



Short Communication

Promoting tobacco cessation utilizing pre-health professional students as research associates in the emergency department



Beau Abar^{a,b,c,*}, Chinwe Ogedegbe^d, Preeti Dalawari^e, Kaley Freeman^f, Edwin D. Boudreaux^{g,h,i}, Frank Illuzzi^j, Stephanie Carro-Kowalczyk^k, Michael Molloy^{k,l}, Keith Bradley^k

^a Department of Emergency Medicine, University of Rochester Medical Center, 265 Crittenden Blvd., Rochester, NY 14642, United States

^b Department of Psychiatry, University of Rochester Medical Center, 265 Crittenden Blvd., Rochester, NY 14642, United States

^c Department of Public Health Sciences, University of Rochester Medical Center, 265 Crittenden Blvd., Rochester, NY 14642, United States

^d Department of Emergency Medicine, Hackensack University Medical Center, 30 Prospect Ave., Hackensack, NJ 07601, United States

^e Department of Emergency Medicine, Saint Louis University School of Medicine, 1402 South Grand Blvd., St. Louis, MO 63104, United States

^f Department of Surgery, University of Vermont College of Medicine, 89 Beaumont Ave., Burlington, VT 05405, United States

^g Department of Emergency Medicine, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA 01655, United States

^h Department of Psychiatry, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA 01655, United States

ⁱ Department of Quantitative Health Sciences, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA 01655, United States

^j Department of Emergency Medicine, St. Vincent's Medical Center, 2800 Main Street, Bridgeport, CT 06606, United States

^k The National Alliance of Research Associates Programs, Bridgeport, CT, United States

^l University of Arizona College of Medicine — Tucson, 550 E. Van Buren Street, Tucson, AZ 85004, United States

HIGHLIGHTS

- Volunteer RAs were able to screen a large number of individuals for tobacco in EDs.
- More than 2000 tobacco users were referred to Tobacco Quitlines.
- Volunteer RAs can inexpensively supplement care received in emergency departments.

ARTICLE INFO

Available online 6 September 2014

Keywords:

Tobacco cessation
Quitline
Research associates

ABSTRACT

Objective: The objective of this study was to investigate the extent to which volunteer research associates (RAs) can be utilized to screen emergency department patients and their visitors for tobacco use and effectively refer tobacco users requesting help to state Tobacco Quitlines.

Methods: A sample of 19,149 individuals in 10 emergency departments around the country was enrolled into a prospective, interventional study on tobacco cessation by pre-health professional RAs. Participants who screened positive for tobacco use were provided a brief description of Tobacco Quitline programs and then offered a faxed referral to their respective state Quitline.

Results: A total of 10,303 (54%) participants reported tobacco use for more than one month during their lives, with 3861 (20%) currently using every day and an additional 1340 using on some days (7%). Most importantly, 2151 participants requested a faxed Tobacco Quitline referral (36% of individuals who used tobacco in the past month).

Discussion: Pre-health professional RAs were shown to be an effective and cost-efficient resource for providing a strongly recommended service in the emergency department. Patient care (and the care of their visitors) was supplemented, emergency department personnel were not provided with additional burden, and RAs were provided with valuable experience for their futures in the health professions.

© 2014 Elsevier Ltd. All rights reserved.

1. Introduction

The Centers for Disease Control and Prevention estimates more than 45 million adults in the U.S. currently smoke cigarettes (Dube, Asman, Malarcher, & Caraballo, 2009), with approximately 80% reporting use every day. Perhaps more importantly, tobacco use is the leading cause of preventable death in the U.S., accounting for about 1 in every 5 deaths

* Corresponding author at: University of Rochester Medical Center, 265 Crittenden Blvd., Box 655C, Rochester, NY 14620, United States. Tel.: +1 585 275 8143.
E-mail address: beau_abar@urmc.rochester.edu (B. Abar).

(Mokdad, Marks, Stroup, & Gerberding, 2000; US DHHS, 2014) and the loss of 5.6 million years of potential life yearly (US DHHS, 2004). Given these consequences, it is not surprising that nearly 2/3 of tobacco users report a strong desire to quit (Ozhathil et al., 2011). Despite this interest in quitting, only 1 in 5 quit attempters receives any form of cessation assistance (Zhu, Melcer, Sun, Rosbrook, & Pierce, 2000). The current study sought to evaluate a strategy for providing access to effective tobacco cessation assistance for a large portion of the population: individuals who visit hospital emergency departments (EDs).

More than 115 million people are seen as patients in EDs across the U.S. annually (Niska, Bhuiya, & Xu, 2010). Often during these visits, family members, friends or co-workers accompany the presenting patient. As such, as much as 1/2 to 2/3 of the U.S. population comes to an ED each year. An ED visit frequently involves inevitable periods of waiting (e.g., for testing/results and disposition). This wait time can potentially be a valuable resource for primary and preventive health care screening for concerns like tobacco use.

The U.S. Preventive Services Task Force provides their strongest recommendation (Grade A) for universal tobacco screening and referral to treatment. Tobacco Quitlines are a set of treatments to which tobacco users are frequently referred (Borland & Segan, 2006; Cummins, Bailey, Campbell, Koon-Kirby, & Zhu, 2007). These free programs provide tobacco users with cessation assistance through services including medications, adaptive self-help materials, and counseling (Asfar, Ebbert, Klesges, & Klosky, 2012; North American Quitline Consortium, 2009). The effectiveness of Tobacco Quitlines for enhancing tobacco cessation has been consistently demonstrated in a wide breadth of research (Lichtenstein, Glasgow, Lando, Ossip-Klein, & Boles, 1996; Stead, Perera, & Lancaster, 2006; Zhu et al., 2002).

Despite the demonstrated effectiveness of the Quitlines, the desire of many tobacco users to stop smoking, the large potential audience, and calls from national organizations to do so, the use of screening and referral protocols for tobacco cessation in the ED remains very limited. This is primarily due to clinical personnel being too busy providing medical care for presenting complaints to engage in this type of additional intervention. The current study sought to address this lack of implementation by utilizing a motivated and inexpensive resource, available in large numbers: pre-health professional students.

With regard to medical school alone, nearly 34,000 students applied for the first time in 2012 (AAMC, 2012). This ever-replenishing applicant pool, in part, creates the need for thousands of interested college undergraduates and post-baccalaureates to gain significant clinical experience to qualify and develop for a career in the health professions. Pre-health professional college students and graduates, termed Research Associates (RAs), have been previously shown to be efficacious data collectors in the ED on a variety of successful research studies (Edwards, Richman, Bradley, Eskin, & Mandell, 2002; Ferrigno, Bradley, & Werdmann, 2001). For example, in pilot research for this study, RAs enrolled 3125 participants over 21 weeks, with 53% reporting tobacco use for more than 30 days in their lives (Bradley et al., 2009). Of these tobacco users, 38% accepted a Quitline referral.

1.1. Study objectives

This study sought to expand upon the pilot work by examining the utility and efficiency of using pre-health professional students as volunteer RAs in multiple independent institutions across the U.S. to screen ED patients and their visitors for tobacco use, and referring users requesting help to state Tobacco Quitlines.

2. Methods

2.1. Settings and study population

In this prospective, interventional study, RAs screened patients and their visitors 18 years-of-age or older in the emergency department

(ED) for their history of tobacco use and quit-related behaviors and cognitions. A convenience sample of participants was enrolled from 10 EDs around the country, with sites ranging from small community hospitals to large academic institutions in rural, suburban, and urban settings (see Table 1). Each site is a part of the National Alliance of Research Associates Programs (NARAP).

2.2. Patient recruitment, consent, and interview procedure

In order to standardize the procedure for use by the pre-health professional student RAs, an adaptive interview was created using Research Electronic Database Capture software (REDCap; Harris et al., 2009). Participants received a description of the study and provided documented verbal consent. Participants who requested a Tobacco Quitline referral as the result of the study provided written permission to fax the referral. The total interview took 2–15 min to complete, and the Institutional Review Board at each site provided approval for this study.

2.3. Research associates (RAs)

RAs were recruited from undergraduate institutions through health professions advisors, online advertisement through NARAP, and site specific, volunteer postings. RAs volunteered at least one 4-hour shift per week per academic semester enrolling participants. Chief RAs were selected at each institution to facilitate training and management of the other RAs. Each RA received training in basic clinical research, ethics of informed consent and confidentiality, ED safety issues, and study procedures. RAs were also explicitly trained to avoid impeding

Table 1
Demographic characteristics of the sample.

	Frequency	Percentage
Type of participant		
Patient	14,536	76%
Visitor	4613	24%
Institution		
St. Vincent's Medical Center (CT)	4027	21%
St. Louis University Hospital (MO)	3210	17%
Hackensack University Medical Center (NJ)	2878	15%
Hartford Hospital (CT)	2787	15%
UMass Memorial Medical Center (MA)	1910	10%
University Medical Center of Southern Nevada (NV)	1757	9%
Thomas Jefferson University Hospitals (PA)	757	4%
University Medical Center Brackenridge (TX)	777	4%
University of Vermont Medical Center Campus (VT)	518	3%
Pullman Regional Hospital (WA)	528	3%
Sex		
Male	10,353	54%
Female	8741	46%
Not documented	55	<1%
Race		
White	11,327	59%
Black	4516	24%
Asian	394	2%
American Indian/Native American	93	1%
Native Hawaiian/Pacific Islander	51	<1%
Other/multi-racial	2399	13%
Refused to respond/not documented	369	2%
Hispanic ethnicity	2846	15%
Educational level		
<12th grade	2452	13%
GED	736	4%
High school diploma	4997	26%
Some college	4590	24%
College degree	4977	26%
Refused to respond/not documented	1397	7%
Insurance status		
Has private insurance	9678	51%
Has Medicare	4796	25%
Has Medicaid	3750	20%
No reported insurance	3255	17%

Download English Version:

<https://daneshyari.com/en/article/7261292>

Download Persian Version:

<https://daneshyari.com/article/7261292>

[Daneshyari.com](https://daneshyari.com)