Parental Tobacco Screening and Counseling in the Pediatric Emergency Department: Practitioners' Attitudes, Perceived Barriers, and Suggestions for Implementation and Maintenance

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Introduction: The pediatric emergency department (PED) is a venue that underuses parental tobacco screening and brief cessation counseling. We sought to explore PED practitioners' attitudes and perceived barriers regarding the implementation and adoption of tobacco screening/cessation counseling of parental smokers in the PED setting, as well as to solicit suggestions for improving the sustainability and maintenance of such practices.

Methods: We conducted an exploratory, qualitative study of a convenience sample of PED practitioners using the RE-AIM (reach, effectiveness, adoption, implementation, and maintenance) framework. Individual, focused interviews were conducted to determine factors that would maximize the implementation and maintenance of parental tobacco screening and intervention counseling as standard PED practice.

Results: Thirty interviews were conducted from which relevant data, patterns, and themes were identified. Reach factors included targeting parental smokers with children with respiratory diseases, having adequate training of practitioners, and providing "prearranged" counseling packages. Effectiveness factors included practitioner desire for outcome data about intervention effectiveness (eg, changes in children's secondhand smoke exposure and parental quit rates). Solutions to increase intervention adoption included quick electronic health record prompts and the provision of onsite tobacco cessation experts. Implementation suggestions emphasized the importance of financial support and the alignment of tobacco screening/counseling with strategic plans. Maintenance factors included institutional and technical support, as well as the importance of intervention "champions" in the PED.

Discussion: By highlighting important viewpoints of practitioners regarding tobacco screening and counseling, the findings can help guide and direct the development and evaluation of sustainable interventions to facilitate tobacco use treatment in the PED.

Key words: Tobacco screening; Smoking cessation counseling; Parental smoking; Secondhand smoke exposure; Emergency department

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Over a decade has passed since the introduction of the clinical practice guideline "Treating Tobacco Use and Dependence," which recommends a "5 A's" approach: ask about tobacco use, advise to quit, assess willingness to quit, assist those who wish to quit, and arrange for follow-up.[1–3] In 2006 an American College of Emergency Physicians (ACEP) taskforce of professional emergency medicine organizations summarized recommendations for tobacco control. They stated that (1) emergency departments should be used as a venue to launch tobacco cessation efforts and (2) emergency department–based tobacco control efforts may constitute "high-impact, high-reach, low-efficacy interventions." However, further investigation to identify the most effective emergency department–based practices for screening, advising, and referring smokers to treatment is needed.[4] Since that time, studies conducted in adult health care settings evaluating the use of electronic health records (EHRs) as a way to increase adherence to the 5 A's approach have shown some success—predominantly in the "ask" about tobacco use step and in the "arrange" for follow-up or referral to cessation counseling step. However, limited compliance was noted for the remaining 5 A's: advise to quit, assess willingness to quit, or assist those who wish to quit.[2,5–9]

In parallel with ACEP's efforts, pediatric practitioners, policymakers, and public health advocates have recognized the urgent need to intervene on secondhand smoke exposure (SHSe) in children. The American Academy of Pediatrics has published a policy statement recognizing tobacco use as a "pediatric disease" because children of smokers exposed to high rates of SHSe have a higher SHSe-related morbidity risk.[10–15] Clinicians who care for children are thus urged to advise all parents to quit smoking as a way to promote the health of children.[10] Despite these recommendations, practitioners who care for pediatric patients do not routinely screen or advise parental smokers about ways to quit smoking.[1,10,11,14] There are several existing individual- and systems-level barriers to incorporating tobacco screening and counseling of parental smokers in the pediatric primary care setting. These barriers include lack of visit time and reimbursement for these services, lack of infrastructure for parental tobacco screening and counseling, and most notably, lack of practitioner comfort in counseling adult smokers.[16,17]

Recent research in the pediatric emergency department (PED) setting has uncovered alarmingly high smoking rates in parents who bring their children to the PED.[18–20] This setting may be an ideal venue to implement both ACEP and American Academy of Pediatrics recommendations, by providing tobacco interventions to benefit both the parent and the child.[4,21] The potential impact of such PED interventions can be assessed using the RE-AIM (reach, effectiveness, adoption, implementation, and maintenance) framework,[22] which is used to guide and assess intervention impact and sustainability. This framework is used to investigate behavioral change, understand evaluation of the impact of interventions in real-world settings, and facilitate the translation of research into practice (Table 1). Within this framework, impact is defined as the product of reach (the number of people who would use the intervention) and efficacy (the percentage of people who use and benefit from the intervention).[4,23,24] Therefore, using a conservative 30% prevalence rate for smoking among adults who bring their children to the PED and a conservative 1% cessation rate, PED-based tobacco cessation interventions could have a significant positive impact on both adults (30,000 fewer smokers) and their children.[4,21,25]

In an effort to develop PED parental smoking intervention strategies, we sought to understand existing barriers and to create potential solutions to implementation. The primary objective was to explore PED nurses' and physicians' attitudes and perceived barriers that would prevent the implementation and adoption of tobacco screening and cessation counseling of parental smokers into standard PED practice. Secondary objectives were to solicit suggestions from PED practitioners for improving the sustainability and maintenance of such PED practices.

Methods

STUDY DESIGN

We conducted an exploratory, qualitative study of PED practitioners using a deductive framework approach.[26–28] Researchers have used qualitative methods to identify factors that influence integration, implementation, and maintenance of clinical protocols among ED personnel.[29–31] In this study we used these methods to conduct semi-structured, focused interviews of nurses and attending physicians to assess their views on integrating tobacco screening and treatment interventions into the PED.

We used the RE-AIM framework to guide the interview process and data analysis. We developed focused interview questions structured to help determine factors that would maximize the implementation and maintenance of parental tobacco screening and brief intervention counseling as part of standard PED practice.[32] We elicited responses that reflected the positive attitudes, approaches, and solutions that practitioners believed would result in effective translation. We also identified practitioners' perceived barriers to implementation and sustainability.