

# Are Emergency Physicians In The United States Being Trained To Help Their Patients Stop Smoking?

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## Abstract

**OBJECTIVE:** To determine if emergency medicine(EM) residency programs are educating their residents on how to help patients with smoking cessation.

**METHODS:** In 2004 we did a prospective survey by emailing all emergency medicine residency directors in the United States and asking them 1. whether they include lectures on smoking cessation in their EM curriculum and 2. the percentage of their EM residents involved in helping their patients stop smoking.

**RESULTS:** 114 of the 127 EM residency directors in the United States were reached (90%). The residency directors estimated that 6% of their EM residents are treating their patients for smoking cessation, and only 7% of the EM programs included lectures on smoking cessation.

**CONCLUSION:** Very few emergency medicine residency programs (7%) include lectures for their residents on how to help their patients with smoking cessation, and few (6%) EM residents initiate smoking cessation treatment in the emergency department.

## INTRODUCTION

In 2000 the Society for Academic Emergency Medicine Public Health and Education Task Force was appointed to determine which preventive interventions were appropriate and effective for inclusion in routine emergency care. (1) Smoking cessation counseling received the highest rating. Bernstein et al, in 2002, did a systematic review of the medical literature to assess the efficacy of limited screening and counseling for tobacco use cessation among adults in the primary care and emergency department settings. He found that limited data existed in 2002 for emergency department based practice, but that based on the burden of disease and the relative ease of intervention, he recommended routine screening in the emergency department of all patients for tobacco use and referral of smokers to primary care and cessation programs. (2)

Emergency physicians, with the help of ancillary staff, have an opportunity to counsel patients about smoking cessation. Cigarette smoking is a major preventable cause of morbidity and mortality. A metaanalysis conducted by the Agency for Health Care Policy Research evaluating many behaviorally

based interventions suggests that quit rates increase with both the number of intervention sessions and their duration, but that even a few brief sessions can have benefits. The involvement of physicians and ancillary medical staff is also associated with increased quit rates. (3)

With this study we wish to identify the extent of emergency medicine residency education on smoking cessation at the present time. Unfortunately, we believe that education on smoking cessation is not taught in emergency medicine residency curriculums and that most emergency physicians are not comfortable with treatment for smoking cessation. The intervention would be to have emergency personnel (nurses, public health workers), working under physician supervision, identify any smokers, initiate treatment, and refer them to self help groups and/or their physician. This is a fairly simple intervention that does not take a lot of time, and can be instituted when time is available, or when ancillary staff are available to spend time with the patients.

## METHODS

**STUDY DESIGN:** This was a prospective survey of all

emergency department residency directors in the United States regarding smoking cessation education as part of the emergency medicine curriculum taught to emergency medicine residents. Aside from several brand new residency programs, which either lacked residents and /or a formal education curriculum at the time, we had no exclusions. The study was approved by the institutional review board of the participating institution.

**STUDY SETTING AND PARTICIPANTS:** We surveyed all emergency department residency directors from December 2003 to April 2004 in the United States regarding the education of all emergency medicine residents in the United States. We obtained the email addresses and telephone numbers of all emergency medicine residency directors from the American College of Emergency Physicians.

**STUDY PROTOCOL:** We initially emailed all 127 emergency medicine residency directors in the United States in December 2003. We sent a second email in January, 2004 to all those who had not responded. In March and April, 2004 we telephoned all those who had not responded. We sent an additional email or fax including the questionnaire if requested to do so over the phone. The survey that was emailed, faxed, or completed via telephone is in Figure 1.

### Figure 1

Figure 1: The Survey

1. Are you the emergency medicine residency director?
1. How many emergency residents are in your program?
2. Do you include lectures on smoking cessation in your emergency medicine curriculum?
3. If so, in those lectures which of the following information is included?
  - ☐ Identifying smokers on history taking
  - ☐ Asking smokers if they are interested in quitting
  - ☐ Providing smokers with treatment options (nicotine patches, gum, Buprobion, etc)
  - ☐ Writing prescriptions for treatment for smoking cessation
  - ☐ Referring smokers to their primary care physician for continuing help/ treatment
  - ☐ Referring smokers to established self-help groups like American Lung Association.
4. In your best estimation, what percentage of your emergency residency residents are identifying smokers, offering treatment (Nicotine patches, gum, and/or Buprobion), and referring them to self-help groups and their primary care physician for continued support?
5. Do you think that smoking cessation should be part of the core curriculum for emergency medicine residents?

☐ Check here if you are not interested in participating in the study.

We had a master list of each program and each residency director, including their email address and telephone number. As residency directors responded or refused, we crossed their names off the master list. Telephone, email, and fax responses were entered into a database anonymously. We had implied consent if the directors chose

to answer the questions and respond by email, fax, or telephone. This study was approved by our hospital institutional review board.

**DATA ANALYSIS:** We present frequencies for each response. A level of 0.05 was considered significant. The Mann-Whitney Test was used to compare those emergency medicine residency programs that did include lectures on smoking cessation with those that did not include lectures.

## RESULTS

Of the 127 emergency medicine residency directors that existed in 2003-4 in the United States, 114 were reached (90%). Seven refused. There were 107 completed surveys with a total of 3329 emergency medicine residents in 105 of those programs. On average each program had 32 residents (Range from 6-69).

Only 7 (7%) of the emergency medicine residency programs included lectures on smoking cessation in their curriculum. Of those programs that did include lectures on smoking cessation, the lecture content included information on; identifying smokers (71%), confronting the patient on the issue of quitting (57%), providing the smoker with treatment options [nicotine patches, gum, Buprobion, etc] (71%), writing prescriptions for treatment for smoking cessation (29%), referring smokers to their primary care physician for continuing help (71%), and referring smokers to established self-help groups (43%). In those emergency medicine residency programs that did include lectures on smoking cessation, 8 % of their residents were involved in helping smokers in the ED, as compared with 6% in those emergency medicine programs without lectures on smoking cessation. This trend was not statistically significant.

The residency directors estimated that  $6\% \pm 11\%$  of their EM residents are doing all of the following: identifying smokers, offering treatment, and referring them to their physician and support groups. Thirty one (29%) of EM directors felt that smoking cessation should be part of the core curriculum for EM residents.

## DISCUSSION

There have been a number of articles in the emergency medicine literature suggesting that emergency physicians and ancillary emergency department staff could be involved in identifying smokers in the emergency department and initiating treatment for smoking cessation. (<sup>1,2,4,5,6,7,8</sup>) In a suburban community in New Jersey in 1999, one group looked at the prevalence of smokers in their adult emergency

department population and found that 21% of their adult patients were smokers and 69% wanted to quit. (7) In a recent study from New York in 2004, Bernstein et al found that 52% of the smokers identified in their emergency department population had never been asked by a physician if they smoked, and 52% had never been advised to quit. (4)

Based on a review of the literature, it seems prudent that all emergency medicine residents should receive some training in smoking cessation as part of the core curriculum for emergency medicine. In 1995 some researchers sent out a questionnaire to all members of the Colorado Chapter of the American College of Emergency Physicians and found that 55% of the emergency physicians lacked formal smoking cessation training, and 65% of them felt poorly prepared to counsel patients about smoking cessation. (8)

It has been shown that repeated interventions with smokers is the usual and most effective way of getting someone to quit. (3,10) The emergency department provides the opportunity for one of those interventions, and with follow-up, repeated interventions are possible. Some researchers have had success with smoking intervention programs in the emergency department. (2,5) Other groups have found that a single emergency department intervention on smoking cessation is not enough to improve quit rates. (9)

Treatment for smoking cessation involves a number of modalities; nicotine patches, nicotine gum or lozenges, nicotine spray and inhalers, bupropion, and counseling, all of which are effective. (10) In 1999 a review of the published literature, the US Food and Drug Administration pharmaceutical company reports concluded that pharmacotherapy should be made available to all smokers and that all therapies appear to be equally efficacious, approximately doubling the quit rates compared to placebo. (10) With a higher degree of dependence on smoking, increasing the number of modalities used, improved quit rates. (10)

### **LIMITATIONS AND FUTURE STUDIES**

Surveying the emergency medicine residents themselves would have provided a more accurate assessment of the education they are receiving with regard to smoking cessation, and whether they are counseling their patients about smoking cessation.

In the future, if smoking cessation becomes part of the core curriculum for the emergency medicine residents, it would be important to study the effect of an emergency department

counseling program, specifically long term quit rates for patients. Most likely, an effective emergency department program would be conducted with the help of ancillary staff in the emergency department, and coordinated with smoking cessation programs in the hospital, community and in physicians' offices.

### **CONCLUSION**

In the US very few emergency medicine residency programs (7%) include lectures on educating their emergency medicine residents on how to help patients with smoking cessation. Only 6% of emergency medicine residents are estimated to treat smokers in the emergency department by offering treatment and referring them for counseling. We believe that lectures on smoking cessation should be included in the emergency medicine core curriculum, and their effectiveness on decreasing smoking in patients studied.

Emergency departments throughout the country have access to many smokers. We feel that initiating smoking cessation programs in emergency departments could have a large impact on reducing the numbers of smokers in the country. This process would begin by educating all emergency physicians on smoking cessation.

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