RESEARCH ARTICLE

IS SMOKING CESSATION COUNSELLING EFFECTIVE IN THE OB/GYN OFFICE? A PROSPECTIVE STUDY

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ABSTRACT

Background: There are over 10,000 publications related to smoking cessation alone, there are very few reports examining the success of anti-smoking strategies used in private practice.

Aims & Objective: To investigate the effectiveness of smoking cessation in a private OB/GYN office setting in a suburban middle class population.

Material and Methods: A total of 84 smokers were identified from among 1306 patient visits among 365 patients in a six month period. All patients were coming to a private OB/GYN practice for routine care. The patients participated in a three minute counselling session and were given a two page written hand-out on smoking cessation. Patients were interviewed at 6 and 12 months after the initial smoking cessation counselling.

Results: Approximately 77.4% of smokers indicated a desire to quit smoking when asked at the initial interview. 78.8% of smokers indicated that they enjoyed smoking. The overall successful cessation rate after one year's time was 11.9%. Of those reporting unsuccessful attempts to quit, 30.8% reported cutting down on daily consumption.

Conclusion: A three minute smoking cessation intervention coupled with a two page written hand-out was effective in improving smoking cessation rates in a suburban middle class population.

KEY-WORDS: Smoking; Cessation; Office; OB/GYN

Introduction

During the early 1960's, per capita cigarette consumption reached its peak at more than half a pack of cigarettes per day.[1] In 1964, the Surgeon General's report on smoking and health, concluded that cigarette smoking was the cause of lung cancer in men.[2] The report marked the beginning of the current anti-smoking crusade.[1]

Tobacco use is a leading cause of preventable death and disease in the United States. More than one billion people use tobacco products worldwide. Smoking increases the risk of coronary artery disease as well as chronic obstructive pulmonary disease. Smoking has also been associated with reproductive health problems, perinatal mortality, and complications of pregnancy. The current campaign against smoking encompasses clinical, educational, regulatory, and economic approaches that are geared towards today's youth.[3] Increased regulation and taxes on the sale of tobacco, changes in public smoking policies, and the recent wave of anti-tobacco litigation have all been implemented with the hope of reducing the overall number of smokers and tobacco users.

The United States Public Health Service reported that smokers cite physician advice to quit smoking as an important motivator for a quit attempt, and that interventions as brief as three minutes can significantly increase cessation rates.[4] In addition, office based protocols that identify and offer treatment to pregnant women who smoke have been credited with significant improvement in quit rates.[5] The prevalence of smoking in adult women is 17.3% in 2011.[6] The rate of smoking has been essentially unchanged over the past 5 years, thus falling short of the Healthy People 2010 goal of a smoking rate of 12% or less.[7] Tobacco use screening and cessation counselling is rated among the three most effective and efficacious preventive health actions that can be undertaken in a clinical setting.[8] Even when patients are not willing to make a quit attempt, clinician derived brief interventions enhance motivation and increase the likelihood of future attempts to quit.[9]

According to the Surgeon General, health education and clinical management of nicotine addiction are an important part of overall approach to reducing tobacco use in the United States. Suggesting that simple intervention of a physician giving anti-smoking information could result in quit rates of 5-10% per year.[10] It takes an average of seven quit attempts for the average smoker to quit smoking and stay abstinent for one year. However, patient adherence to physician smoking cessation advice is better than that for diet change and increasing physical activity.[11]

While there are over 10,000 publications related to smoking cessation alone, there are very few reports examining the success of anti-smoking strategies used in private practice.[12] The present study represents a prospective look at the benefits of providing anti-smoking counselling in a private office setting in a suburban middle class population.

Materials and Methods

The study was conducted at the Jersey Shore Obstetrics and Gynaecology in Freehold, New Jersey from June 1, 2011 through December 31, 2012. All obstetrical and gynaecological patients were eligible and had private health insurance. Eighty four smokers were identified and enrolled in this non-blinded, prospective study. The patients were not consecutive. Distinctions between obstetric and gynaecologic patients were not made. A total of 1306 patient visits occurred during this study period. A total of 365 patients were represented. Once a patient was identified as a smoker, their consent to participate in this clinical study was obtained. They were instructed that this study was designed to gather information about smokers and to help determine the benefits of smoking cessation counselling and cessation rates. They understood that participation would involve the completion of a simple survey consisting of four questions and that they would be contacted for follow up questioning about their status. There were no refusals to participate. 92.8% (78 out of the 84) of the participating patients had follow up by office visit or phone call at six and twelve months after enrolment. The enrolment period ended June 1st, 2011 and the follow up period ended one year later. 7.1% (6 out of 84) of the patients were lost to follow up. Analysis was intention to treat and patients lost to follow up were counted as smokers who are still smoking.

Patient demographic information was obtained from office history and was recorded prospectively. Once a smoker was identified and her consent was obtained, she was asked the questions in Table 1.

Table-1: Smoker Survey

1	How long have you been smoking?
2	How much do you smoker per day?
3	Do you enjoy smoking?
4	Do you want to quit smoking?

The patient office visits were conducted routinely. All smokers were then counselled on smoking cessation as, “patients not willing to make an attempt to quit at that time,” per clinical guidelines.[4] A two page smoking cessation hand-out was reviewed with each smoker. Counselling was based on the recommended strategies to enhance motivation to quit, including: discussion of relevance of quitting to the patient, risks of smoking, rewards of quitting, and common roadblocks to quitting. Between 3-5 minutes was spent at the initial counselling session. It was anticipated that 35-45% of smokers would attempt cessation with or without pharmacologic intervention.[13] The importance of follow up as an integral part of success in quitting was stressed as well. Appointments to further discuss smoking cessation were offered at the patient’s convenience. Pharmacologic interventions for smoking cessation were discussed as well.

Results

Eighty four smokers were enrolled in this study. Mean age was 37.2 years; range 14-68 years; average duration of smoking was 19.6 years; range 1-50 years; average amount of cigarettes consumed, 0.96 packs per day; range 5 cigarettes to 2 packs per day. All patients were female and 96.5% were white, 3.5% were from other ethnic groups. Three patients were less than 18 years of age (two patients were 17 and one patient was 14 years old upon entry to the study). Six patients were lost to follow up (7.1%).

The prevalence of smoking in this study was 23.3%. At the onset, 77.4% (65 out of 84 patients) indicated a desire to quit smoking. One patient was ambivalent about quitting and represented 1% of the study population. 78.8% (67 out of the 84 patients) indicated that they enjoyed smoking. 46.4% (39 out of 84) of all smokers made at least one attempt to quit. The overall successful cessation rate was 11.9% (10 out of 84). The quit rate for those who did not enjoy smoking was 5.6% (1 out of 18 smokers). In the 78.8% that did enjoy smoking, the quit rate was higher, 13.6% (9 out of 66). Of those reporting unsuccessful attempts to quit, 30.8% reported cutting down daily consumption (12 out of 39 patients).

Table-2: Study Group Characteristics

Characteristic	Mean	Range
Age (years)	37.2	14-68
Duration of smoking (years)	19.6	1-50
Cigarette Use (packs per day)	0.96	0.25-2.0

Discussion

The risks associated with smoking are well documented. An early anecdote linked smoking to poor health as early as 1602. An anonymous author wrote that illnesses seen in chimney sweepers were caused by soot and that tobacco had similar effects.[14] In 1798, renowned American physician, Dr. Benjamin Rush, commented on the negative health effects of tobacco.[15] Cigarettes were first introduced in the United States in the early 1800's. In 1864, the first federal tax on cigarettes was levied.[16] The Women's Christian Temperance Movement rallied against smoking in the late 1880's, arguing that tobacco, especially cigarettes, was undermining the constitution of young men and boys.[17] Socially, smoking was acceptable behaviour that became very popular among both men and women. The peak prevalence of smoking for the overall adult population in the United States was over 42% in 1966, representing 50% of men and 33% of women.[6]

By the mid 1970's, the federal government began to regulate smoking. Smoking was restricted in all federal government facilities in 1979 and was banned in the White House in 1993. In 1990, Congress prohibited smoking on all commercial airline flights in the United States. In 1994, Mississippi became the first state to sue the tobacco industry to recover Medicaid costs for tobacco related illnesses.[17] A passionate anti-smoking campaign continues today.

While steadfast in our effort to help smokers, we must not overlook the potential negative effects of an anti-smoking campaign. Most patients in this study appreciated the counselling and follow up that they received. Some, however, did express feelings that being constantly asked about smoking heightened their sense of guilt. Other feelings that were revealed by patients, were of anger towards the physician for making them, "uncomfortable" by consistently bringing up the topic that, "smoking is bad." This type if negative reinforcement may have contributed to the number of patients lost to follow up in this particular study. We must acknowledge that some patients may be driven away from primary care if they associate an office visit with a smoking cessation discussion.

There are reports that physician anti-smoking advice can lead to quit rates of 5-10% per year.[10] The smoking prevalence in this study was 23%. More than 46% of smokers made at least one quit attempt and the overall quit rate was almost 12% which compares favourably with prior reports.[11,13]

The logic was simple; stopping a habit that is not enjoyable should be easier than stopping a habit that is enjoyed. However, analysis of two subsets of smokers, those who enjoy smoking and those who do not, supported the opposite conclusion. While limited by lack of statistical significance, those smokers who did enjoy smoking were twice as likely to have quit at a 6 to 12 month follow up. The main weakness of this study is a potential for selection bias. Patient enrolment was not consecutive, and obstetrical patients were not distinguished from gynaecological patients. Inclusion of obstetrical patients may have led to an overestimation of cessation rates. The possibility that smokers were overlooked during recruitment also exists. Despite this, the conclusions of this study are reasonable and applicable in the general female population.

Conclusion

Decreasing the prevalence of smoking remains a worthwhile goal. This study confirms that physician anti-smoking counselling in a private OB/GYN office is effective in improving smoking cessation rates in a suburban middle class population. The effect of smoking enjoyment or lack of enjoyment on quit rates deserves further study.

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