

Prevention of Fetal Alcohol Spectrum Disorders: Practice Behaviors, Attitudes, and Confidence among Members of the American College of Nurse-Midwives

Bridget L. Hanson, PhD
Rebecca R. Porter, MS
Lucía L. Neander, MS

June 30, 2017

Acknowledgements

This report was supported by Cooperative Agreement Numbers DD001143 (University of Alaska Anchorage), DD001144 (University of California, San Diego), and DD001035 (University of Pittsburgh, School of Nursing), funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.

The authors would like to express gratitude to:

- Marilyn Pierce-Bulger, CNM, FNP, Owner and Medical Manager, FASDx Services, LLC
- The leadership and staff of the American College of Nurse-Midwives (ACNM)
- All ACNM members who took part in the online survey
- All partners and champions associated with CDC's FASD Practice and Implementation Centers, National Partners, and the Collaborative for Alcohol-Free Pregnancy

BACKGROUND

As part of an ACNM collaboration with the Centers for Disease Control and Prevention (CDC) and its partners and grantees on a project to prevent fetal alcohol spectrum disorders (FASDs), ACNM members were surveyed to generate an assessment of practice behaviors of certified nurse-midwives and certified midwives related to the prevention of FASDs. The information will be used as a baseline from which to measure change in nurse-midwives' and midwives' practice behaviors over the course of the project. Results from the assessment will also be used to inform detailed collaborative activities between ACNM and CDC grantees whose efforts specifically target nurse-midwives (i.e., University of Alaska Anchorage (UAA), University of California San Diego, University of Pittsburgh).

METHOD

Instrument

The baseline assessment survey was created for the CDC FASD project. The instrument has four main questions, three of which contain sub-questions or follow-up questions. Items assess practice behaviors, beliefs, and confidence associated with alcohol screening and brief intervention (SBI). The instrument was approved by UAA's Institutional Review Board as well as the federal Office of Management and Budget.

Procedure

ACNM members were invited to participate in a brief online survey. An email invitation signed by a UAA researcher was sent by ACNM; one reminder email was also sent.

Participants

Initial email invitations were sent to 6,747 ACNM members; 40.6% ($n = 2,737$) opened the email and 12.9% ($n = 353$) of those who opened the email clicked on the survey link. The reminder email was sent to 6,736 members; 38.8% ($n = 2,613$) opened the email and 9.5% ($n = 249$) of those clicked on the survey link. Between the two invitations, 586 respondents began the survey; 39 individuals did not answer any questions, resulting in 547 valid responses and an overall response rate of 8.1%.

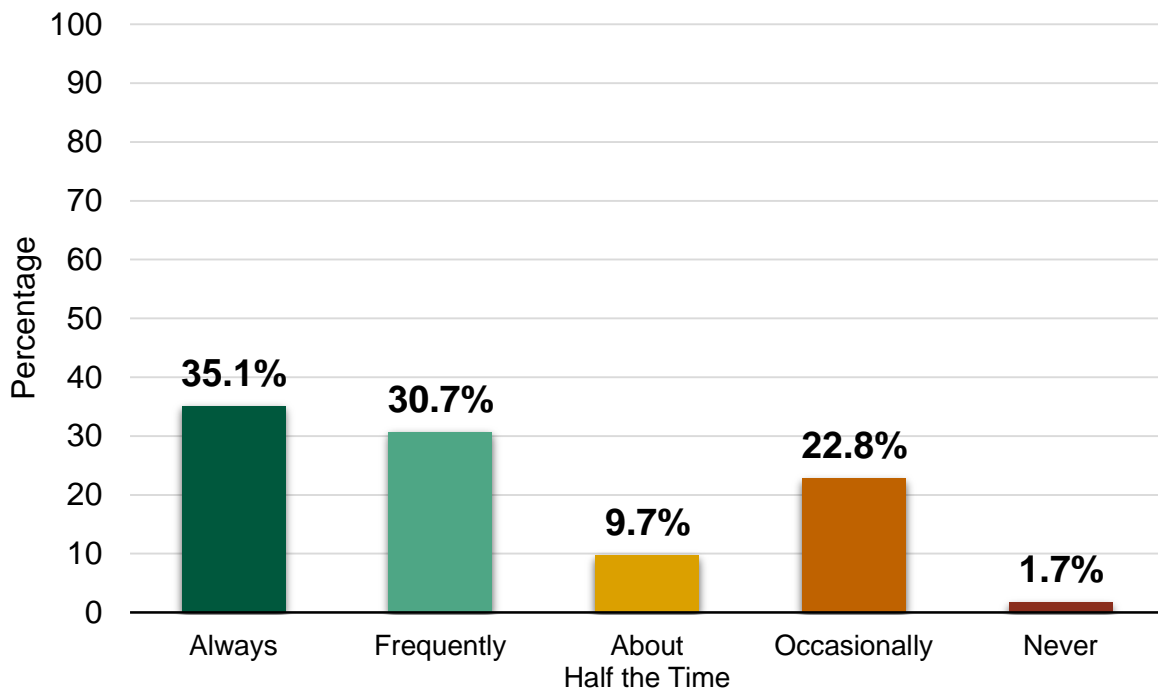
Most participants (90.9%) identified as nurse-midwives. Certified midwives (2.8%) and students (6.3%) comprised the remainder of the sample.

RESULTS

Discussing Alcohol Use with Patients

The majority of respondents (65.8%) reported that they either always or frequently talk with their patients about their alcohol use. Nearly a quarter (24.5%) reported talking with their patients about their alcohol use less than half the time (see Figure 1).

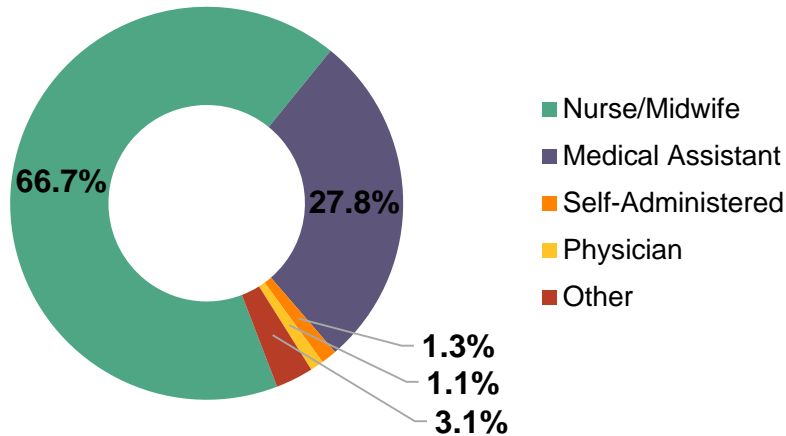
FIGURE 1. FREQUENCY OF CONVERSATIONS WITH PATIENTS ABOUT ALCOHOL USE



A majority of respondents (72.8%) indicated that their practice has a protocol in place to screen all patients for alcohol use, but very few (16.5%) used a validated screening tool (e.g., AUDIT, CRAFFT). Instead most (83.5%) used informal questions (e.g., Do you drink? How much?).

Among those respondents whose practices have an alcohol screening protocol, more than half (66.7%) indicated that the alcohol screen is generally conducted by a nurse, nurse-midwife, or midwife (see Figure 2).

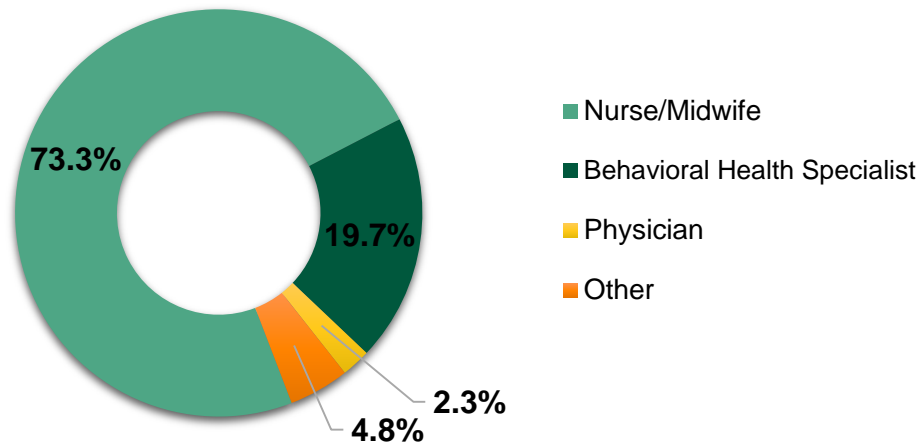
FIGURE 2. HEALTHCARE PROFESSIONALS CONDUCTING ALCOHOL SCREENING



Respondents who indicated that patients are screened for alcohol use were asked additional questions about what happens next. Over one-third (35.4%) of respondents reported that patients who screened positive for at-risk alcohol use were asked follow-up questions and provided brief counseling. A similar proportion of respondents (35.7%) reported patients who screened positive for at-risk alcohol use were asked follow-up questions and provided with additional resources. Other respondents indicated that all patients are given educational materials/information on “safe” levels of alcohol use and health risks associated with consuming too much alcohol or that no education or intervention is done following screening (14.4% for each).

Among those respondents who indicated that alcohol screening is followed by some type of intervention, a majority (73.3%) indicated that a nurse, nurse-midwife, or midwife conducts the intervention (see Figure 3).

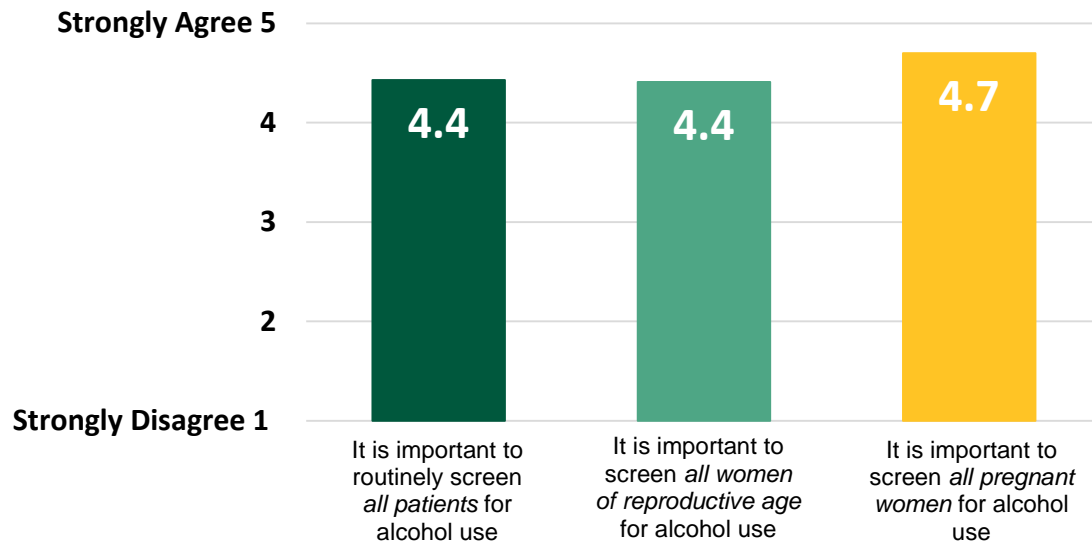
FIGURE 3. HEALTHCARE PROFESSIONALS CONDUCTING ALCOHOL INTERVENTION



Attitudes about Alcohol Screening and Brief Intervention

Respondents indicated the extent to which they disagree or agree with a variety of statements related to alcohol screening and brief intervention. Using a scale from 1 (strongly disagree) to 5 (strongly agree), respondents agreed that it is important to screen all patients, all women of reproductive age, and all pregnant women for alcohol use (see Figure 4).

FIGURE 4. PERCEIVED IMPORTANCE OF ALCOHOL SCREENING BY POPULATION TYPE

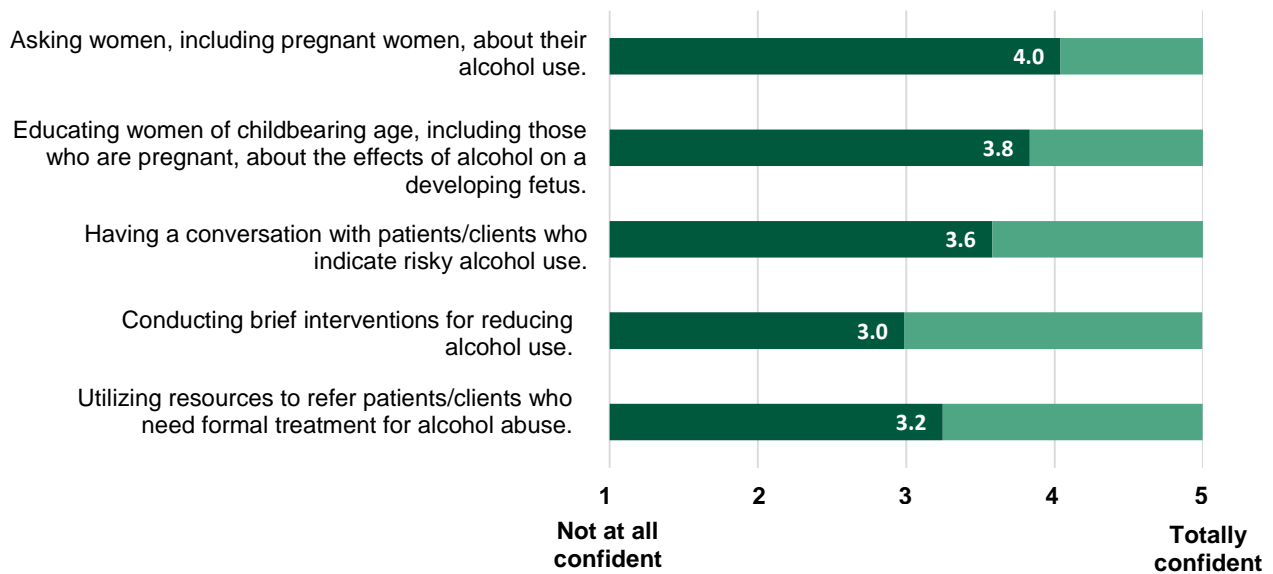


Additionally, respondents disagreed that screening a person for alcohol use confers a stigma to the person being screened ($M = 2.0$; $SD = 1.0$) and they agreed that it is important to educate women of reproductive age, including those who are pregnant, about the effects of alcohol on a developing fetus ($M = 4.6$; $SD = 0.6$).

Confidence in Skills

Respondents provided ratings of their confidence in performing a variety of skills or practice behaviors related to FASD prevention. Using a scale from 1 (not at all confident in my skills) to 5 (totally confident in my skills), respondents indicated the most confidence in asking women, including pregnant women, about their alcohol use ($M = 4.0$, $SD = 0.9$) and the least confidence in conducting brief interventions for reducing alcohol use ($M = 3.0$, $SD = 1.1$; see Figure 5).

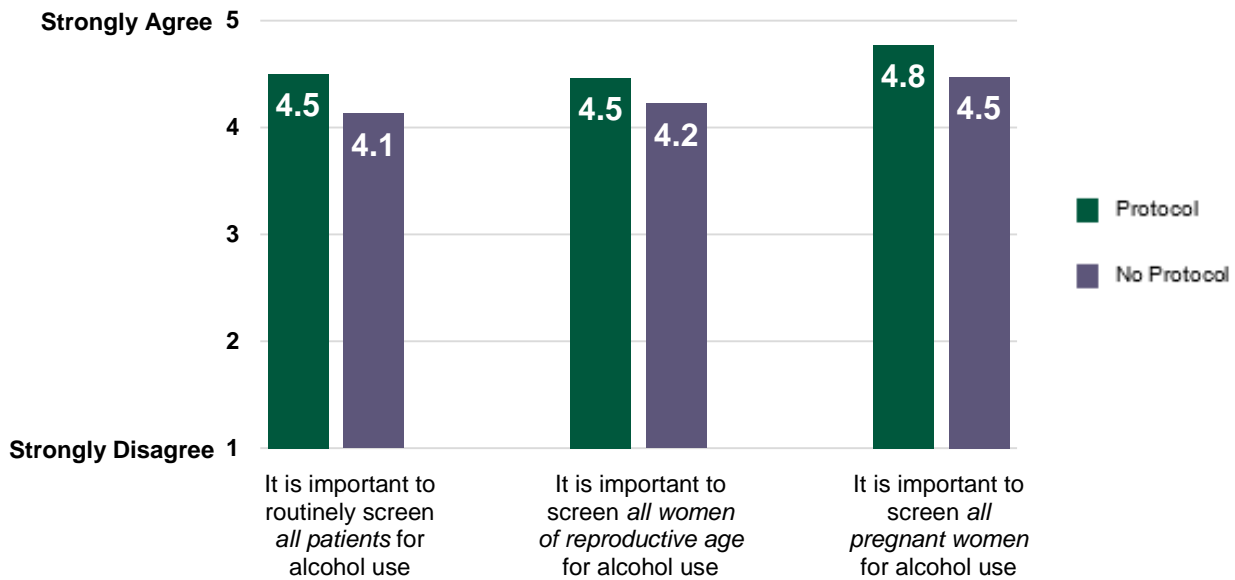
FIGURE 5. CONFIDENCE BY PRACTICE BEHAVIOR/SKILL



Respondents' Attitudes and Confidence by Practice Protocol

Two multivariate analyses of variance (MANOVAs) were used to explore differences in respondents' attitudes and confidence in skills based on whether or not their practice has an alcohol screening protocol in place. Results of the MANOVA for attitude revealed a significant main effect.¹ Follow-up tests found significant differences in attitude such that respondents whose practices have a protocol indicated greater endorsement of the importance of alcohol screening for all patients, all women of reproductive age, and all pregnant women² (see Figure 6). Respondents did not differ based on practice protocol in their belief that screening for alcohol use confers a stigma to the person being screened nor in their beliefs regarding the importance of educating women of childbearing age about the effects of alcohol on a developing fetus.

FIGURE 6. COMPARISON OF PERCEIVED IMPORTANCE OF ALCOHOL SCREENING BY PROTOCOL

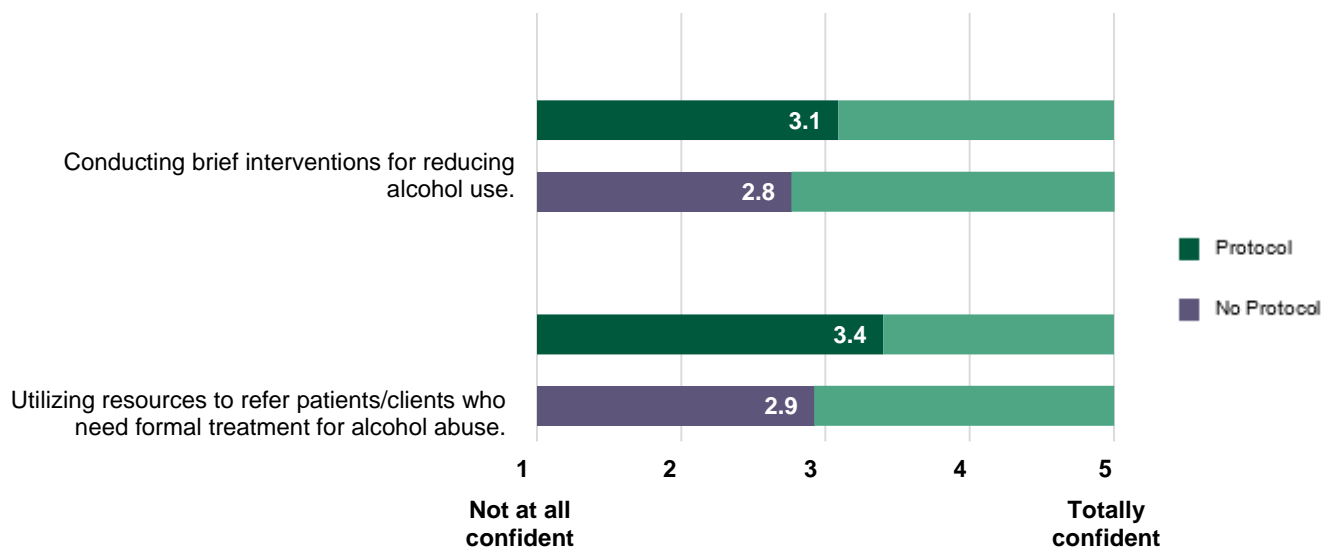


¹ Wilks' $\lambda = .94, F(5, 460) = 6.03, p < .001$

² $p < .01$ for all

A second MANOVA tested differences in confidence and also found a significant main effect.³ Follow-up tests revealed significant differences in confidence between those respondents whose practice has a protocol and those working in practices without a protocol. Respondents in practices with protocols were significantly more confident in conducting brief interventions for reducing alcohol use and in utilizing resources to refer patients for formal treatment⁴ (see Figure 7). Respondents did not differ based on practice protocol in their confidence in asking women about alcohol use, educating women of childbearing age about the effects of alcohol on a developing fetus, or having a conversation with patients about risky alcohol use.

FIGURE 7. COMPARISON OF CONFIDENCE IN PRACTICE BEHAVIOR BY PROTOCOL



³ Wilks' $\lambda = .96$, $F(5, 449) = 3.96$, $p < .01$

⁴ $p < .01$ for both

DISCUSSION

Many ACNM members talk to their patients about their alcohol use and a majority of respondents work in settings where a protocol for alcohol screening is routinely utilized in practice. However, very few respondents whose practices have an alcohol screening protocol in place use a validated screening instrument to objectively determine whether a patient's drinking creates a risk for themselves or others. Nurse-midwives, midwives, and nurses were often identified as being the healthcare professional responsible for conducting alcohol screening and follow-up interventions for positive cases, highlighting their central role in FASD prevention.

ACNM members who responded to the survey have a generally positive attitude toward alcohol screening and view it as an important clinical practice. Additionally, most respondents are not concerned about stigma associated with alcohol use. This was consistent regardless of whether respondents practice in settings where a routine alcohol screening protocol exists. These results suggest nurse-midwives and midwives are willing to universally discuss alcohol use with patients in a considerate and unbiased manner, which is of particular importance when addressing the use of alcohol during pregnancy. Opportunities exist to promote the use of validated screening tools to begin these conversations with patients.

Confidence to conduct alcohol screening is high among ACNM members and a majority of respondents felt it important to provide patient education about the effects of alcohol on a developing fetus. However, confidence is lower related to skills for responding to risky alcohol use (i.e. providing a brief intervention and referring for additional care, as needed). Continued clinical training efforts are recommended, with an increased focus on materials and practice opportunities associated with alcohol SBI. Such efforts can improve nurse-midwives' and midwives' confidence to address alcohol use among women of reproductive age, including confidence to effectively intervene with patients who drink too much and may be at-risk of an alcohol-exposed pregnancy.

Respondents who practice in settings with an established alcohol screening protocol showed greater endorsement of the importance of alcohol screening as well as significantly more confidence in conducting brief interventions and providing referral for treatment than respondents who practice in settings where no established alcohol protocol exists. These

results suggest providers' adoption of alcohol SBI is greatly enhanced when practice settings have established procedures to systematically address alcohol use as part of patient care.

RECOMMENDATIONS

As a respected professional membership organization, ACNM can promote efforts that prioritize FASD prevention by encouraging the use of evidence-based practices, like alcohol SBI, among its membership. Optimizing nurse-midwives' and midwives' capacity to detect and address at-risk alcohol use as a clinical preventive service for women of reproductive age can be achieved through the following recommendations:

- Offer clinician-led training for alcohol SBI, emphasizing practice opportunities, to increase nurse-midwives' and midwives' confidence to effectively intervene with patients who drink too much and may be at risk for an alcohol-exposed pregnancy. To optimize reach among ACNM members, a variety of on-going continuing education opportunities (e.g., online, print, live) and use of experienced nurse champions should be utilized.
- Encourage ACNM members to use a validated screening instrument when assessing alcohol use in clinical care. Instruments that focus directly on how much patients are drinking can inform alcohol-related conversations and assist in meeting client needs.
- Endorse health system implementation of alcohol screening protocols, or enhancement of existing protocols, in order to develop practice environments that stimulate nurse-midwives' and midwives' adoption of alcohol SBI and support their ability to effectively address alcohol use as a routine component of midwifery care.