



#### Available online at www.sciencedirect.com

## **ScienceDirect**

Currents
in Pharmacy
Teaching
& Learning

230

http://www.pharmacyteaching.com

Currents in Pharmacy Teaching and Learning 7 (2015) 224-230

#### Short communication

# Effects of actual participation in drug testing on the attitudes of first-year pharmacy students toward a mandatory drug testing program testing program

Marshall E. Cates, PharmD, BCPP, FASHP<sup>a,\*</sup>, Michael D. Hogue, PharmD, FAPhA, FNAP<sup>a</sup>, Thomas W. Woolley, PhD<sup>b</sup>

<sup>a</sup> McWhorter School of Pharmacy, Samford University, Birmingham, AL
 <sup>b</sup> Brock School of Business, Samford University, Birmingham, AL

#### **Abstract**

*Background:* Previous research revealed that matriculating first-year pharmacy students held generally favorable opinions about mandatory drug testing despite expressing definite concerns regarding practical issues. The objective of this study was to examine the changes in their attitudes toward drug testing as the result of actual participation in drug testing.

*Methods:* The study was an anonymous, voluntary survey that was composed of 30 pretested Likert-type questions relating to knowledge, concerns, and beliefs about drug testing. The survey was administered during orientation week (pre-testing) and then again at the end of the academic year (post-testing).

Results: The survey was completed by 129 (100%) students in the pre-testing phase and 91 (71%) students in the post-testing phase. Nine items showed statistically significant changes from pre- to post-testing. Interestingly, there was greater agreement with various concerns about drug testing, including cost of testing, being called for testing when busy with other matters, accidentally missing drug testing, consequences of missing drug testing, and being in situations in which showing up for drug testing would be difficult to impossible. Students' responses revealed less agreement that drug screening had the potential to decrease illegal substance use among students and that it was important to detect a substance use problem in a pharmacist. Conclusion: First-year pharmacy students' attitudes toward drug testing remained generally positive and were relatively unaffected by their actual participation in drug testing during the academic year; however, some concerns about drug testing were heightened, and changes in two of the belief questions were rather disconcerting.

© 2015 Elsevier Inc. All rights reserved.

Keywords: Pharmacy students; attitude; drug testing

E-mail: mecates@samford.edu

#### Introduction

Published studies have revealed rather concerning findings regarding the extent of alcohol and drug use among pharmacy students.<sup>1–8</sup> The rate of marijuana use has been reported to be 11–14%, <sup>2,3,5</sup> and the rates of amphetamine use and opiate use (without legitimate prescriptions) have been reported to be 5–7% and 5%, respectively.<sup>2,3,7</sup> Drugs that have been purportedly taken by pharmacy students at a rate lower than 5% include cocaine, ecstasy, and

<sup>\*</sup>Presented as a poster at American College of Clinical Pharmacy Annual Meeting, Albuquerque, NM, on October 15, 2013.

<sup>\*</sup> Corresponding author: Marshall E. Cates, PharmD, BCPP, FASHP, McWhorter School of Pharmacy, Samford University, 800 Lakeshore Drive, Birmingham, AL 35229.

tranquilizers.<sup>2,5</sup> In part due to the concerns about drug use among pharmacy students and the possible effects of such use on patient care and other professional activities, many experiential training sites have started to require drug testing for pharmacy students.<sup>9,10</sup> Consequently, pharmacy schools have had to deal with the issue of drug testing for students, although they have responded using different models.<sup>9,10</sup>

Little is known about the attitudes of pharmacy students toward their mandatory participation in drug testing programs as a result of requirements by pharmacy schools and/ or experiential training sites. We previously reported that matriculating first-year pharmacy students at the Samford University McWhorter School of Pharmacy (MSOP) held generally favorable opinions about the school's mandatory drug testing program despite expressing definite concerns regarding pragmatic issues. The objective of the current study was to determine the effect of actual participation in drug testing on pharmacy students' attitudes toward drug testing. Our hypothesis was that pharmacy students' attitudes toward drug testing would be more positive once they had actually experienced drug testing.

#### Methods

The implementation and details of MSOP's random drug screening program have been previously published. 10 The school contracts with a local drug testing company that is responsible for randomizing students for drug testing, notifying students about their selection for testing, conducting same-day, on-site testing, conducting medical reviews (when applicable), and releasing results. Random drug testing occurs continually throughout the academic year. Students are subject to drug testing on any week day other than official university holidays and during finals week. All students receive a minimum of one random drug test per academic year; however, in order to maintain a true random drug screening program, a certain percentage of each class is randomly assigned to receive two or more drug tests within a given academic year. In fact, students can be (and have been) randomly called for drug testing on consecutive weeks. A staff member in the Office of Experiential Education at the school is responsible for ensuring that all students are being drug tested according to the aforementioned parameters.

The study was approved by the Samford University Institutional Review Board. The current study was a continuation of a prior study that examined the baseline attitudes of first-year pharmacy students toward drug testing during their orientation week. The prior study's methodology (e.g., composition, pre-testing, and administration of the survey) as well as results are described in a previously published article. The current study utilized the same cohort of students and the same attitude questions that were used in the prior study, except that the survey took place at the very end of the first academic year, which meant that all students had participated in drug testing at least once while

enrolled in pharmacy school. Thus, the findings from the current survey (post-testing phase) were compared to those from the prior survey (pre-testing phase).

The survey was both anonymous and voluntary. Students did not receive any type of incentive (e.g., prize lottery or extra credit) for their participation. The survey included demographic questions (Table 1) as well as 30 attitude questions relating to knowledge (n = 7), concerns (n =14), and beliefs (n = 9) about drug testing (Table 2). One of the demographic questions in the pre-testing phase relating to whether or not the student had ever participated in drug screening was no longer applicable in the post-testing phase because all students were screened by default. Attitude questions were scored on a Likert scale of 1 (strongly agree) to 5 (strongly disagree). Statistical analyses were conducted using Minitab Statistical Software (release 16.3.2). Chisquare tests of independence or Fisher's exact tests (for 2 × 2 tables) were used to determine whether or not there were relationships between group membership and response to individual items. Two-independent samples t-tests were used to compare attitudinal item means in the pre-testing and post-testing phases, with significance set at p < 0.05. Results were corroborated by Wilcoxon-Mann-Whitney tests.

#### Results

The survey was completed by 129 (100%) students in the pre-testing phase and 91 (71%) students in the post-testing phase. There were no statistically significant differences in the demographic characteristics of students who participated in the survey in the pre-testing and post-testing phases (Table 1). Responses to attitudinal questions on the post-testing survey are shown in Table 2 (responses to attitudinal questions on the pre-testing survey were detailed in Ref. 9).

Pre-testing versus post-testing survey results are shown in Table 3. Of the 30-items, only nine items showed statistically significant changes from pre- to post-testing. Students' responses revealed greater agreement that they had an extensive knowledge about random urine drug screening, but less agreement that they understood the reasons behind the school's random drug screening program. There was greater agreement with various concerns about drug testing, including cost of testing, being called for testing when busy with other matters, accidentally missing drug testing, consequences of missing drug testing, and being in situations in which showing up for drug testing would be difficult to impossible. Students' responses revealed less agreement that drug screening had the potential to decrease illegal substance use among students and that it was important to detect a substance use problem in a pharmacist.

#### Discussion

In general, first-year pharmacy students continued to have positive attitudes toward drug testing after they had

### Download English Version:

# https://daneshyari.com/en/article/353305

Download Persian Version:

https://daneshyari.com/article/353305

<u>Daneshyari.com</u>