



# Emergency Department Healthcare Providers' Understanding and Skill Level of Alcohol Treatment and Service

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## Introduction

### Screening, brief intervention, and referral to treatment procedures (SBIRT)

The World Health Organization (WHO) reported that from December 2000 to February 2002, 1.8 million deaths were due to alcohol consumption (2007). As a result, employing preventive and treatment programs that address excessive alcohol use are needed. The goals of this project is to examine perceived skill level to address alcohol-related problems and understanding of alcohol-related treatments and services between groups based on training and career specialty among Emergency Department (ED) providers.

The American College of Surgeons Committee on Trauma proposed that trauma centers should be equipped with a protocol for identifying such patients with alcohol-use disorders, as well as staff who can properly administer interventions as they have proven to be effective at reducing trauma (2007).



This has led to employing screening, brief interventions, and referral to treatment procedures (SBIRT) in primary care/general medicine settings. Although research has shown that SBIRT has been an effective way of reducing high-risk drinking and associated consequences, it continues to be underutilized, and implementation is impeded as healthcare providers lack knowledge and skill on how to conduct proper SBIRT procedures.

### Organizational challenges to widespread implementation of SBIRT

Practice of such skills deteriorates over time due to:

- Lack of real-world practice
- Unfamiliarity
- Attitudes, perceptions, and behaviors

Nygaard & Aasland (2010) identified multiple barriers toward implementation such as:

- Perception of alcohol problems
- Integration of SBIRT into existing routines
- Prevention vs. treatment conflict
- Structural issues
- Relationship between healthcare provider and patient

### Added value and benefit of SBIRT

- One 15-minute conversation between patient and healthcare provider reduced average drinks per week consumed (2004)
- Referral of patients to treatment to better help such patients address alcohol problems
  - An estimated 10-18% of injured patients are admitted due to alcohol-related events (World Health Organization, 2007)



## Hypotheses

The primary aim of the present study was to investigate perceived skill level to address alcohol-related problems and understanding of alcohol-related treatments and services between groups based on training and career specialty among ED providers. We conducted a two independent samples t-test with the following hypotheses in mind:

1. Perceived skill level to address alcohol-related problems and understanding of alcohol-related treatments and services will differ between nurses and physicians.
2. Perceived skill level to address alcohol-related problems and understanding of alcohol-related treatments and services will differ between those in practice and those in training.

## Methods

### Procedure:

The analyses for the present study consist of 123 healthcare staff at University Medical Center of El Paso. Participants completed a brief survey assessing current skill level for SBIRT and understanding of alcohol related treatment and prevention programs.

### Measures:

*Groups were categorized as follow:*

1. Experience - in practice (N=30) and in training (N=93)
2. Career specialty - nurses (N=75) and physicians (N=45)

*The dependent measures are as follow:*

- A. Current Skill Level-** Participants were asked to rate current skill level to implement SBIRT along a 4-point Likert-type scale (1 = *Not at all skilled*; 4 = *Very Skilled*).
- B. Understanding** - Participants were asked to rate how well they understand alcohol treatment programs along a 4-point Likert-type scale (1 = *Not at all*; 4 = *Very*).

## Results

Seventy-seven participants were female (N=77) and the remaining were male (N=46). The majority of the participants self-identified as Hispanic/Latino (56.6 %). The remaining participants self-identified as non-Hispanic/Latino (43.4%).

We conducted a series of independent sample t-test to test our two hypotheses.

There were no statistical differences between nurses and physicians in perceived skill level to address alcohol-related problems and understanding of alcohol-related treatments and services.

However, it is important to note that all means were below 2.5 on a 4-point Likert-type scale. These low means may be indicative of lack of skill to address alcohol-related problems and understanding of alcohol-related treatments and services amongst nurses and physicians.

Descriptives for Experience using an independent sample t-test.

	In training		In practice		t-test	95% CI
	Mean	SD	Mean	SD		
A.Screen for alcohol use disorders or heavy drinking	2.63	.718	2.73	.782	-.607	(-.417, .221)
A.Diagnose alcohol use disorders or heavy drinking	2.63	.850	2.61	.834	.116	(-.328, .369)
A.Provide Brief Motivational Interventions	1.97	.765	2.35	.842	-2.242*	(-.731, -.405)
A.Refer patients with alcohol use disorders or heavy drinking to other professionals for treatment	2.20	.610	2.64	.884	-3.052*	(-.730, -.153)
B.The workings of 12-step programs	2.00	.743	2.20	.867	-1.160	(-.530, .122)
B.Pharmacotherapies for treating and preventing the relapse of alcohol use disorders or heavy drinking	2.27	.521	2.25	.747	.158	(-.225, .264)
B.Counseling intervention programs used for alcohol use disorder or heavy drinking	2.07	.583	2.20	.854	-.994	(-.414, .138)
B.Relapse prevention	1.77	.568	2.04	.806	-2.074*	(-.591, .038)

**Note:** \**p*<.05

## Discussion

Results indicate that providers-in-practice had higher perception of skill level for providing Brief Motivational Intervention, referring patients with alcohol use disorders or heavy drinking to other professionals for treatment, and relapse prevention than those healthcare providers-in-training.

These findings suggest a need for continued training on SBIRT for alcohol and drug-use disorders to increase perceived skill level to address alcohol-related problems and understanding of alcohol-related treatments and services.

Additionally, the current project provides support to criticisms about the lack of training of SBIRT available for health care providers. Johnston, Leung, Fieldsing, Tin, & Ho (2003) reported that attitudes, perceptions, and behaviors were all contributing barriers to implementation, which can be addressed by incorporating trainings that increase knowledge about the efficacy of SBIRT. Thus, future studies should concentrate on experimental trials that assess the efficacy of SBIRT in primary care/general medicine settings.

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