

## Workplace Prevention of Prescription Drug Abuse: Pilot Assessment of a New Psycho-educational Program

Michael Neeper<sup>1\*</sup>, Joel Bennett<sup>1</sup>, Deborah Galvin<sup>2</sup> and Gale Lucas<sup>1</sup>

<sup>1</sup>Organizational Wellness and Learning Systems, The University of Texas at Arlington, USA

<sup>2</sup>Substance Abuse and Mental Health Services Administration, USA

\*Corresponding author: Michael Neeper, Organizational Wellness and Learning Systems, The University of Texas at Arlington, USA, Tel: 972-974-6663; E-mail: [mneeper@organizationalwellness.com](mailto:mneeper@organizationalwellness.com)

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### Abstract

Prescription drug misuse and abuse is a growing problem in America. It has negative effects on employees themselves, as well as productivity in the workplace, costing organizations money. This brief note describes a webinar that was designed to increase awareness of prescription drug abuse and misuse, as well as offering options on treatment for employees. 91% of participants agreed that they would use content from the webinar to assist the employees at their organizations. Ideally, a full pre-posttest analysis would be conducted on these data, but for now, these data provide support that the webinar was beneficial to participants.

**Keywords:** Prescription drug misuse; Abuse; Workplace; Employee assistance; EAP

### Introduction

#### Growing problem of prescription drug abuse/misuse

A growing body of evidence indicates that adult prescription drug misuse and abuse leads to productivity costs inside the workplace; this is an increasing concern given the growing prevalence of such misuse [1,2]. The problem is so pervasive, that it has emerged as the United State's fastest growing drug problem [3]. Results from the 2014 National Survey on Drug Use and Health (NSDUH) showed that approximately 5.9 million adults used prescription drugs for nonmedical purposes [4]. Prescription pain relievers are by far the most often misused/abused; in 2014, 66% of those who reported being nonmedical users of prescription drugs, aged 12 and older, reported using prescription pain relievers for nonmedical purposes. Currently, 44 Americans die every day as a result of prescription opioid overdose [5]. It has also been reported that, in 2013, drug overdose was the leading cause of injury death, ranking even higher than deaths involving motor vehicle traffic crashes [6]. In 2014, 47,055 Americans died of drug overdose, 61% of those involved prescription drugs. That equates to 28,647 people, almost 63 people a day.

#### Growing problem in the workplace

There is a growing issue of adult prescription drug misuse and abuse, which leads to productivity costs in the work environment [1]. The problem is distributed widely across the country, and is a large burden to organizations, especially when examining the combination of costs [7]. While the problem is growing, workplace health educators and wellness professionals lack educational tools to heighten awareness and give employees knowledge and skills to identify risk factors and take proactive action to address these risks.

### Webinar

A prototype slide deck and webinar was developed to educate employees on these issues, as well as provide helpful advice and strategies that health educators could utilize by training others in their workplace. Webinar presentations are an effective way to disseminate information to attendees [8], which have the added benefit of getting participants involved in the discussion. This presentation used proven strategies to increase webinar effectiveness [9]. The goal of this pilot study was to gain feedback on a prototype webinar slide deck (with handouts and supporting materials) from educators and wellness champions who could potentially provide employees with advice on how to be more cognizant of prescription drug misuse/abuse [10]. The desired outcome of the webinar was to educate workers on prescription drug misuse/abuse issues who could use the webinar's strategies to assist themselves and coworkers in reducing drug misuse/abuse. The purpose of this study was to receive initial feedback on the content and usefulness of the prototype.

### Methods

#### Overview/Procedure

An initial slide deck was developed for webinar presentation as a free service through HealthPromotionLive (HPLive), which provides free educational content to professionals seeking educational credits in various areas: Certified Health Education Specialist (CHES), American College of Sports Medicine (ACSM), and Employee Assistance Credits (EACC). As part of signing up for the webinar, attendees were asked to complete a brief survey. After the webinar, all attendees were invited to provide a more in-depth review of the slide presentation.

These brief analyses were conducted after the data was attained by the presenters. All participants were informed in the beginning of the presentation that data acquired during this webinar would be used for analysis and publication, but they would remain completely anonymous.

Data was analysed using pair-wise comparison techniques. This allows for the most efficient use of data, so as to only avoid the missing data within a case, permitting the rest of the data remaining in the case to be used.

### Participants

Data acquired prior to the webinar came from 68 participants (79% female). They were asked to fill out a six-item survey designed to assess participant opinions on prescription drug abuse and desire to learn more about prevention interventions. After the webinar, participants were asked to provide a more in-depth review of the slide deck and fill out a post-survey, which measured attitudes toward the webinar and webinar efficacy. A total of 25 subjects were considered in-depth reviewers and completed the follow-up survey (37% follow-up rate of the original 68 participants) [11]. Table 1 shows the professional roles of all participants in both the full sample of webinar participants and the in-depth reviewers. Among the 23 in-depth reviewers, three worked in the field of substance abuse counseling or prevention, and nine provided health promotion as a trainer or facilitator. These reviewers reported that their colleagues/clients considered them "a lot" or "greatly" knowledgeable about prescription drugs (n = 6), wellness and health promotion (17), and workplace wellness (16).

	Full Sample (n=67) <sup>a</sup>	In-Depth Reviewers (n=23) <sup>a</sup>
<b>Professional Role</b>		
Administer or manage wellness programs	22%	26%
Human Resources/Benefits	7%	11%
Provide wellness services directly to clients/staff	13%	11%
Do wellness coaching	13%	11%
Employee Assistance	36%	42%
Student	9%	0%
<b>Background/Interests (percent "agree" or "strongly agree")</b>		
I am familiar with the growing problems of PD	81%	76%
I would like more tools to educate employees	89%	96%
Perception of top concerns of employees b		
Want better education as consumers of PD	34%	44%
Concerned productivity of coworkers who use/misuse	22%	20%
Concerned as parents	18%	16%
Concerned about own personal use	12%	12%
Concerned as children of aging parents	10%	4%

**Table 1:** Role, background, interests, and perceptions of all respondents. Note: <sup>a</sup>Missing data in some cases; <sup>b</sup>Respondents were asked to select one of the five reasons as the most important concern for employee interest in PD. PD = Prescription Drugs

### Materials

The second author created the slide deck underlying the webinar with funding from the Center for Substance Abuse Prevention (SAMHSA). The webinar consisted of an online, live presentation to all participants. A version was also saved online so that it could be reviewed at a later date by participants, if so desired: (<http://www.slideshare.net/hpcareernet/bennett-owls-preventing-prescription-drug-abuse-hplive>). The presentation consists of 81 slides, and was posted online August 1, 2014. The webinar was designed to educate employees about the risks involved with prescription drug abuse/misuse, as well as: a) defining "health consciousness" as key to preventing prescription drug abuse/misuse; b) listing both the major risks with prescription drug abuse and healthy alternatives to diminish risk; c) describing how to take action to implement those healthy changes; d) and advising on how to use those skills to reduce prescription drug abuse/misuse in their organization.

### Surveys

The surveys given to participants consisted of six items for the pre-survey, and 57 items for the follow-up survey. Follow-up data were acquired using Wufoo.com, an online survey administration service [6]. Surveys were developed using a Likert scale with anchors on each option. Participants were asked to complete the pre-survey prior to attending the scheduled webinar via GOTO Meeting survey software. Following completion of the surveys, the data were exported from Wufoo.com into an excel file, which was converted into a workable file for the Statistical Package for Social Sciences (SPSS). From SPSS, all analyses were completed and reported.

### Results

Table 1 shows that roughly 80% of participants were familiar with the prescription drug problem and 90% wanted more tools to help with the problem. Participants were also asked what would motivate employees to learn about prescription drugs. The top reason was wanted to be better educated as consumers, followed by concerns about coworker use.

	Not at All	Very Little	Some	A lot
My own workplace/practice already has educational material/training that is provided to staff	20%	40%	28%	12%
As a service provider, we already provide educational material/training that is provided to clients	36%	24%	24%	16%
How much of the educational material/training is of high quality and/or effective?	36%	28%	20%	16%

**Table 2:** Perception of current educational material/training: In-depth reviewers. Note: Likert scale anchors ranged from 1 - 'Not at all' to 4 - 'A lot'. Sample size = 22.

Table 2 shows in-depth reviewer responses to three items about current service offerings to educate employees about prescription abuse. Only 4 (16%) currently provided services to clients and these same 4 reported that it had high quality. The majority (60%) or more reported no or very little services.

	Mean (SD)	% Agree / Strongly Agree
I am interested in getting certified in this training	3.18 (1.37)	55%
My knowledge about prescription drugs improved	3.59 (1.05)	77%
I can see ways of using webinar content in my own practice or work	3.82 (0.96)	82%
I am motivated to learn more and do more in the area of prevention in prescription drugs	4.09 (0.81)	91%
I plan to actually use content/ideas in my work	3.95 (0.72)	91%
My perspective on how to deal with the risks of prescription drugs improved	3.95 (0.49)	95%

**Table 3:** Utility of the presentation: In-depth reviewers. Note: Likert scale anchors ranged from 1 – ‘Strongly Disagree’ to 5 – ‘Strongly Agree’. Sample size = 22.

Table 3 shows a number of responses to the webinar training and slide deck. Over 90% reported increased motivation to learn more, deal with prescription drug risks, or planned to use webinar content in their professional work.

Participants were asked to rate the importance about several aspects of the webinar. Of each section, (‘Data showing the rising rates of prescription abuse,’ ‘State/policy efforts to curb misuse/abuse,’ ‘Workplace efforts to curb misuse/abuse,’ ‘How to read prescription labels,’ ‘How the brain works with prescription drugs,’ ‘Data showing the rising sales of prescription drugs,’ ‘Ways to read/respond to commercial ads on such drugs,’ ‘Special risks for: teenagers and youth; women (e.g. pregnancy); emerging adults (college); military; and workplace (e.g., health workers with access,’ and ‘Dealing with aging parents’ use of prescription drugs.’) roughly 100% of the respondents agreed that every section was at least somewhat important (Table 4).

	Overall M(SD)	Important or Very Important
<b>Review of Data</b>		
Data showing rising rates of prescription abuse	3.22 (0.74)	83%
Data showing rising sales of prescription drugs	3.09 (0.79)	74%
<b>Review of Policies</b>		
State/policy efforts to curb misuse/abuse	3.04 (0.83)	78%
Workplace efforts to curb misuse/abuse	3.30 (0.64)	91%
<b>Tools</b>		
How to read prescription labels	3.39 (0.66)	91%
How the brain works with prescription drugs	3.43 (0.66)	91%
Ways to read/respond to ads on such drugs	3.00 (0.74)	74%
<b>Special Populations</b>		
Risks for teenagers and youth	3.22 (0.74)	83%
Risks for women (e.g. pregnancy)	3.22 (0.74)	83%

Risks for emerging adults (college)	3.22 (0.74)	83%
Risks for military	3.00 (0.80)	70%
Risks in workplace (e.g. health workers w/access)	3.35 (0.71)	87%
Dealing with aging parents' prescription drugs	3.35 (0.78)	83%

**Table 4:** Webinar content section importance: in-depth reviewers; Note: Ratings were on a 4-point scale from "Not Important" to "Very Important." Sample size: 23

## Discussion

The purpose of this research was to begin to address the need for an informational presentation to help prevent worker prescription drug abuse. Participants from various health professions reviewed the webinar and offered detailed feedback. Results indicated that many sections of the program were given high ratings, especially those that reviewed practical tools and efforts to curb misuse and abuse. In addition, raters agreed that the program provided new knowledge and they could incorporate content into their own wellness or prevention offerings. Indeed, 91% planned to use content/ideas in their work. While these results are promising, the next step is to offer the tools directly to workers and conduct an evaluation of their response. We would propose beginning with a simple pre-post assessment of improvement in knowledge and attitudes towards prescription abuse and in willingness to seek help for problems associated with such abuse. As the webinar emphasized using alternative health promotion practices (e.g., to dealing with pain, stress, and anxiety), such an assessment would also include ratings of increased interest and willingness to use such practices. Ideally, such a pre-post assessment would be provided in a randomized trial to those showing some prescription risk. In the meantime, the current study has yielded significant useful content that other practitioners might use in their workplace health promotion efforts.

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