



# Pregnancy and Alcohol: The Need for Alcohol-Screening and Brief Intervention in Women of Childbearing Age



Brayden Kameg, BSN, RN, Ann Mitchell, PhD, RN, FAAN, Irene Kane, PhD, CNAA, EP-C, Kathryn Puskar, DrPH, RN, FAAN, Holly Hagle, PhD, & Dawn Lindsay, PhD

**University of Pittsburgh School of Nursing**

## Background

- Fetal Alcohol Spectrum Disorders (FASD) consist of a wide variety of physical, behavioral, and cognitive dysfunctions.
- Developmental and cognitive defects affect approximately 3 in every 1,000 live births.
- Individual and economic turmoil; FASD-related healthcare costs are approximately \$5.4 billion annually in the U.S.
- Prenatal alcohol exposure is the leading *preventable* cause of birth defects and disabilities
- It is crucial that nurses who frequently encounter women of childbearing age are adequately educated in the evidence-based practice of alcohol-Screening and Brief Intervention (alcohol-SBI).

## Project Overview

- Centers for Disease Control and Prevention (CDC) funding, collaboration between the University of Pittsburgh School of Nursing, University of Alaska at Anchorage, and University of California at San Diego
- Objective was to evaluate current educational resources available to nurses and other healthcare professionals via an environmental scan and comprehensive literature review
- Gaps and opportunities were identified and strategies were developed to broaden the availability of alcohol-SBI related materials.
- Additionally, this workgroup collaborated with national nursing partner organizations.
- Ultimately, the workgroup sought to increase the reach and number of nurses trained to use alcohol SBI to prevent AEPs and subsequent FASDs.

## Methods

- An environmental scan was completed to identify evidence-based/ evidence-informed training materials and resources related to alcohol SBI and FASD. The environmental scan reviewed:
  - existing literature
  - statements of national nursing organizations
  - training curricula
  - other learning opportunities already present in the nursing field
- Over 400 items initially were obtained; 125 items were reviewed in-depth and rated on several factors including coverage of alcohol SBI and FASD issues and potential patient reach and sustainability (see below).
- 92 *journal articles* met inclusion criteria and were reviewed.

## Environmental Scan Resource Rating Tool

Variable Name	Initial Rating Criteria/Labels	Secondary Rating Criteria
Year	2010-2015	Earlier articles considered
Resource Type	journal article, existing training, practice guidelines, policy or position statements, conference presentations, other	--
Nurse Specific	Yes/No	--
Alcohol Specific	Yes/No	--
Prevention Specific	Yes/No	--
FASD Competencies 1-7	Yes/No	--
Audience; Provider using the resource	List healthcare provider disciplines that resource targeted as the users	Identify practice settings (potential adopters); implementation feasibility; acceptability/ burden to providers
Hierarchy	Meta Analysis; Systematic Review; RCT; Cohort Longitudinal Study; Case Control Studies; Cross-sectional or Observation studies; Single Descriptive and/or Qualitative studies; Editorials, Opinions; Other	External validity of studies conducted: i.e., effectiveness or implementation studies reporting on adoption, implementation, maintenance, and outcomes
Reach potential (patients)	Universal; Selected; Indicated	Number and representativeness of patients reached (and groups not reached?); Effectiveness of resource to change patient behavior
Sustainability potential	Present/Absent	Cost, potential to be used by nurses with continued fidelity and to influence their practice behaviors long-term
Endorsed or Recommended	List agency or professional organizations	--
Relevance to goal	Directly (i.e., nurse, alcohol, and prevention-specific); Somewhat (i.e., meets 2 of the above); Not Directly (i.e., meets 1 or none of the above)	Extent that the resource reflects current U.S. health recommendations for alcohol, is high quality; practical and relevant to nursing professionals; and usable as is (i.e., will it require costly adaptation; user testing)

## Results

The environmental scan points to areas where nurses can improve their knowledge, attitudes, and behaviors related to alcohol screening and intervention for AEP and FASD. Other gaps in nursing education with regard to addressing patients' alcohol use were identified and include:

- Effectiveness research of nurse-delivered alcohol SBI in the U.S. is limited, especially with respect to primary care settings.
- Providers are not consistently knowledgeable of NIAAA alcohol limits for specific populations, including women of child-bearing age and pregnant women.
- Limited studies of SBI/SBIRT effectiveness exist for diverse patient groups.
- Content related to FASD Competencies is inadequate.
- Insufficient role acceptance and lack of motivation may exist among nurses.
- Best practices for obstetric triage lack SBI.
- Position statements are absent from most nursing organizations.

## Conclusion

- In order to reduce the burden of FASD, healthcare professionals must be proficient when utilizing alcohol-SBI; therefore, education materials and practice guidelines must be available.
- This extensive process will serve as the basis to complete a national training plan for nursing practice around implementation with multiple nursing organizations.

