

Second-hand tobacco exposure: parental knowledge about health impact and feasibility of cessation

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Background

- ❖ One in three children in the United States lives with a tobacco smoker.
- ❖ As the primary source of smoke exposure is in the home, the smoking behaviors of parents and other caregivers are key determinants of a child's exposure to second-hand smoke.
- ❖ The detrimental impact of second-hand smoke on children has been well established.
- ❖ The perioperative period offers an opportunity to discuss smoking cessation strategies and how risk factors in the home can be mitigated to improve a child's health.

Methods

- ❖ This prospective study was IRB approved and verbal consent was obtained.
- ❖ A survey was presented to the parents and caregivers in dental operating rooms during the preoperative phase.
- ❖ The primary aim was to determine the feasibility of using the preoperative encounter to offer smoking cessation resources to parents.
- ❖ The secondary aim was to compare willingness to receive smoking cessation resources according to knowledge of the risks of smoking (i.e., being aware of second-hand smoking and knowing that it posed a risk to their child).

Results

- ❖ Awareness of risks due to second-hand smoking was 65% in the overall cohort and 58% among current smokers (p=0.284 vs. non-smokers).
- ❖ Among smokers in our study, only 12% were interested in smoking cessation help.
- ❖ Knowledge of the risks of second-hand smoke was not associated with a willingness to receive smoking cessation resources.

Table 1: Characteristics and smoking knowledge of smokers according to whether they know the risks of secondhand smoke (N=43)

Variables	Knowledge of risks of secondhand smoke (N=25)	No knowledge of risks of secondhand smoke (N=18)	P value
	N (%) or mean (SD)	N (%) or mean (SD)	
Willingness to receive smoking cessation help	5 (20%)	0 (0%)	0.064
Has been offered help to quit smoking	18 (72%)	12 (67%)	0.747
Age	33 (8)	29 (5)	0.115
Male	9 (36%)	9(50%)	0.532
Race			0.223
Hispanic	0 (0%)	1 (6%)	
Non-Hispanic White	20 (80%)	10 (56%)	
Non-Hispanic Black	4 (16%)	5 (28%)	
Non-Hispanic Other	1 (4%)	2 (11%)	
Education			>0.999
High school or less	12 (48%)	9 (50%)	
Some college or associate's degree	9 (36%)	7 (39%)	
Bachelor's degree or higher	4 (16%)	2 (11%)	
Child has asthma, chronic breathing conditions, or ear infections	10 (40%)	7 (39%)	>0.999
Number of people who smoke in child's home	1 (1)	1 (1)	0.352

Discussion

- ❖ In the current study, only 58% of smokers agreed that second-hand smoke could be harmful, much lower than a national study which found that 90% of smokers recognize that environmental tobacco smoke could be harmful.
- ❖ Although some of this difference may be caused by subjects being less familiar with the term second-hand smoke, these results suggest that outpatient surgery centers such as our dental center may present an opportunity to educate parents about the adverse effects of smoking.
- ❖ Even among smokers who were aware of the harm of second-hand smoke, only 20% expressed a willingness to receive smoking cessation resources.
- ❖ The low percentage of smokers willing to receive smoking cessation resources suggests that knowledge is not sufficient to motivate these parents to quit smoking.
- ❖ As anesthesiologists, this setting could present a great opportunity to educate caregivers on the acute and long term effects of smoking.
- ❖ This study suggests there is a need for better methods of educating caregivers on the potential side effects of second-hand smoke and of emphasizing the issue of cessation.

References:

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2. Dillman DA, Smyth JD. Design effects in the transition to Web-based surveys. Am J Prev Med 2007;32:90-6.

