

Assessing the Need for Nutrition Services in the Fetal Alcohol Syndrome Diagnostic and Prevention Network Clinic

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Background

What is FASD?

Fetal Alcohol Spectrum Disorders (FASD) are lifelong disabilities caused by prenatal alcohol exposure. Fetal Alcohol Syndrome (FAS) is one of the diagnoses that fall under this continuum of disorders.

Symptoms may include:

- Permanent brain damage
- Behavioral issues
- Growth deficiency
- Minor facial anomalies



Examples of children with minor facial anomalies commonly seen in FAS.

Objective & Methods

The goal of this project is to determine:

1. Does nutrition play a role in the challenges observed among children with FASD?
2. If yes, how could nutrition services be incorporated into the FASDPN clinic.

Nutrition issues for individuals with FASD were explored through interviews with key informants (including the director of the FASDPN clinic) and through an extensive literature review.

The Role of Nutrition Services

A Registered Dietitian Nutritionist (RDN) can provide the following services:

- Evaluate growth
- Identify feeding issues
- Assess nutrient intake
- Assess nutrition status
- Provide recommendations for relevant interventions and resources

Key Recommendations

1. Share the findings from this project with the Director of the FASDPN to discuss recommendations 2 and 3
2. Develop a survey for parents/caregivers regarding nutrition, feeding, and growth concerns for the children being seen at the FASDPN clinic
3. Explore how the RDN could fit into the current FASDPN clinic schedule to determine nutrition concerns of the family and provide recommendations
4. Research funding options for addition of RDN to team

Key References:
• FAS Diagnostic & Prevention Network. <https://cdpn.washington.edu/fadpn/>. Accessed July 26, 2018.
• Astley SJ, PhD, Gelo J, Health S, MA, MD, CD. Fetal Alcohol Spectrum Disorders: Nutrition Focus for children with special health care needs. November/December 2014;29(6).
• Center for Disease Control and Prevention. Fetal Alcohol Spectrum Disorders (FASD) Data & Statistics. https://www.cdc.gov/nchs/data/2014/fasd_data.html. Published 2018.
• Astley SJ, Susan JA, Julia MB, Julian KD. The essential role of growth deficiency in the diagnosis of fetal alcohol spectrum disorder. *Advances in Pediatric Research*. 2016;3(9).
• Nguyen TT, Richard RB, Chambers CD, Thomas JD. Dietary nutrient intake in School-Aged Children With Heavy Prenatal Alcohol Exposure. *Alcoholism: Clinical and Experimental Research*. 2018;40(5):1075-1082.
• Anoop-Krooks RM, Pink SA, Smith CL, et al. Abnormal Eating Behaviors Are Common in Children with Fetal Alcohol Spectrum Disorder. *The Journal of Pediatrics*. 2016;180:194-200.e311.
• Wiers RL, Van Calcar SC, Wargowski DS, Smith SM. Inappropriate Feeding Behaviors and Dietary Intakes in Children with Fetal Alcohol Spectrum Disorder or Probable Prenatal Alcohol Exposure. *Alcoholism: Clinical and Experimental Research*. 2014;38(3):871-878.
• Korbines L, Astley SJ. Interview with Susan Astley, PhD, FASDPN Director. August 2018.

The Fetal Alcohol Syndrome Diagnostic & Prevention Network Clinic

Practitioners from a variety of disciplines come together to evaluate children for FASD & to provide families with recommendations & resources.

- Interdisciplinary team includes:
- Medical doctor
 - Psychologist
 - Speech-Language Pathologist
 - Occupational Therapist
 - Social Worker

FASD as a Public Health Issue

- FASD is 100% preventable
- Prenatal alcohol exposure is the **leading known cause of intellectual disabilities**
- Approximately 2-5% of children living in the US have FASD

Nutrition Issues for Kids with FASD

- **Growth deficiencies:** less than or equal to the 10th percentile for weight/height is present in 35% of kids with FASD
- **Nutrient deficiencies** including lower intakes of **fiber, omega-3 fatty acids, vitamins D, E, K, C, B6, choline, niacin, and calcium** than typically-developing children
- **Feeding problems** due to:
 - Weak suck
 - Sensory abnormalities
 - Issues related to activity level (i.e. hyperactivity)
 - Distractibility
 - Behavioral issues

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