Alcohol Misuse (Screening and Counseling)

Clinical Preventive Service Recommendations

U.S. Preventive Services Task Force Recommendation

The U.S. Preventive Services Task Force (USPSTF) recommends screening and behavioral counseling interventions to reduce alcohol misuse by adults, including pregnant women, in primary care settings.[1]

***Evidence Rating:* B (Recommended/At Least Fair Evidence)**

The evidence on the effectiveness of counseling to reduce alcohol consumption during pregnancy is limited; however, studies in the general adult population show that behavioral counseling interventions are effective among women of childbearing age. The USPSTF concluded that the benefits of behavioral counseling interventions to reduce alcohol misuse by adults outweigh any potential harms.[1]

The USPSTF recommendation is supported by the American Academy of Family Physicians (AAFP).[2]

Recommended Guidance U.S. Surgeon General

The Surgeon General of the United States recommends that clinicians 1) screen pregnant women for alcohol use, 2) inform them of the risks of alcohol consumption, and 3) advise them not to drink alcohol during their pregnancy.[3]

Evidence Rating:

Not Specified

Information Sources

The recommendations and supporting information contained in this document came from several sources, including the:

- American Academy of Family Physicians (AAFP)
- Centers for Disease Control and Prevention (CDC)
- National Institute of Alcohol Abuse and Alcoholism (NIAAA)
- Peer-reviewed research
- U.S. Preventive Services Task Force (USPSTF)
- U.S. Surgeon General

The background and supporting information contained in this document is a compilation of research findings. All information presented in this document should be attributed to its referenced source and should not be considered a reflection of other organizations cited in the text.

Condition/Disease Specific Information

Epidemiology of Condition/Disease

No amount of alcohol can be considered safe during pregnancy: alcohol consumed during any stage of pregnancy increases the risk of alcohol-related birth defects.[3] Fetal exposure to alcohol during pregnancy is one of the leading causes of preventable birth defects, mental retardation, and developmental disorders in the United States.[4]

Despite the documented risks associated with fetal alcohol exposure 10% of pregnant women reported consuming alcohol in 2003.[5] Annually, 55% of

women of childbearing age report alcohol use, and 12% report binge drinking.[5] This statistic is of particular concern because half of all pregnancies in the United States are unplanned and are at particular risk of unintentional prenatal alcohol exposure. Therefore, experts recommend that women of childbearing age consult their physicians and take steps to reduce the possibility of an alcohol-exposed pregnancy by either 1) using an effective form of contraception or 2) reducing or eliminating alcohol use.[5]

Prenatal alcohol use can lead to one or more fetal alcohol spectrum disorders (FASD). FASD is characterized by permanent disabilities of varying degrees of severity. FASD may result in subtle defects, such as learning disabilities or mild physical abnormalities, or it may result in fetal alcohol syndrome (FAS), the most severe form of FASD, which is characterized by mental retardation, abnormal facial features, growth retardation, and central nervous system complications.[3]

FASD is identified in 2 of every 1,000 live births, and FAS is identified in between 0.5 to 2 of every 1,000 live births.[3] Because many alcohol-related deficits are not identified at the time of birth, the actual prevalence of alcohol-related disorders is much higher. In fact, researchers estimate that, for every case of FAS documented at birth, there are 3 additional cases that are not identified until later in life.[3]

Condition/Disease Risk Factors

Alcohol misuse (in the form of binge drinking, heavy drinking, alcohol abuse, or alcohol dependence) before pregnancy is highly predictive of continued use.[4]

Value of Prevention

Economic Burden of Condition/Disease

The direct and indirect costs of alcohol misuse in the United States were estimated to equal nearly $185 billion in 1998. Medical consequences of fetal alcohol syndrome (FAS) accounted for about $2.9 billion of this amount and approximately $1.3 billion were attributed to lost earnings due to FAS.[6]

Workplace Burden of Condition/Disease

Data are limited about presenteeism and absenteeism stemming from parental caregiving requirements for FASD/FAS-affected children, but parents are likely to take time off from work to attend to special needs children.

Economic Benefit of Preventive Intervention

The economic benefits of screening and counseling mainly result from:

- The averted costs of medical care for FAS and related disorders.
- Cost-savings in neonatal care and the management of developmental delays and birth defects.
- Cost-savings associated with special education, the criminal justice system, alcohol and/or drug abuse treatment, and mental health services.

Interventions directed toward alcohol misuse that occur during pregnancy may also improve a pregnant woman's long-term drinking behavior. A permanent or long-term reduction/elimination of alcohol use would generate additional cost-savings due to averted long-term healthcare costs.

Estimated Cost of Preventive Intervention

Screening patients for alcohol misuse in primary care settings is relatively inexpensive. The cost of follow-up counseling sessions depends on the number of sessions, their mode of delivery (in-office or by telephone), and on the type of provider who delivers the counseling. In 2004, the private-sector cost of the initial health risk assessment and counseling averaged $23; approximately 95% of all paid claims fell within the range of $0 to $81.[7]

Estimated Cost of Treatment

Treatment costs for pregnant women who misuse alcohol should not differ from general alcohol treatment costs unless there are other pregnancy-related complications.

Cost-Effectiveness and/or Cost-Benefit Analysis of Preventive Intervention

Screening and counseling for alcohol misuse have a greater impact and are more cost-effective than most clinical preventive services.[8] Screening and counseling for alcohol misuse among all adults (not just pregnant women) reduce both societal and healthcare costs. It is estimated that each $1 invested in screening and brief counseling interventions saves approximately $4 in healthcare costs.[9-10] Furthermore, researchers estimated that the excess medical costs for a child with fetal alcohol syndrome (FAS) are $2,342 per year (based on North Dakota Health Claims data for 1996 and 1997). This suggests that a alcohol-reduction program that costs $50,000 and is able to prevent one case of FAS each year would have paid for itself in 6 years by generating healthcare savings. The benefits are returned even faster if the prevention of alcohol-related conditions other than FAS are included in the analysis.[11]

Preventive Intervention Information

Preventive Intervention: Purpose of Screening and Counseling

Screening for alcohol misuse allows clinicians to identify women who misuse alcohol early in the course of pregnancy (or during the pre- or interconception periods). Pregnant women who misuse alcohol can be counseled to reduce or eliminate their use and referred to treatment services as needed.

Benefits and Risks of Intervention

The benefits of screening and intervention include the prevention of FASD and FAS in addition to the maternal benefits accrued from identifying and intervening with their alcohol misuse. Randomized trials demonstrate that brief counseling leads to reduced alcohol consumption among excessive drinkers and to reductions in adverse alcohol-related health outcomes, including excess mortality.[9, 12-13] The USPSTF found little direct evidence regarding harms of screening for alcohol misuse or behavioral counseling interventions to reduce or eliminate alcohol use in general populations.[14]

Initiation, Cessation, and Interval of Screening

All women should be screened for alcohol use with each pregnancy. Because the optimal frequency of screening is unknown, screening is left to the discretion of the clinician. Patients at greater risk for alcohol problems, either because they have a history of past alcohol misuse or may report other risky behaviors, may benefit from re-screening during pregnancy.[14] Counseling should be conducted as medically indicated. A total of 8 counseling sessions are covered each calendar year.

Intervention Process

Screening

There are several effective screening tools currently available for assessing alcohol use in primary care settings. Non-pregnant women of childbearing age seen in primary care settings should be screened with general tools such as a single questions screen (e.g., AUDIT or AUDIT-C).[15] Pregnant women seen in primary care settings should be screened with a pregnancy-specific tool such as the TWEAK or T-ACE. The TWEAK, a 5-question tool, and the T-ACE, a 4-question tool, were specifically designed to screen pregnant women for "risky drinking", "harmful drinking", and alcohol abuse disorders. The T-ACE is very sensitive and has been shown to outperform unaided clinicians in identifying pregnant women who use alcohol.

All pregnant women and women considering pregnancy should be advised of the harmful effects of alcohol on the fetus. Because safe levels of alcohol consumption during pregnancy are unknown, pregnant women should be advised to refrain from drinking alcohol altogether.[5,14] Non pregnant women should also be advised to use contraception until their drinking can be reduced or eliminated.

Counseling

Clinicians should provide counseling interventions for patients who meet the criteria for alcohol misuse. The USPSTF identifies 3 levels of counseling intervention, differentiated by level of intensity, for these patients. Multi-contact counseling is more effective than single-contact counseling interventions, but providers should tailor counseling intensity to address individual patient needs. Intensity is determined by the duration of the initial contact and whether any follow-up occurs. "Very brief" interventions last up to 5 minutes and have no follow-up. "Brief" counseling interventions last 15 minutes and have no follow-up. "Multi-contact" interventions include one initial session lasting at least 15 minutes and several follow-up contacts.[1] More intensive interventions are typically recommended for those meeting criteria for alcohol dependence.

Effective counseling for alcohol misuse in the primary care setting includes feedback, advice, goal setting, and follow-up. Alcohol misuse counseling should follow the counseling framework known as the "5 As"[15]:

- Providers should **assess** the degree of a patient's drinking, including any problems caused by alcohol and whether the person is alcohol dependent or not.
- Providers should **advise** patients to reduce their alcohol consumption to safer levels or to abstain altogether from drinking.
- Providers should **agree** with patients on their goals for reducing alcohol consumption.
- Providers should **assist** patients in acquiring personal motivation, self-help skills, or outside resources necessary to achieve behavior change.
- Finally, providers should **arrange** for patients to receive appropriate follow-up support services and counseling, depending on the nature of their alcohol misuse.

Treatment Information

Health benefits should include provisions for diagnostic assessment, follow-up, and treatment services.

Strength of Evidence for the Clinical Preventive Service

The level of evidence supporting the recommendations contained in this section is described below.

Evidence-Based Research:

The U.S. Preventive Services Task Force (USPSTF)
Strength of Evidence: B (Recommended/At Least Fair Evidence)

- The USPSTF found at least fair evidence to support screening and behavioral counseling all adults, including pregnant women, for alcohol misuse.[1]

This recommendation is supported by the:

- American Academy of Family Physicians (AAFP)[2]

Recommended Guidance:

The U.S. Surgeon General
Strength of Evidence: Not Specified

- The U.S. Surgeon General recommends that clinicians should routinely 1) screen pregnant women for alcohol use, 2) inform them of the risks of alcohol consumption, and 3) advise them not to drink alcohol during their pregnancy.[3]

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Campbell KP, Naimi T, Chattopadhyay S. Alcohol misuse during pregnancy evidence-statement: screening and counseling. In: Campbell KP, Lanza A, Dixon R, Chattopadhyay S, Molinari N, Finch RA, editors. *A Purchaser's Guide to Clinical Preventive Services: Moving Science into Coverage.* Washington, DC: National Business Group on Health; 2006.