

## Missed Opportunities: Screening and Brief Intervention for Risky Alcohol Use in Women's Health Settings

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### Abstract

**Background:** Although women's health settings could provide access to women for screening, brief intervention, and referral to treatment (SBIRT) for risky alcohol use, little is known about rates of alcohol use or associated risk for alcohol-exposed pregnancy (AEP) among women's health patients, receipt of SBIRT services in these settings, or patient attitudes towards SBIRT services.

**Methods:** This study reports the results of a self-administered survey to a convenience sample of women's health patients attending public clinics for family planning or sexually transmitted infection visits.

**Results:** Surveys were analyzed for 199 reproductive-aged women who had visited the clinic within the past year. The rate of risky drinking among the sample was (44%) and risk for AEP was (17%). Despite this, many patients did not receive SBIRT services, with more than half of risky drinking patients reporting that they were not advised about safe drinking limits (59%) and similar rates of patients at risk for AEP reporting that their medical provider did not discuss risk factors of AEP (53%). Patient attitudes towards receipt of SBIRT services were favorable; more than 90% of women agreed or strongly agreed that if their drinking was affecting their health, their women's health provider should advise them to cut down.

**Conclusions:** Women's health clinics may be an ideal setting to implement SBIRT and future research should address treatment efficacy in these settings.

### Introduction

SCREENING, BRIEF INTERVENTION, AND REFERRAL TO treatment (SBIRT) is a comprehensive, integrated, public health approach to deliver early intervention to individuals with risky alcohol use, and the timely referral to more intensive treatment for those who have alcohol use disorders.<sup>1</sup> On a population level, most alcohol-related harm is not due to severe alcohol dependence, but rather is from consumption that exceeds recommended drinking levels and the related physical, psychological, and social problems that occur in the large group of hazardous or harmful drinkers.<sup>2</sup> Although SBIRT has been tested with patients with varying severity of alcohol use across different settings, its most consistent effects occur when risky drinkers receive SBIRT from their ongoing providers in primary care settings, where brief intervention can reduce alcohol consumption by 10%–30%.<sup>3–5</sup>

While some key studies have found that an SBIRT approach is effective for both male and female patients in primary care, there is less evidence about the utility of SBIRT in

women's health settings. Services provided in women's health settings include routine gynecological care, family planning and birth control consultation, and testing and treatment for sexually transmitted infection (STI). Providers in such settings are uniquely positioned to identify and intervene with women who are consuming alcohol at unhealthy levels.<sup>6</sup> Recommended maximum drinking limits for women are no more than three standard drinks in one day or seven in a week;<sup>7</sup> exceeding these limits significantly increases risk for a range of negative health and psychosocial consequences, including breast and ovarian cancer, contraction of STIs, sexual assault, and unintended pregnancy.<sup>8</sup> The majority of women of childbearing age in the United States drink alcohol and nearly fifteen percent report past-month binge drinking.<sup>9</sup> In addition, we have observed in clinical work that there is typically an ongoing relationship and established rapport between women and their women's health providers. Such settings also have the potential for extensive reach, as 70% of women aged 15–44 years attend a family planning medical visit annually.<sup>10</sup>

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SBIRT in women's health settings could also serve the additional role of reducing risk for alcohol-exposed pregnancy (AEP). When women drink at risky levels, it can be a danger not only to them, but also to a developing fetus.<sup>11</sup> While most women limit or cease drinking when planning pregnancy, nearly half of pregnancies in the United States are unplanned.<sup>12</sup> Unrecognized conceptions expose many pregnancies to alcohol during vulnerable periods of fetal development.<sup>13-15</sup> AEP increases the risk for fetal alcohol spectrum disorders, which range from mild to severe across organ systems.<sup>8,16</sup> While the Centers for Disease Control and Prevention estimates that approximately 2% of community women are at risk, a multisite epidemiological survey of high-risk settings such as addiction treatment centers, jails, Medicaid health maintenance organizations, urban gynecology clinics, and media-recruited drinkers found that 8%–21% of women in these settings are at risk for AEP.<sup>17</sup> The rate of risk for AEP among public women's health clinic patients is unknown.

Despite the clear relevance of preventing AEP and risky drinking among childbearing-age women, women's health providers have the lowest rates of asking about alcohol use in new patients, assessing maximum drinks per occasion, using formal screening tools, or offering interventions to problem drinkers when compared with other specialists in a sample of over 2000 physicians.<sup>18</sup> While a range of factors are cited by physicians as barriers to implementation, many express concerns about time, their own abilities to effectively intervene, or that patients may be offended and SBIRT services will damage rapport or interfere with the patient–doctor relationship.<sup>19</sup> This is also true in qualitative analyses of barriers where providers indicate concern about inducing shame when discussing stigmatized behavior.<sup>20</sup>

There are no published reports of an SBIRT strategy to reduce risky drinking and risk for AEP in women's health settings. Women's health clinics may be optimal settings in which to identify and intervene with women who are consuming alcohol at unhealthy levels. The purpose of this paper is to investigate rates of risk behaviors, receipt of SBIRT components, and patient attitudes towards receipt of services in these settings, in order to determine the suitability of these settings for SBIRT.

## Materials and Methods

### Study design

Adult female patients visiting Virginia Department of Public Health clinics for family planning and/or STI appointments were invited by a receptionist to complete a voluntary, self-administered survey on “lifestyle issues that impact women's health.” The survey was composed of three sections assessing (1) alcohol use and contraception behavior, (2) self-reported receipt of SBIRT services, and (3) attitudes towards receipt of SBIRT services. Patients completed the surveys in the waiting room before their scheduled appointment and upon completion received a breakfast bar as compensation. The surveys were anonymous, available in both English and Spanish, and took approximately 10 minutes to complete. To minimize burden on clinic receptionists and not interfere with regular clinic flow, rates of survey refusal were not tracked. The Institutional Review Board (IRB) for Health Sciences Research at the University of Virginia and the IRB for the Virginia Depart-

ment of Health reviewed and approved the study protocol. To maintain anonymity, signed consent requirements were waived by the IRBs and women instead received an information sheet explaining the study and participant rights.

### Setting

Study participants were recruited from 13 Virginia State Department of Health (VDH) public clinics providing women's health services in two central Virginia health districts. The health districts selected for this study were also based on convenience, including proximity to the investigators' university and the presence of leadership with whom the investigators had previously collaborated. These sampled clinics provide primary care, women's health, and other medical services to a predominantly white and African American, lower socioeconomic status, female population. Six of the clinics serve rural county areas, while seven serve small cities ranging in population from 6,000 to 43,000 inhabitants. Clinics are staffed by a physicians or nurse practitioners who supervise the nurses who conduct screening for a range of health behaviors and provide regular medical care. Alcohol screening does occur within the VDH system's Title X services for patients presenting for prenatal visits. However, there is no centralized or documented effort to implement such services with patients attending family planning or STI visits. Across these different women's health care visits, actual rates of SBIRT implementation are unknown.

### Participants

Participants were a convenience sample of adult (18 years or older), female patients seen between July and October 2012.

### Measures

(1) Alcohol use and contraception behavior. Participants were asked the single screening question: “How many times in the past year have you had 4 or more drinks in a day?” This question has been validated in primary care settings to identify risky alcohol use.<sup>21</sup> Risky alcohol use was defined as a response of 1 or greater. Contraception behavior was also assessed using a single question screen: “How many times in the past year have you had sexual intercourse without using effective contraception (e.g., no birth control pill, condom, etc. OR birth control pill, condom, etc. had been taken incorrectly or used improperly)?” Pregnancy risk was defined as a response of 1 or greater. Risk for AEP was defined as a positive response ( $\geq 1$ ) to both the alcohol risk question and the contraception question.

The survey also included the Alcohol Use Disorders Identification Test-C (AUDIT-C), a three-question alcohol-screening test, adapted from the original 10-question AUDIT developed by the World Health Organization.<sup>22</sup> The AUDIT-C is a simple, reliable tool used to identify risky drinkers and/or current alcohol use disorders. Each question has five response options, which are summed to yield scores ranging from 0 to 12. For women, a score equal to or greater than 3 is a positive screen, suggestive of hazardous drinking, while scores of greater than 6 are indicative of an alcohol use disorder, requiring more in-depth assessment.<sup>23</sup>

(2) Receipt of SBIRT services. Questions about patient receipt of SBIRT services were adapted from other provider

practices' questionnaires.<sup>24,25</sup> The questions had yes/no response options for receipt of past-year SBIRT services (e.g., "In the last twelve months, has your medical provider asked you whether you drink alcoholic beverages?"). All participants responded to questions about their receipt of screening, assessment, and safe drinking limit advice. Current drinkers responded to questions about whether providers had queried about alcohol-related health problems, advised them to quit or cut down, provided treatment, or referred them to outside treatment. Additionally, all women responded to questions about whether their provider asked them about their use of effective contraception or discussed risk factors for AEP.

(3) Attitudes toward receipt of SBIRT services. The patient opinion survey was adapted from Miller et al.<sup>26</sup> and contained questions about patient attitudes toward alcohol screening by health care providers. Statements were rated on a 5-point Likert scale, from "strongly disagree" to "strongly agree." Items focused on the patient's attitudes toward SBIRT practices, including screening (e.g., "As part of my medical care, my women's health care provider should feel free to ask me how much alcohol I drink"); emotional reactions towards self-report (e.g., "I would be embarrassed if my women's health care provider asked me how much alcohol I drink"); openness to advice (e.g., "If my drinking is affecting my health, my women's health care provider should advise me to cut down on alcohol"); and honesty in answering these questions (e.g., "If my women's health care provider asked me how much alcohol I drink, I would give an honest answer").

(4) Demographics and background information. Questions about the reasons for the current visit and type of women's health care provider were included in the survey, along with basic demographics.

#### Data analysis

Descriptive statistics including frequencies, means, and standard deviations were generated for all survey data. Surveys with missing data were considered. The denominators of frequencies and number of participants described varied based on the group under analysis (e.g., all participants, drinkers, risky drinkers, etc.) as well as by item non-response rates (e.g., missing data). To investigate differences between self-reported non-receipt of SBIRT services by race/ethnicity and language, Pearson chi-square tests were conducted.

## Results

### Sample characteristics

The statistical software package SPSS 21 (SPSS Inc.) was used for all data analyses. A total of 399 patients completed the survey. Rates of completion of the survey could not be determined because the denominator is unknown.

Since the primary focus of the investigation was prevention of AEP, women who were not of reproductive age ( $\geq 45$  years old;  $n=29$ ) were excluded from all analyses. This left a sample of 351 participants. In addition, since questions about receipt of SBIRT services assess past year activities, only those reproductive-aged patients who endorsed seeing their women's health provider in the past year ( $n=199$ ) were included. Surveys with missing data were

retained in the sample. Missing data sometimes occurred when women did not complete the survey before being called to the exam room.

Table 1 describes the sample characteristics. The average age of survey respondents was 27.0 (standard deviation [SD]=6.7). The sample was racially/ethnically diverse, with 60% white, 17% Hispanic, 17% African American, 2% Asian, 2% American Indian, and 3% "other" by self-report.

### Representativeness of sample

While demographic data of women's health patients is not available at the clinic or district level to gauge the representativeness of the sample, state-level data is available.<sup>27</sup> At the state level, in 2012, the majority of females attending public health clinics for family planning were in the age range of 20–29 years and 19% were Hispanic, 24% were African American, and 43% were white. A majority of the sample (60.0%) had a high school diploma or less.

Of the 199 surveys included in analyses, 173 were completed in English and 26 in Spanish. Among patients who were aware of the professional background of their primary women's health provider ( $n=121$ ), 65% reported seeing a nurse practitioner, while 33% reported seeing a physician. Participants indicated the purpose of their visit was an annual exam (22%), birth control consultation (38%), STI test or follow-up (5%), or other women's health reason (35%).

### Sex and drinking: risk behaviors

Table 2 shows the risk behaviors related to drinking and sex for the sample. Sixty-two percent of the sample (120/193)

TABLE 1. DEMOGRAPHICS FOR RESPONDENTS IN THE SCREENING, BRIEF INTERVENTION, AND REFERRAL TO TREATMENT SURVEY

Characteristic	No. of responses (%)
Total	199
Survey language	
English	173 (87%)
Spanish	26 (13%)
Age	
Mean (SD)	27.0 (6.7)
Range	18–44
Race/ethnicity	
White	119 (60%)
Hispanic	33 (17%)
Black	33 (17%)
Asian	3 (2%)
American Indian	4 (2%)
Other	6 (3%)
Unknown	1 (1%)
Education	
Less than 8th grade	15 (8%)
Some high school	22 (11%)
High school or GED	82 (41%)
Some college	62 (31%)
College graduate	12 (6%)
Graduate degree	5 (3%)
Unknown	1 (0%)

SD, standard deviation.

TABLE 2. PREVALENCE OF RISK BEHAVIORS

<i>Past year risk behavior</i>	<i>All participants (n = 199)<sup>a</sup></i>	<i>Drinking participants<sup>b</sup> (n = 120)<sup>a</sup></i>	<i>Risky drinking participants<sup>c</sup> (n = 79)<sup>a</sup></i>	<i>Likely AUD participants<sup>d</sup> (n = 7)<sup>a</sup></i>	<i>AEP risk participants<sup>e</sup> (N = 30)<sup>a</sup></i>
<i>% (n) or mean (SD)</i>					
Engaged in risky drinking <sup>c</sup>	44% (79/179)	68% (78/15)	100% (79/79)	100% (7/7)	100% (30/30)
Number of times risky drinking <sup>f</sup>	13 (26)	13 (26)	13 (26)	30 (23)	8 (11)
Had unprotected sex <sup>g</sup>	34% (54/161)	33% (35/107)	39% (29/74)	50% (3/6)	100% (30/30)
Number of times had unprotected sex <sup>h</sup>	19 (31.2)	17 (31)	17 (32)	6 (4)	17 (32)
At risk for AEP <sup>i</sup>	17% (30/177)	26% (29/111)	40% (30/75)	50% (3/6)	100% (30/30)

<sup>a</sup>Changes in denominators reflect missing data due to question non-response.  
<sup>b</sup>Answered AUDIT-C question, “How often do you drink?” with any number > 0.  
<sup>c</sup>Positive response to single-question alcohol screen (≥4 drinks in one day in the past year).  
<sup>d</sup>AUDIT-C total score great than 6.  
<sup>e</sup>Participants who engaged in risky drinking and had unprotected sex in the past year.  
<sup>f</sup>Among those who engaged in risky drinking at least once.  
<sup>g</sup>Defined as having unprotected sex in the past year.  
<sup>h</sup>Among those who had unprotected sex at least once.  
<sup>i</sup>Respondents who engaged in risky drinking and had unprotected sex in the past year.  
 AEP, alcohol-exposed pregnancy; AUDIT-C, Alcohol Use Disorders Identification Test-C.

were current drinkers. Forty-four percent (79/179) of participants were classified as risky drinkers. Risky drinking participants reported exceeding daily safe drinking limits (>3 per day) an average of 12.7 times (SD = 26.2) in the past year; this average had a wide range of responses (0–200). AUDIT-C scores ranged from 0 to 8 with a mean of 1.6 (SD = 1.9). Twenty-four percent of women had an AUDIT-C score of 3 or greater, indicating hazardous drinking, while 4% of women had an AUDIT-C score greater than 6, indicating a likely alcohol use disorder. Thirty-four percent (54/161) of women had

unprotected sex at least once in the past year and, among those who did, women reported having unprotected sex 19 times (SD = 31.2; range 0–150) in the past year on average. Seventeen percent (30/177) of women were classified as at risk for AEP by reporting both risky drinking and unprotected sex.

*Receipt of SBIRT services*

Table 3 describes the nonreceipt of SBIRT services reported by the sample. A significant proportion of the sample

TABLE 3. PAST YEAR NONRECEIPT OF SBIRT SERVICES BY PATIENT REPORT

<i>Questionnaire item</i>	<i>All participants (n = 199)</i>	<i>Drinking participants (n = 120)<sup>a</sup></i>	<i>Risky drinking participants (n = 79)<sup>b</sup></i>	<i>Likely AUD participants (n = 7)<sup>c</sup></i>	<i>AEP risk participants (n = 30)<sup>d</sup></i>
<i>Percent responding “No”</i>					
Has your medical provider asked you whether you drink alcoholic beverages?	17%	14%	10%	14%	11%
Has your medical provider asked you the amount of alcohol you drink?	38%	30%	30%	14%	23%
Has your medical provider advised you about safe drinking limits?	62%	59%	60%	NA	50%
Has your medical provider asked you about health problems related to your alcohol use?	81%	82%	86%	57%	87%
Has your medical provider advised you to reduce or stop your alcohol use?	NA	NA	82%	78%	87%
Has your medical provider discussed alcohol treatment with you?	NA	NA	NA	86%	NA
Has your medical provider referred you for alcohol treatment?	NA	NA	NA	100%	NA
Has your medical provider treated you for alcohol dependence with medications?	NA	NA	NA	100%	NA
Has your medical provider asked you about your use of effective contraception (birth control)?	25%	23%	20%	0%	13%
Has your medical provider discussed risk factors for alcohol-exposed pregnancy with you?	53%	55%	58%	14%	50%

<sup>a</sup>Answered AUDIT-C question “How often do you drink?” with any number > 0.  
<sup>b</sup>Positive response to single question alcohol screen (≥4 drinks in one day in the past year).  
<sup>c</sup>AUDIT-C total score greater than 6.  
<sup>d</sup>Participants who engaged in risky drinking and had unprotected sex in the past year.

reported that their health care provider had not asked if they drink alcohol (17%; 31/180) or use contraception (25%; 33/134). Of those women who drink alcohol, 30% (35/117) reported that their health care provider did not assess the amount of alcohol they consume. While the proportion of patient reports of initial screening of alcohol use and amount was high among this sample, subsequent brief interventions and/or referral to outside treatment were low. Sixty-two percent (112/180) of the total sample and 60% (47/78) of the risky drinking sample reported that their health care providers have not advised them about safe drinking limits. Additionally, 82% (62/76) of risky drinkers reported not having been advised to cut down on their drinking. Of those women at risk for AEP, 50% (15/30) reported that their provider had not discussed risk factors for alcohol-exposed pregnancy.

Pearson chi-square analyses were conducted to investigate potential differences in nonreceipt of SBIRT services based on race/ethnicity and language. No differences in rates of nonreceipt of services were found between white and African American patients, white and Hispanic patients, or English- and Spanish-speaking patients.

#### Attitudes toward SBIRT services

The majority of women reported favorable attitudes towards SBIRT services (Table 4). For example, 81% reported it was acceptable for their health care provider to ask about their current drinking habits. Only 17% reported that this question would cause them embarrassment. Additionally, more than 90% reported they would give an honest answer if

asked about their drinking. Women also supported biomarker alcohol tests. This included 75% who agreed or strongly agreed that they would want a blood test that could determine if their drinking levels were risky, and 74% who agreed or strongly agreed that their health care provider should feel free to order a blood test if the health care provider deemed it necessary. Favorable attitudes toward SBIRT services were robust across subgroups. As can be seen in Table 4, attitudes of risky drinking participants and participants at risk for AEP reflected those of the larger sample.

#### Discussion

Overall, rates of risky drinking (44%) and risk for AEP (17%) among women receiving public women's health services were high. In addition, a majority of the women in our study reported favorable attitudes towards receiving SBIRT services in their women's health clinics. These findings suggest that there is a need to develop effective interventions targeting women in this setting and that SBIRT is a promising candidate.

Among potential barriers to implementation of SBIRT in general health settings, the perception that "patients don't want to be asked about substance use" has been found to be one of the strongest predictors of whether clinicians provide an intervention.<sup>18</sup>

Despite these practitioner concerns, in general medical settings patients appear to be more open to alcohol discussions than providers think. Among patients receiving an alcohol consultation from a general practitioner, 81% reported

TABLE 4. PATIENT ATTITUDES ABOUT SCREENING AND BRIEF INTERVENTION

Questionnaire item	Response	All participants (N=183) <sup>1</sup> % (n)	Risky drinking participants (N=79) % (n)	Participants at risk for AEP (N=30) % (n)
As part of my medical care, my women's health provider should feel free to ask me how much alcohol I drink.	Agree/Strongly agree	81% (148)	79% (62)	83% (25)
I would be embarrassed if my women's health provider asked me how much alcohol I drink.	Disagree/Strongly disagree	83% (151)	86% (68)	87% (26)
If my drinking is affecting my health (such as my blood pressure), my women's health provider should advise me to cut down on alcohol.	Agree/Strongly agree	93% (170)	92% (73)	87% (26)
If my women's health provider offered me a blood test that could tell if I am drinking too much for my health, I would want to be tested.	Agree/Strongly agree	75% (137)	70% (55)	73% (22)
If my women's health provider asked me how much alcohol I drink, I would give an honest answer.	Agree/Strongly agree	92% (170)	90% (71)	90% (27)
How much alcohol I drink is personal and confidential, and my women's health provider should not ask me about it.	Disagree/Strongly Disagree	79% (143)	84% (66)	87% (26)
If my women's health provider thinks my drinking is affecting my health, (s)he should feel free to order a blood test to see if I am drinking too much.	Agree/Strongly Agree	74% (135)	68% (54)	67% (20)
I would be annoyed if my women's health provider asked me how much alcohol I drink.	Disagree/Strongly Disagree	82% (150)	82% (65)	83% (25)
If my women's health provider asked me how much alcohol I drink, I would probably not give an honest answer.	Disagree/Strongly Disagree	90% (163)	90% (71)	90% (27)

<sup>1</sup>Actual denominators varied from 181 to 183 to reflect missing data due to question nonresponse.

finding it useful.<sup>28</sup> In fact, a majority of patients reported favorable attitudes towards receipt of alcohol screening services in general medical settings.<sup>26</sup>

Our data provide more evidence that women receiving care in women's health settings are also open to alcohol screening and intervention, despite potential clinician concerns. For instance, 93% of women agreed or strongly agreed that, "if my drinking is affecting my health (such as my blood pressure), my women's health provider should advise me to cut down on alcohol." In contrast, only 18% of risky drinkers reported that their health provider had advised them to cut down on their drinking. These data show that women are open to discussing alcohol with women's health providers, yet do not receive brief interventions. This evidence further suggests that more training of women's health clinicians in this area might help them to overcome reluctance or perceived lack of skill in performing alcohol screening and/or brief intervention.

Our current data suggests that women's health settings have rates of AEP risk similar to those observed in other high-risk settings, such as jails.<sup>29</sup> When women are identified as being at risk for AEP, there are potential interventions for them. Over the past 15 years, a range of AEP prevention interventions of varying intensity have been tested and found efficacious.<sup>30–33</sup> Among these AEP risk reduction interventions, the most robust is CHOICES, a four-session motivational interviewing plus feedback intervention, which demonstrated improvements in drinking, contraception, or both among approximately two-thirds of program participants. While CHOICES is robust, its intensity limits the feasibility of implementation. Several follow-up studies have tested single session adaptations of CHOICES with promising results.<sup>32–34</sup> While these briefer interventions yielded smaller magnitudes of effects, they did significantly reduce rates of risk for AEP and have the potential for increased reach. In addition, in all studies, many control participants who received information and assessment only were no longer at risk for AEP at follow-up, suggesting there are subgroups of women who may benefit from very brief interventions that could be easily implemented in busy medical settings.

Several limitations should be noted. First, the survey was conducted with a convenience sample of women whose responses may not be generalizable to all women in public clinics, or to women in other settings. Second, it was impossible to calculate the survey response rate. Comparison of survey respondent demographics to state level data regarding participation in family planning indicated an overrepresentation of white patients. Despite a limited ability to speak to the representativeness of the sample, there is not reason to believe that women at increased risk for AEP would be differentially likely to participate in the survey. The sample size was also small, limiting the power of tests investigating potential subgroup differences. Lastly, the survey was limited to self-report, and could be subject to poor memory or response bias; rates may not accurately represent women's actual behavior or receipt of services. Future epidemiological research to clarify the rate of risks among subgroups of women in these settings would lead to better tailoring of interventions to patient need.

A preventive preconceptional approach to help risky drinking women both reduce alcohol to safer levels and prevent unintended pregnancy could improve women's health and reduce incident AEP. As noted earlier, AEP-prevention

interventions of varying intensity have been tested and found efficacious.<sup>30–33</sup> It is encouraging that in several studies, subgroups of women made healthy changes in drinking and contraception even when randomized to only receive information on risk for AEP without further intervention. This finding suggests that a lower-intensity intervention such as SBIRT may be appropriate and effective for some women. Studies are needed to test SBIRT and other AEP-prevention interventions in women's health settings.

Women's health providers have much room for improvement in using screening and brief intervention methods, possibly due to misplaced concerns about damaging the patient–doctor relationship.<sup>18,19</sup> In contrast to these concerns, the primary results of the current survey study show that women are open to talking about drinking and related risks to their health with women's health providers. Moreover, they see discussing drinking and its related risks as part of their practitioner's job and report that they would respond honestly to provider inquiries about drinking and related risk behaviors. These results contrast with practitioner assumptions previously reported in the literature and suggest a need for training women's health clinicians and increasing their comfort with intervention.

This study found high rates of risky drinking and risk for AEP and that women are willing to discuss drinking with their practitioners. These results should encourage practitioners to ask about drinking and intervene on drinking and related risks when providing women's health care services. Women's health practitioners are well positioned to deliver the benefits many women would receive from a discussion of safe levels of drinking. We recommend that future research be conducted to analyze the efficacy of SBIRT for drinking and/or AEP risk in women's health settings so that clear, evidence-based recommendations can be given regarding the implementation of services in these settings.

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#### Disclosure Statement

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