

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

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The FASD Learning Series is part of the Alberta government's commitment to programs and services for people affected by FASD and those who support them.

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**

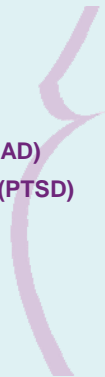


Mental Health and Illness

Mental illness (continued)

➤ **Anxiety Disorders**

- **Generalized Anxiety Disorder (GAD)**
- **Post Traumatic Stress Disorder (PTSD)**
- **Panic attacks**
- **Specific phobias**

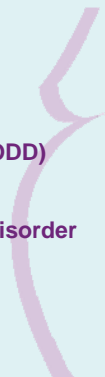


Mental Health and Illness

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)

Mental Health and Illness

Traditionally, diagnosis serves two main purposes:

- Define clinical entities to ensure common understanding
- Determine treatment

Mental Health and Illness

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

Steinhausen, Spohr et al (1982, 1987, 1993, 1998)

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

Steinhausen, Spohr et al (1982, 1987, 1993, 1998)

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)

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**

Low Levels of PAE

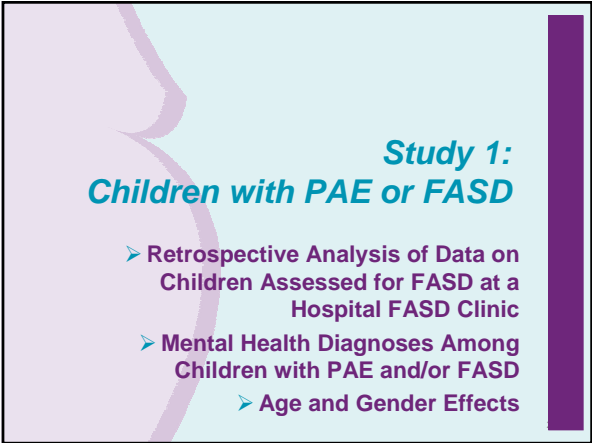
- **<1 drink per week in the first trimester was associated with significant mental health problems among girls at ages 3 years-11 months and 6 years-9 months**
- **Preliminary data indicate very low levels of PAE may negatively affect mental health**



Edmonton Research Studies

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

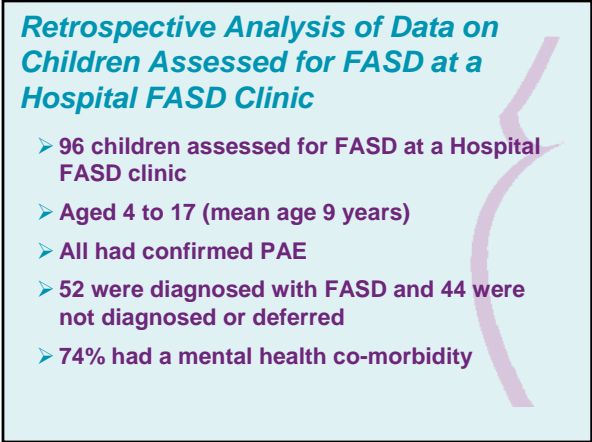
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**Study 1:
Children with PAE or FASD**

- 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

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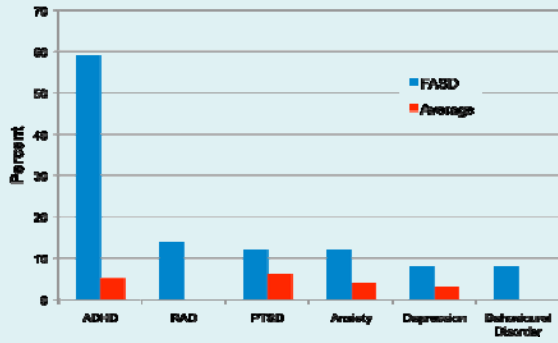


Retrospective Analysis of Data on Children Assessed for FASD at a Hospital FASD Clinic

- 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

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Mental Health Diagnoses Among Children with PAE and/or FASD



Age and Gender Effects

- 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

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

Mental Health Diagnoses Among Adults with PAE and/or FASD

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

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)

Clinical Considerations in Service Delivery

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

- 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)

Clinical Considerations in Service Delivery

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

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

Clinical Considerations in Service Delivery

Reminders:

- Beware of stigma and “self fulfilling prophecies”
- 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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