetal Alcohol Effect (FAE)

FAS and FAE fall under the umbrella term FASD. FASD refers to individuals who may have physical, mental, behavioral, and/or learning disabilities as a result of maternal alcohol consumption.

Chudley et al., 2005

Fetal Alcohol Spectrum Disorder (FASD)

FASD may result in:

Primary disabilities
- Those which directly result from the brain injuries of PAE and are evident in some form from birth
  - Intelligence
  - Memory
  - Attention

Fetal Alcohol Spectrum Disorder (FASD)

FASD may result in:

Secondary Disabilities
- Result from primary disabilities and environmental interactions and are not evident from birth
- In theory, secondary disabilities are preventable with better understanding of appropriate interventions
Research on FASD and Mental Health

- Mental Health in FASD
- Children with FASD
- Adults with FASD
- Suicide and FASD
- Low Levels of PAE

Mental Health in FASD

- Measured secondary disabilities among 415 individuals (6-51 years old) with FASD
- More than 90% had mental health problems
- Other secondary disabilities: inappropriate sexual behaviors, disrupted school experience, trouble with the law, alcohol and drug problems

Streissguth et al. (1996) longitudinal study

Mental Health in FASD

Protective Factors:
- Living in a good quality home
- Few changes in living arrangement
- Not being exposed to violence
- Receiving services for developmental disabilities
- Being diagnosed before the age of six (6)

Streissguth et al. (1996) longitudinal study
Children with FASD

- Very high rates of psychiatric disorders among children with PAE
- 87% met the criteria for a psychiatric disorder
  - 61% mood disorder
  - 35% bipolar disorder
  - 26% major depressive disorder
- Even among 6-year-olds, PAE was associated with depressive symptoms, particularly for girls

O’Connor et al. (2002)

Children with FASD

Walthall et al (2008) found that children aged 6-12 with PAE had higher rates of psychopathology:

- Anxiety
- Disruptive behaviors
- Mood disorders
  compared to those without PAE

Children with FASD

- Suggests that PAE may be under recognized among children in psychiatric settings
- Chart review of 130 children admitted to psychiatry inpatient services
  - 30% had documented PAE
    - Of those 26% met criteria for FAS
- None had a diagnosis prior to admission
- Children with PAE more likely to be admitted for externalizing problems than those without PAE

O’Connor et al. (2006)
**Children with FASD**

- Compared psychopathological conditions among children with (n=39) and without (n=30) PAE
- Caregiver interview:
  - Group differences (PAE > non PAE) on ADHD
  - Depressive disorders
  - ODD
  - CD
  - Specific phobia

Fryer et al. (2007)

**Children with FASD**

- ADHD largest group difference
- Concluded that “Fetal alcohol exposure should be considered a possible factor in the pathogenesis of childhood psychiatric disorders.”

Fryer et al. (2007)

**Children with FASD - German Studies**

- High rates of psychopathology:
  - Hyperkinetic
  - Emotional disorders
  - Conduct disorders
  - Sleep disorders
  - Abnormal habits
  - Stereotypical behavior

Children with FASD - German Studies

- Psychiatric impairments among children with FAS that appear to persist or increase with age
- Impairments in FAS lead to serious problems with life adaptation resulting in a large proportion of affected individuals dependent on external support


Adults with FASD

- In young adults, PAE is also associated with alcohol problems as well as increased psychiatric disorders and traits (Barr et al 2006)
- Among Canadian adults with FASD, Clark et al (2004) found that 92% had a mental health disorder with high rates of ADHD, depression and panic disorder
- Psychiatric problems among adult women with FASD reduced their quality of life (Grant et al 2005)

Suicide and FASD

Streissguth long. study

- 23% (21/90) of adults with FASD has attempted suicide (5x higher than US average)

Huggins et al. (2008)

- FASD may increase risk for suicide
- Looked at risk and protective factors among 11 individuals with FASD (6 who attempted suicide from 5 who did not)
**Suicide and FASD**

Those who attempted suicide were more likely to have:
- Mental health or substance abuse disorders
- A history of trauma or abuse
- Financial stress
- Low social support

Huggins et al. (2008)

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**Low Levels of PAE**

- Most previous studies conducted on those with significant PAE and/or FASD diagnosis
- Sayal et al. (2007) looked at relation between very low levels of PAE (<1 drink/week) and mental health problems in children

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**Low Levels of PAE**

- <1 drink per week in the first trimester was associated with significant mental health problems among girls at ages 3 years-11 months and 6 years-9 months
- Preliminary data indicate very low levels of PAE may negatively affect mental health
Edmonton Research Studies

Study 1: Children with PAE or FASD
Study 2: Adults with PAE or FASD

Study 1: Children with PAE or FASD

Retrospective Analysis of Data on Children Assessed for FASD at a Hospital FASD Clinic
Mental Health Diagnoses Among Children with PAE and/or FASD
Age and Gender Effects

Retrospective Analysis of Data on Children Assessed for FASD at a Hospital FASD Clinic

96 children assessed for FASD at a Hospital FASD clinic
Aged 4 to 17 (mean age 9 years)
All had confirmed PAE
52 were diagnosed with FASD and 44 were not diagnosed or deferred
74% had a mental health co-morbidity
Mental Health Diagnoses Among Children with PAE and/or FASD

- Older children were more likely to be depressed than younger children.
- Younger children were more likely to be diagnosed with ADHD than older children.
- Boys were more likely to be depressed than girls.

Age and Gender Effects

Study 2: Adults with PAE or FASD

- Retrospective Analysis of Data on Adults in the Step By Step Program at CSS
- Mental Health Diagnoses Among Adults with PAE and/or FASD
Retrospective Analysis of Data on Adults in the Step By Step Program at CSS

- Step by Step program provides support to parents with PAE or FASD
  - Aged 19 to 47 (mean age 30 years)
  - 24 adults (23 female, 1 male)
  - Half had FASD diagnosis, half suspected of FASD
- 88% had a mental health co-morbidity
- 71% reported experiencing abuse

<table>
<thead>
<tr>
<th>Mental Health Diagnosis</th>
<th>Sample</th>
<th>General Pop. (DSM-IV-TR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>50%(12)</td>
<td>5 - 9%</td>
</tr>
<tr>
<td>ADHD/ADD</td>
<td>42%(10)</td>
<td>3 - 7%</td>
</tr>
<tr>
<td>Anxiety/Panic Attacks</td>
<td>38%(9)</td>
<td>3%</td>
</tr>
<tr>
<td>PTSD</td>
<td>25%(6)</td>
<td>8%*</td>
</tr>
<tr>
<td>Cognitive Delays</td>
<td>25%(6)</td>
<td>2 – 10%</td>
</tr>
<tr>
<td>Tourettes</td>
<td>8%(2)</td>
<td>.01 -.02%</td>
</tr>
<tr>
<td>Self-harm/Suicidal</td>
<td>8%(2)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>29%(7)</td>
<td></td>
</tr>
</tbody>
</table>

Caution in Interpreting the Research

- A sample is just that, a sample - does not mean it is predictive/descriptive of the whole population
- Other factors need to be considered
  - What supports were in place
  - What brought them into the sample
  - What other explanations could produce the results we are seeing
Caution in Interpreting the Research

- This means we need to keep doing the research to enhance our understanding, and remain critical thinkers.

Responding to the Need: Provision of Mental Health Services

- Responding to the Need
- Etiology and Risk Factors
  - Protective Factors
- Clinical Considerations in Service Delivery
- FASD and Mental Health
- The Future of Interventions

Responding to the Need

Themes to be covered:

- Etiology considerations and risk factors
- Protective factors
- Issues to consider in service delivery with those affected by FASD
- Where do we go from here?
Etiology and Risk Factors
- Genetics?
- Environmental stressors?
- Specific trauma?
- Transience, homelessness, marginalization - contribute to and make worse any unstable mental health

Protective Factors
- Genetics?
- Individual strengths and survival skills?
- Support systems?
- Stability?

Clinical Considerations in Service Delivery
In addition to this information, more may be needed:
- The underlying brain damage may contribute to a highly unique and unexpected profile. There is no template - it is important to have some knowledge of this profile. (e.g. cognition, memory, problem solving)
- Cognitive often does not match function
Clinical Considerations in Service Delivery

Our systems and strategies of service delivery need to respond to these unique issues:

- Re-evaluate the way in which we define success and treatment adherence
  - Avoid treatment decisions based on attendance
  - Beware of the appearance of success (expressive vs. receptive skills)

- Explore options for effective communication between systems
  - Encourage support systems that look at multi-dimensional factors - NOT education alone, or criminal alone, or mental health alone

- Implement preventative approaches (eg. structure, schooling, success opportunities)

- Care for the caregiver
Clinical Considerations in Service Delivery

We can work with some of our existing tools, but need to be selective:

- Traditional counseling options may not work well (e.g. psychotherapy and CBT)
- Developmentally appropriate interventions like play therapy, action oriented therapies (e.g. art, drama, phototherapy), and cultural/support connections
- Physical stress reducing approaches

Reminders:

- Beware of stigma and “self fulfilling prophesies”
- Move towards enhancing strengths not just addressing/focusing on deficits
- Remain hopeful - your perspective counts, expectations do influence outcomes

FASD and Mental Health

Goals include:

- Reduction in secondary disabilities
- Improvement in life functioning
- Prevention of FASD

Are we achieving our goals?
The Future of Interventions

- Integration of systems that build on strengths and support challenges
- Empirical evaluation and support of strategies
- Long term program planning that looks at the life span and reduces negative impacts of transitions

Reference

- Questions
- Contact Information

Questions?
Contact Information

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Please Take the Time to Fill Out The On-Line Evaluation

Thank You!