Structured Analysis of the Emerging Shift from Smoke-free to Smoker-free Policies in Georgia Hospitals

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Structured Analysis of the Emerging Shift from Smoke-free to Smoker-free Policies in Georgia Hospitals

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Structured Analysis of the Emerging Shift from Smoke-free to Smoker-free policies in Georgia Hospitals

ABSTRACT

The high rate of smoking-related deaths has encouraged policies prohibiting smoking in public and work places. Although hospitals seem obvious places for strict smoking policies, Georgia and other states have failed to implement total smoking bans in hospitals. In 1992, the Joint Commission on the Accreditation of Health Care Organizations (JCAHO) required hospitals to ban indoor smoking; however, an effect of this policy has been increased outdoor involuntary exposure to tobacco on hospital campuses. This creates a negative image for hospitals because it contravenes the expectation that hospitals should be free of such obvious health risk as involuntary smoking. While some hospitals have adopted smoke-free policies, others have adopted smoker-free policies, which, among other effects, deny employment to smokers. Currently, three Georgia hospitals have smoker-free policies while others consider the policy. This supports an inference that hospitals may be shifting to smoker-free policies. Under a three-step analytical framework grounded in descriptive research methodology, this study tests whether there is an emerging shift to smoker-free policies in hospitals in Georgia and nationwide. As a threshold step, it tests whether Georgia hospitals are shifting from smoke-free to smoker-free policies. Next, it assesses the prevalence of any detected shift. Finally, it measures any inherent impediments to any detected shift.

A Structured Analysis of the Emerging Shift from Smoke-free to Smoker-free Policies in Georgia Hospitals

CHAPTER 1

Introduction

Health care facilities seem obvious places for strict smoking restrictions; however, because of public relations concerns, comprehensive smoking bans in health care settings are not fully implemented in Georgia and in majority of states. In 1992, in the Joint Commission on the Accreditation of Health Care Organizations (JCAHO) required hospitals nationwide to ban smoking indoors as a quality indicator but did not require restrictions on smoking in other parts of hospital campuses. Among the unintended consequence of these policies is increased outdoor tobacco exposure within hospital campuses. This creates an unpleasant public image for hospitals because it contravenes the reasonable expectation that hospitals (full of patients with tobacco-related diseases) should be substantially free of such obvious health risk as second-hand smoking.

Among the benefits of smoke-free policies in hospitals are reduction in patient and employee smoking levels; reduced exposure to smoke-related health risks; improvement in the health of patients, employees, and visitors; decreased costs occasioned by tobacco-related illness; increase in hospitals' credibility as advocates for healthy lifestyles and exponential improvement in general well-being. It appears counter-productive for a hospital to permit smoking on its premises with notice of the adverse health effects of tobacco and second-hand smoke (SHS). Also, hospitalization is a unique opportunity for the medical community to educate the public and to encourage smoking cessation, through among other strategies, providing a smoke-free environment. Moreover, employee smoking results in direct and indirect costs, including increased health care and insurance costs, lost productivity, absenteeism, and maintenance costs due to property damage. A tobacco free policy in hospitals can be a significant mechanism to encourage hospital staff smoking-cessation.

To promote and protect health, more healthcare facilities are adopting voluntary 100% smoke-free campus policies. Moreover, smoke-free policies encourage community, employee, and patient cessation efforts; lower maintenance costs; and increase productivity. Other hospitals and health systems have gone as far as making non-smoking a condition precedent to hospital employment. According to the New York Times, this policy reflects a frustration that softer efforts — like banning smoking on company grounds, offering cessation programs and increasing health care premiums for smokers — have not been powerful-enough incentives to quit (February 2011). Under this policy, candidates for hospital employment are subjected to a pre-employment nicotine screening. Advancement to the next stage of the employment selection process will be contingent on a negative nicotine-test result. Nevertheless, applicants testing positive for nicotine have a choice of either smoking cessation assistance and may reapply for open position after a reasonable time or not. Current employees who smoke are given the opportunity to participate in smoking cessation program under which voluntary relinquishment of smoking is a condition to participation. This is allowed in some states and not others. Currently, the state of Georgia has no relevant legislation that addresses this issue. Proponents of this policy assert that the ban on employing smokers will, among other things, increase worker productivity, reduce healthcare costs and encourage healthier living.

This paper reviews current literature to determine whether there is a shift from smokefree to smoker-free policies in Georgia hospitals, the prevalence of the shift if any, and finally the impediments to the shift.

There is uncontroverted scientific evidence that tobacco consumption poses a significant health risk, and it constitutes a major threat to global public health. In 2005, the CDC recognized tobacco use as the leading cause of many chronic diseases; thus one of the national health objectives for 2010 was to establish laws in all states to prohibit or restrict smoking in all public places and work sites. Smoking harms most human organs, and it causes many diseases and reduces life expectancy and overall quality of life. It is the single most preventable cause of disease, disability, and death in the United States. Notwithstanding, approximately 46.6 million U.S. adults (over 20%) or nearly 1 in 5 American adults continue to smoke (CDC, 2009 and 2011).

According to the CDC website, in the state of Georgia, 19.5% of the adult population aged 18+ years (over 1,393,000 individuals) currently smokes. Across all states, cigarette smoking among adults range from 9.3% to 26.5%, placing Georgia in the 32nd rank among the states (see Figure 1).





Source: 2010 Georgia Behavioral Risk Factor Surveillance System (BRFSS)

About 10,300 Georgians die every year from tobacco-related illnesses, constituting one

out of every six deaths in adult Georgians (Georgia Vital Statistics, 2003-2007).

- More adult males (6,400) than adult females (3,900) die from tobacco-related illnesses
- Among Georgia adults ages 35 and older, cancer accounts for 43% of all deaths from smoking

- Cardiovascular diseases and respiratory diseases account for 30% and 27% of all deaths due to smoking, respectively
- Adult smokers lose an average of 16 years of life compared to adult non-smokers

The financial impact of smoking to the state is staggering. It includes:

- \$1.8 billion in healthcare costs among adults aged 18 years and older
- \$3.4 billion in lost productivity costs among adults aged 35 years and older (Georgia Vital Statistics, 2003-2007).

It is noteworthy that, according to the CDC, Georgia lacks a statewide smoke-free law that provides adequate protection against exposure to secondhand smoke in public places (see Figure 2).

Figure 2: GA Smoke-free Policy



In addition, Georgia has a 0.37 per pack tax, ranking 47th among the states (see Figure 3)





The U.S Public Health Service's Clinical Practice Guideline, <u>*Treating Tobacco Use and Dependence*</u>, recommends seven medications and three types of counseling that are scientifically-proven to be effective in helping smokers quit. The Medicaid fee-for-service program in Georgia only covers Bupropion without prior authorization; therefore, it could have been used for smoking cessation, although this was not the intention of the coverage policy (see Figure 4).

Figure 4: Medicaid Coverage for Counseling and Medications for Smoking Cessation in GA.



Problem Statement

Smoking and smoking bans in public places remain a continuing subject of considerable controversy in the United States. The prohibition of smoking in public and work places has become increasingly popular because of the high rate of premature smoking-related deaths. Smoke-free policies not only protect people from the long-term effects of secondhand smoke; they also help to reduce the incidence of heart and lung disease among smokers (CDC, 2005). Moreover, there should be a reasonable balance between the right of smokers to smoke and the right of non-smokers to live and work free from involuntary exposure to cigarette smoke.

According to the CDC, some states have significantly improved the health of their citizens by reducing smoking rates, thereby decreasing smoking-related diseases, deaths, and health care costs. Even in economically challenging times, states can make a significant difference in public health by employing high-impact, cost-effective tobacco control and prevention strategies to:

- **M**onitor tobacco use and prevention policies
- **P**rotect people from tobacco smoke
- Offer help to quit tobacco use
- Warn people about the dangers of tobacco
- Enforce bans on tobacco advertising, promotion, and sponsorship
- **R**aise state cigarette taxes on tobacco

While some states are making great strides in reducing smoking rates using evidencebased strategies, others, including GA, still have a lot of work to do to protect the public from the deleterious effects of smoking and secondhand smoke. Laws and policies have been proven effective in protecting the public from secondhand smoke exposure, promoting cessation, and preventing smoking initiation by young people. Georgia can join the other states by:

- Increasing the amount of cigarette excise tax
- Providing insurance coverage for tobacco use treatment
- Implementing smoke-free policies, regulations and laws

The emerging shift from smoke-free to smoker-free policies has prompted sharp debate, even among anti-tobacco groups, over whether the policies establish a troubling precedent of employers invading private lives to ban a legal conduct (New York Times, February 2011).

Theoretical Framework

The socio-ecological model was chosen as the framework for this study because it addresses public health problems such as smoking at multiple levels, namely intra-personal, inter-personal, and socioenvironmental. Ecological models are comprehensive health promotion models that are multifaceted, concerned with environmental change, behavior, and policy that help individuals make healthy life choices. Moreover, contemporary tobacco control programs increasingly apply multi-level and multi-strategy approaches based on socio-ecological model (Ontario Tobacco Research Unit, 2003; Campaign for Tobacco-Free Kids, 2003; Center for Disease Control and Prevention, 1999). These programs are consistent with a greater understanding of the complex and nested determinants that influence patterns of tobacco use (Smedley et al, 2001; Green, 1996).

Socio-ecological model recognizes the interconnectedness between the individual's health and the physical and social environment. It also recognizes other external influences like

peer as well as organizational on such individual choices as smoking cessation. Although individuals are responsible for instituting and maintaining the lifestyle changes necessary to reduce and improve health, their behavior is shaped by multiple influences. A key feature of the socio-ecological model is that it highlights how health and wellbeing are affected by changes and interactions between all multiple factors over the course of one's life (McClure et al. 2004). Thus, this model focuses on the development and maintenance of a healthful environment that motivates better individual choices. For example, higher taxes on cigarettes have been shown to reduce smoking rates, especially when disposable income is limited. Smokers can be motivated to reduce smoking rates and ultimately quit through tobacco control programs such as legislation that bans tobacco advertising, health education, taxation, smoking and smoker-ban policies in public places and work sites, e.g. hospitals.

In the United States, approximately 70% of the 45 million smokers report that they want to quit, approximately 40% report that they try to quit each year, and almost two-thirds of smokers who relapse want to try quitting again within 30 days (USPHS 2008). Also, approximately 58% or 730,000 adult smokers made a quit attempt in the past year (GA BRFSS 2008). If environmental changes are made to include public and worksite bans on smoking, these individuals are likely to achieve higher quit rates. Borland et al (1990) conducted a study to determine the effects of workplace smoking bans on cigarette consumption among 391 smokers. The study was based on ecological model in which individual behavior was changed by environment changes. Results showed a reduction in cigarette consumption by more than 25%.

Purpose Statement

This study initially assesses whether there is the desire among Georgia hospitals to shift from smoke-free policies to "smoker-free policies. Then it evaluates the impediments, if any, inherent in any detected shift.

Research Questions

The research questions include:

- 1. Is there a shift from smoke-free to smoker-free policies among hospitals in the state of Georgia?
- 2. If so, how prevalent is the shift?
- 3. What, if any, are the impediments to this shift?

Significance Statement

According to the Centers for Disease Control and Prevention (CDC), each year, an estimated 443,000 people die prematurely from smoking and another 8.6 million live with a serious illness caused by smoking (see Figure 5)



Figure 5: Deaths attributable to cigarette smoking

Secondhand smoke (SHS), also known as environmental tobacco smoke (ETS) is the combination of smoke from the burning end of a cigarette and the smoke breathed out by smokers. SHS contains more than 7000 chemicals. Hundreds are toxic and about 70 can cause cancer (USDHHS 2006, 2010). The US Environmental Protection Agency (EPA), the US National Toxicology Program, and the International Agency for Research on Cancer (IARC), a branch of the World Health Organization, have all classified secondhand smoke as a "known human carcinogen"

Cigarette smoking has been identified as a potential risk factor for mental illnesses such as depression, anxiety, affective disorders, and schizophrenia and is associated with an increased prevalence of these mental illnesses (Nakata et al., 2008; Van Dongen, 1999) and higher suicide rates (Hughes, 2008). Cigarette smoking and SHS exposure also have negative reproductive effects leading to reduced fertility in women, early menopause, low birth weight, fetal death, and pregnancy complications (Soares & Melo, 2008). In addition, cigarette smoking is linked with a higher risk of absence from work (Lundborg, 2007) ,occupational injuries and accidents (Nakata et al., 2006) and increased likelihood of common cold infections (Arcavi & Benowitz, 2004; Bensenor et al., 2001).

The 2006 Surgeon General's Report asserts that there is no safe level of exposure to tobacco smoke. (U.S Department of Health and Human Services [USDHHS] 2006). Exposure to second-hand smoke causes approximately 35,000 heart disease deaths and 3,000 lung cancer deaths among nonsmokers in the United States every year (CDC 2005). According to the Surgeon General Carmona, "The scientific evidence is now indisputable: second-hand smoke is not a mere annoyance. It is a serious health hazard that can lead to disease and premature death in children and nonsmoking adults. (USDHHS 2006).

Adding to the harm caused by smoking and second-hand smoke, there is a new health threat to smoking called third-hand smoke. Third-hand smoking is generally considered to be residual nicotine and other chemicals left on a variety of indoor surfaces by tobacco smoke long after smoking has ceased. This residue is thought to react with common indoor pollutants to create a toxic mix containing cancer-causing substances that pose potential health hazards to exposed non-smokers, especially children and individuals with compromised immune systems.

Moreover, the economic loses to society from smoking is enormous. During 2000–2004, cigarette smoking was estimated to be responsible for \$193 billion in annual health-related economic losses in the United States (\$96 billion in direct medical costs and approximately \$97 billion in lost productivity) (CDC 2008). The total economic costs (direct medical costs and lost productivity) associated with cigarette smoking are estimated at \$10.47 per pack of cigarettes sold in the United States (CDC 2006). Cigarette smoking results in 5.1 million years of potential life lost in the United States annually (CDC 2008). Annually, employers lose \$50 billion in productivity due to smoking in the United States (CDC 1993), and the additional expense to employers for each one-pack-a-day smoker is \$624 annually (Mudarri, 1994).

The overwhelming evidence of the harmful effects of cigarette smoking, secondhand smoke exposures, and third-hand smoke has lead to an increase in smoke-free policies and laws at every level including community, local, state, federal and international. Majority of these laws ban indoor smoking in public places and work sites, and some hospitals are barring smokers from employment. Proponents of this ban feel it's a great way to set a healthy example for patients. Also, this ban will save the hospital system considerable health-related costs.

Operational Terms

Smoking bans are tobacco control policies and regulations which prohibit smoking in workplaces and public spaces. For this study, a comprehensive smoke-free policy prohibits all tobacco products including cigarettes, cigars, chewing tobacco and all forms of smokeless tobacco, rolling paper and any items containing or resembling tobacco or tobacco products.

A smoker-free policy has all the elements of a comprehensive smoke-free policy in addition to making non-smoking a condition precedent to hospital employment.

Secondhand smoke (SHS), also known as environmental tobacco smoke (ETS) is the combination of smoke from the burning end of a cigarette and the smoke breathed out by smokers. Third-hand smoking is generally considered to be residual nicotine and other chemicals left on a variety of indoor surfaces by tobacco smoke long after smoking has ceased.

CHAPTER 2 LITERATURE REVIEW

Introduction

Following the Surgeon General's 2006 report identifying involuntary or second-hand smoke as a cause of disease, including lung cancer, in healthy nonsmokers, work-place smoking bans have proliferated. Hospitals are one of the major employers in many American communities, employing approximately 4.3 million individuals nationally (American Hospital Association, 1993). Hospitals were the first to address the issue of workplace smoking by implementing the first industry-wide ban on smoking in the workplace in 1993.

This chapter provides background information on smoking ban and its impacts in U.S. hospitals, examines the current status and trends of bans in U.S hospitals with emphasis on hospitals in the state of Georgia, and examines impediments to smoking and smoker ban policies.

History of smoking ban in U.S Hospitals

The first surgeon General's Advisory Committee Report on smoking and health, released in 1994 associated tobacco use with increased death from lung cancer, heart disease, chronic bronchitis and emphysema. The committee concluded that "cigarette smoking is a health hazard of sufficient importance in the United States to warrant appropriate remedial action. (USDHHS, 1994). Following that report, efforts have been made to reduce and ultimately eliminate tobacco use. These efforts have resulted in a drastic reduction in smoking and tobacco consumption rates in the U.S. However, tobacco use still remains the number one cause of preventable and premature deaths in the U.S nearly 48 years later.

The movement for smoke-free workplaces started in 1971 following a call for smoking ban in public places by Surgeon General Jesse Steinfeld. According to the Surgeon General,

"Nonsmokers have as much right to clean air and wholesome air as smokers have to their so called right to smoke, which I would define as 'right to pollute'. It is high time to ban smoking from al confined public places such as restaurants, theaters, airplanes, trains, and buses." (Steinfeld, 1971). Since then, smoke-free work place policies and movements have proliferated in the United States and around the world.

In 1992, The Joint Commission, the world's largest healthcare standard-setting and accrediting body, mandated all of its accredited U.S hospitals and those applying for accreditation to ban indoor smoking by December 31st 1993, resulting in the nation's first industry-wide ban on smoking in the workplace. Immediately following this mandate, 43% of hospitals had implemented policies that exceeded the requirement, and a small number, 2.7%, reported an entirely smoke-free campus (Lango et al. 1998). These hospitals probably felt that the indoor smoking ban imposed by The Joint Commission did not go far enough to eliminate the dangers associated with smoking and second-hand smoke.

The impact of smoke-free hospital policies

The widespread implementation of smoking bans in public and workplaces, including hospitals, has been slowed by fears that such bans may adversely affect businesses. However, it is clear that allowing smoking in the workplace adds considerable costs for businesses. Smoke-free policies significantly improve the health of the public by ensuring better air quality which translates into better health. For example, when the state of California implemented smoke-free policies lung cancer rates dropped significantly more than the rest of the country. The decline among men in California was 1.5 times greater in other areas of the country. Among California women, the rate of lung cancer declined by 4.8 percent whereas rates increased by 13.2 percent elsewhere (CDC 2000).

Some hospitals anticipate that transitioning to a smoke-free campus may decrease patient volume, particularly patients who smoke. Following the implementation of a smoke-free campus by a 180-bed acute care hospital located in a small town in 2006, a study was conducted by Gadomski, Stayton, Krupa, and Jenkins (2010) to determine the impact on inpatient and employee outcome. They compared inpatient volume, percentage of inpatients who currently smoke, nicotine replacement therapy (NRT) orders (obtained from electronic medical records), the number of inpatients who signed out against medical advice (obtained from incident reports), and employee tobacco-use rates from annual occupational health assessments pre and post implementation. The result showed that a smoke-free campus policy had no adverse affect on impatient volume (even among smokers), significantly increased inpatient NRT use, and decreased hospital employee smoking rates.

In another study titled "Hospital smoking bans and employee smoking behavior: Results of a national survey" was conducted by Lango et al. in 1996, the goal of which was to examine the impact of workplace smoking behavior on employees. In this quasi-experimental cross-sectional study, a total of 1469 current or former smokers (intervention group) employed in smoke-free hospitals and 920 current or former smokers (comparison group) employed in non-smoke-free workplaces were surveyed for smoking behavior. The main outcome measures were post-ban quit ratio and progression along the stages-of-change continuum. The authors used a Cox proportional hazards model to compare the post-ban quit ratio between the intervention and comparison groups. The Cochran-Mantel-Haenszel analysis of variance statistic was used to compare groups on the stages-of-change variables. Beginning with the smoking ban and continuing for 5 years after implementation, researchers observed statistically significant differences in the post-ban quit ratio between employees of smoke-free hospitals who were

smokers and counterparts in the community (P<.001). Despite pre-ban differences in smoking intensity, the overall difference in post-ban quit ratios remained significant even after multivariate adjustment for socioeconomic, demographic, and smoking intensity variables. For those sites that were 5 years post-ban, the quit ratio was 0.506 in smoke-free workplaces compared with 0.377 in workplaces where smoking was permitted. Except in one category, the intervention group was further along the stages-of-change continuum toward quitting smoking than the comparison group (P<.001). The authors concluded that American hospitals' experiences with smoking bans, which directly affect more than 5 million workers, should be examined by other industries as a method of improving employee health. Workplace smoking bans could also be effective in saving lives, reducing health care costs, addressing safety concerns, and decreasing operating and maintenance expenses for employers.

Becker et al (1989) also conducted a study to determine the impact of a total ban on smoking in the Johns Hopkins Children's Center. A survey conducted 6 months before and after implementation of a smoking ban showed current smoking prevalence to be 15% and 13.8 %, respectively. The percentage of smokers who smoked at work declined from 82% before the ban to 43% after the ban. Following the ban, 66% of smokers and 93% of nonsmokers agreed that a hospital should be smoke-free compared with 43% and 83%, of the same sample agreeing with the statement before the ban. Additionally, systematic observations showed a decline from 53% of visitors and staff smoking in public areas one month before the ban to 0% smoking 6 months after the ban. Twenty-four-hour cigarette butt counts in elevator lobbies located well within the center dropped from 940 for an average day to 19 for an average day 6 months after the ban. Finally, measurement of environmental nicotine vapor showed a decline from a weekly average concentration of 13 micrograms/m3 of nicotine one month prior to the ban to 0.51

micrograms/m3 of nicotine six months after the ban in nine lobby lounges. These finding tend to confirm the feasibility of total smoking ban policies as well as the effectiveness of the outcome in substantially reducing, if not eliminating, public smoking

Also, following the adoption of a smoke-free policy at the Duke University Medical Center but not at the adjacent University Campus, Stave and Jackson (1991) conducted a study to determine the effects of a total work-site smoking ban on employee smoking and attitudes. Three months after the effective date of the smoking prohibition, researchers conducted a crosssectional survey using randomly selected groups of 400 employees from each campus. Subjects were queried about current and previous smoking histories and their opinion of the smoking ban. As determined retrospectively from this survey, at the time of the announcement of the policy and six months before implementation, 23.6% of employees at the Medical Center were smokers, compared with 20.3% on the University Campus. Three months after implementation of the Medical Center smoking prohibition, smoking cessation rates were 12.6% at the Medical Center and 6.9% on the University Campus dating back nine months to the time of policy announcement (P less than 0.10). Mean cigarette consumption during work hours declined over this same period from 8.1 +/- 6.8 (mean +/- SD) to 4.3 +/- 4.4 at the Medical Center but showed little change on the University Campus (9.3 +/- 7.5 v 8.7 +/- 8.0). Overall, 75.8% of subjects at the Medical Center "somewhat" or "strongly" agreed with the policy compared with 73.2% on the University Campus. A follow-up survey of the cohort of current or recent ex-smokers identified on the initial survey was conducted 6 months later. This survey revealed a smoking cessation rate of 22.5% at the Medical Center and 6.9% on the University Campus, dating back fifteen months to the time of policy announcement (P < 0.01).

Ong and Glantz (2004), estimated in their study the number of U.S. indoor workers not covered by smoke-free workplace policies and the effects of making all workplaces smoke-free on smoking behavior and on the relative risks of acute myocardial infarction and stroke. They calculated one-year and steady-state results using an exponential decline model. The result showed that the first-year effects of making all workplaces smoke-free would produce about 1.3 million new quitters and prevent over 950 million cigarette packs from being smoked annually, which translates to about 2.3 billion dollars in pretax sales to the tobacco industry. In one year, making all workplaces smoke free would prevent about 1500 myocardial infarctions and 350 strokes, and results in nearly \$60 [corrected] in savings in direct medical costs. At steady state, 6250 myocardial infarctions and 1270 strokes would be prevented, and \$279 million [corrected] would be saved in direct medical costs annually. Reductions in passive smoking would account for 60% of effects among acute myocardial infarctions.

The authors concluded that making all U.S. workplaces smoke free would result in considerable health and economic benefits in one year. Reductions in passive smoking would account for a majority of these savings. Similar effects would occur with the enactment of state and local smoke-free policies.

In summary, studies conducted to determine the impact of the smoking ban mandate indicate no adverse effect on employee morale, retention, or patient satisfaction (Lango, et al. 1996, 1998, 2001). Also, these studies suggest that restrictive smoke-free policies reduced employee smoking and increased cessation rates (Lango, et al. 1996). Facilities that were smoke-free but maintained designated smoking areas showed a reduction in the amount smoked by employees but had little impact on cessation (Chaloupka, 1992; Glasgow, et al. 1997). However, facilities that eliminated designated smoking areas had approximately twice the

reduction in both cigarette consumption and cessation as those that allowed smoking in designated areas (Williams, et al. 2005).

Studies also indicate that smoking bans in hospitals can facilitate a "teachable moment" to promote or enhance inpatient smoking cessation after discharge (Fiore, et al. 2000; Rigotti, et al. 2000). Consequently, there has been movement towards smoke-free policies in hospital campuses (Wheeler et al. 2007) that ban smoking anywhere on the hospital grounds, including entranceways and parking lots.

Prevalence of Smoke-free hospitals and other healthcare facilities

According to the American Nonsmoker's Right Foundation, overall, at least 2,994 local and/or state/territory/commonwealth hospitals, healthcare systems, and clinics have adopted 100% smoke-free campus grounds policies that protect all employees, visitors, and patients from secondhand smoke exposure within their campuses, including but not limited to facility buildings, outdoor areas and parking lots. The following hospitals, clinics, insurers, and health service companies have adopted smoke-free policies nationwide which extends to their respective facilities, campuses, and office buildings:

- Kaiser Permanente
- Mayo Clinic
- SSM Health Care
- CIGNA Corp.

For example, the state of Arkansas passed legislation banning smoking 1n all hospitals in the state, according to a 2009 article published in the International Journal of Environmental Research and Public Health by Christine Sheffer of the University of Arkansas.

Smoke-free hospitals in GA

The table below lists Georgia hospitals with100% smoke-free policies.

Table 1: GA Hospitals that have adopted 100% smoke-free polices

Archbold Medical Center,	Grady General Hospital,	Piedmont Fayette Hospital,
GA	GA	GA
Athens Regional Medical Center, GA	Harbin Clinic, GA	Piedmont Hospital, Atlanta, GA
Beaufort Hospital, GA	Hart County Hospital, GA	Piedmont Medical Center, GA
Brooks County Hospital,	Memorial Health	Piedmont Newnan
GA	University Medical Center, GA	Hospital, GA
Children's Healthcare of	Memorial Hospital and	St. Mary's Health Care
Atlanta, GA	Manor (3 facilities), GA	System [†] , GA
Colquitt Regional Medical Center, GA	Mitchell County Hospital, GA	St. Joseph Hospital, GA
Crisp Regional Hospital, GA	North Fulton Hospital, GA	Southwest Georgia Regional Medical Center, GA
Early Memorial Hospital, GA	Palmyra Medical Center, GA	Tift Regional Hospital, GA
Eastside Medical Center,	Phoebe Putney Medical	University Health Care
GA	Center, GA	System (Augusta), GA
Floyd†, GA	Phoebe Worth Medical	Wellstar Healthcare
	Center, GA	System, GA

Source: http://www.no-smoke.org/pdf/smokefreehealthcare.pdf

In creating this document, the American Nonsmokers' Rights Foundation relied on information found on the Internet, information in news articles, and information obtained from other tobacco prevention agencies. This information is accurate to the best of their knowledge; however, there may be some discrepancies due to incomplete information.

Please also note that the hospitals were not contacted to verify the status of their policies

A 2010 publication by Anne Gadomski of the Bassett Research Institute in the Journal of Hospital Medicine reports that hospitals instituting these comprehensive smoking ban policies see a significant reduction in employee smoking. The primary catalyst for smoke-free polices is the deleterious effect of tobacco use. Epidemiological studies have shown that people living or working in an environment polluted with secondhand smoke have a 30% increased risk of myocardial infarction (Sargent, Sheppard & Glantz, 2004)

The new trend: Smoker-free policies

Notwithstanding the achievements of indoor smoking bans as well as the more stringent comprehensive bans, some hospitals want to move even further to protect the public from the nation's number one cause of preventable disease and death. Accordingly, these hospitals are taking smoking bans to new heights by refusing to hire smokers (smoker-ban policies). A February 2011 article in the New York Times by A. G. Sulzberger titled "Hospitals Shift Smoking Bans to Smoker Ban" reports that hospital administrators see 'tobacco-free hiring" as a way to increase worker productivity, decrease healthcare cost, and encourage healthier living.

The CDC estimates that cigarette smoking costs the United States \$193 billion in lost productivity and healthcare cost, with every employee who smokes costing employers an additional \$3,391 per year – including \$1,760 in lost productivity and \$1,623 in excess medical expenses (1995-1999). Moreover, according to the American Cancer Society, a study of health care utilization in 20,000 employees showed smokers had more hospital admissions per 1,000 (124 vs. 76), had a longer average length of stay (6.5 vs. 5 days) and made six more visits to health care facilities per year than nonsmoking employees (April 2000). As a result, some hospitals and other companies require smokers to pay a larger share of health insurance than non-smokers. For example, Newton Medical Center in Kansas imposed a "tobacco-user

surcharge" of \$35 per two-week period to employees who smoke or have a spouse or dependents who smoke effective July 1st 2010. This quest to make the work place healthy by eliminating smoking is not peculiar to the healthcare industry. Even the department store Macy's has placed a surcharge of \$420 a year on workers who admit to using tobacco for health coverage. According to the company, the extra cost will be deferred only if smokers enroll in a free quit-smoking class with a half-yearly progress review (Bartels, 2010).

In employer plans where employees are required to self-report their smoking status in order to pay higher premiums, a potential problem is under reporting of smoking status in order to avoid the surcharge. According to a representative of the Towers Watson Company, the percentage of employees who identify themselves as smokers range from about 8% to 15%, meaning that the rest of the employees are not accurately reporting their smoking status. The lower reporting numbers are likely to occur when there are significant financial penalties applied to smokers (e.g., smoker surcharge of \$100 per month per adult or \$1200 per year per employee). Employers generally include language in open enrollment materials to try to deter employees from being dishonest in their reporting. For example, they may have a statement to the effect that anyone found to have provided false information regarding smoking status will be responsible for paying back avoided penalties and may be subject to additional penalties and disciplinary actions up to and including termination.

According to a New York Times Article titled "Money and Policy" published by Abelson, R. " more and more employers are demanding that workers who smoke, are overweight or have high cholesterol shoulder a greater share of their health care costs, a shift toward penalizing employees with unhealthy lifestyles rather than rewarding good habits. "Policies that impose financial penalties on employees have doubled in the last two years to 19 percent of 248 major American employers recently surveyed" (Nov. 16, 2011)

Prevalence of the smoker-free polices in U.S Hospitals

The healthcare industry has been actively leading a movement to tackle smoking. In 2005, the Cleveland Clinic banned the use of tobacco and stopped hiring smokers in 2007. Job applicants are required to be tested for nicotine. Toby Cosgrove, the chief executive officer of the clinic network justifies this decision by saying "if we want to be a model of healthcare, then we as an organization need to show our patients what a healthy lifestyle means". A 2010 Palm Beach Post article by Laura Green reports that the Cleveland Clinic – one of the champions of the new regulation – had already screened 15,000 workers, turning away several hundred applicants who tested positive for nicotine (December 26,2010)

Memorial Hospital in Chattanooga, Tennessee is now giving check-ups to prospective employees. A urine test that detects nicotine means no job is offered. The head of the hospital's parent company, Memorial Healthcare Systems, James Hobson defends the decision. "It's relevant to creating that healthy lifestyle," he said. "And again it's relevant to the entire community." (Smith, M. 2010)

An article in USA TODAY by K. Alltucker of The Arizona Republic titled "Humana won't hire smokers in Arizona" revealed that the health insurer announced that it will no longer hire workers in Arizona who smoke or use other tobacco products. To enforce this tobacco ban, the company tests new employees for nicotine use during a pre-employment urine drug screen. Humana had implemented a tobacco-free hiring program for its new employees in Ohio two years prior, but the Ohio program did not test for nicotine among new hires. The company believes the efforts have worked as 78% of its employees in Ohio reports being tobacco-free. Cox, the Humana vice president and market medical officer for Arizona, Nevada and Utah, said it selected Arizona to roll out the new program because state laws allow employers to require
tobacco-cessation programs. In addition, the state's smoking rate, 13.1%, is also among the lowest in the nation, according to the Arizona Department of Health Services. A Humana representative says "it makes sense for a company in healthcare field to lead by example". "Smoking's harmful effects on human health are well-documented, and Humana seeks to promote health and wellness – starting with its workers." Dr. Charles Cox equally defended the decision saying "Humana is dedicated to helping our employees take charge of their health." (June 30, 2011)

The companies named above comprise a growing number of healthcare employers who are seeking to ban smoking among new hires. According to several reports, hospitals in Arizona, Florida, Massachusetts, Missouri, Ohio, Pennsylvania, Tennessee, Texas and even Georgia have already implemented smoker-free policies while others are openly considering the measure.

Like the smoke-free campus policies, the smoker-free policies extend beyond the employees to the patients and the communities. A 2011 Dallas Business article by Bill Hethcock quotes Joe Woods, an administrator in the Humana health system, who said "for any employer, it's an aggressive step, but it's a step that really sends a message that they're going to establish a culture of wellness, and it's something that they're taking very seriously." (September 26, 2011)

The position of the Joint Commission on smoke-free policy

Although the Joint Commission has taken no current position on the smoker-free policies in hospitals, it believes that hospitals should have the option to enact policies consistent with their goals and mission.

Impediments to smoke-free policies

A common argument against smoke-free hospital policies that extends to smoker-free policies is that refusal to hire smokers constitutes unlawful discrimination (constitutional

concerns). Under smoker-ban policies, hospital may deny employment to smokers who are otherwise qualified applicants. This classification between smokers and non-smokers may be a sufficient basis for a constitutional challenge under the Equal Protection Clause of the U.S Constitution where a state actor is involved. The threshold inquiry under a contemplated constitutional challenge is whether the policy makes constitutionally objectionable classification or discrimination. A claimant, under Equal Protection, has the duty to demonstrate a discriminatory intent. Discriminatory intent can be directly shown by the express language of the policy. For instance, it can be shown where the policy says hospitals may deny employment to smokers. Inquiry into policy history can also reveal direct evidence of discriminatory intent. Analysis of the language used by policy makers as well as committee notes and reports can reveal unjustified discriminatory intent. Where no direct evidence exists, discriminatory intent can be shown by circumstantial evidence. Under this standard, discriminatory intent can be demonstrated by evidence that the policy resulted in disproportionate denial of employment to smokers. Although evidence of disparate impact alone is not determinative of discriminatory intent, it can be sole proof where the impact is sufficiently large and the institution lacks a nondiscriminatory explanation.

The next inquiry is to determine whether the proposed classification is justified when subjected to the appropriate level of judicial review. The category in which a classification falls determines the applicable level of judicial review. Generally, classifications based on race belong to a suspect class and are subject to Strict Judicial Scrutiny while gender and legitimacy classifications fall into a quasi-suspect class and are subject to Intermediate Judicial Scrutiny. Socio-economic legislations belong to a non-suspect class and are subject to Rational Basis judicial review. A smoker-ban policy makes neither a racial nor a gender/legitimacy

classification. Rather, it falls under a socio-economic policy; thus, it is of a non-suspect class. Therefore, to be justified, it must pass the Rational Basis test.

The standard for Rational Basis review is whether the classification or discrimination is rationally related to a legitimate purpose. Rational Basis presumes socio-economic classifications to be rational unless the institutions fail to offer any rational explanation or where the purpose of the classification is illegitimate. Under Rational Basis, states and their institutions enjoy broad discretion in formulating socio-economic legislations.

In summary:

- There is no such thing as a Constitutional "right to smoke". The Constitution does not extend special protection to smokers
- Smoking is not a specially protected liberty right under the Due Process Clause of the Constitution. The fundamental right to privacy does not apply to smoking
- Smokers are not a specially protected class under the Equal Protection Clause of the Constitution.
- Since the Constitution does not extend special protection to smokers, smoker-ban legislation need only be "rationally related to a legitimate goal" in order to be within the boundaries of the Constitution.
- The Constitution does not explicitly mention smoking. People who claim a right to smoke usually rely on one of two arguments: (1) that smoking is a personal liberty specifically protected by the Due Process Clause, or (2) that the Equal Protection Clause extends special protection to smokers as a group. Neither of these claims is legally valid. Since smoking is not a specially protected

constitutional right, the Constitution does not bar the passage of institutional, local, state, or federal smoke-free and smoker-free laws and policies and other restrictions on smoking (Graff, 2008).

The institutions have broad discretion, under Rational Basis to enact socio-economic policies although the policy results in classification or discrimination. The smoker-ban policies seek to address a major socio-economic problem caused by smoking. In addition to placing a substantial burden on the economy of the hospitals, smoking creates substantial health risks bearing directly on the socio-economic health of the public.

There is also the argument that refusal to hire smokers is a civil right and personal liberty issue, not health issue. What's next – refusal to hire people who are obese? Here are the counter arguments to this claim:

- Like smoking, obesity has negative consequences; however there is no direct harm to the health of others. Several reports have shown that exposure to secondhand smoke can cause immediate harm to others, especially among individuals who are at increased risk for heart disease and stroke.
- Secondhand smoke is a public health issue. Exposure to secondhand smoke is a leading cause of cancer and heart disease in the U.S. People have the right to work in a workplace free from this health hazard
- Smoking remains a legal activity, not in ways that harm other people. No one should have to choose between their health and their job. Everyone has the right to breathe smoke-free air.
- Personal liberty has never been understood to allow one person's behavior to damage or risk damage to another (Indian Campaign for Smokefree Air).

With regards to obesity, according to John Banzhaf, a Professor of Public Interest Law, George Washington University Law School, smoking differs from obesity in several ways. First, obesity's official classification by the government as a "disease" (for tax and Medicare purposes), and as a "health status" (for health and insurance purposes), might make it legally difficult, whereas smoking classification only as a "behavior, "enjoys no such legal protection. Similarly, obese workers are also sometimes subject to protection under the American with Disabilities Act (ADA), whereas smokers enjoy no such legal protection. That's why smokers can be charged more for health insurance even in the absence of a qualified "wellness" program, whereas obese cannot – and probably why a majority of Americans favor charging smokers more for health insurance, but oppose a similar surcharge on the obese.

In addition, since about one-third of adult Americans are obese, a policy of not hiring them could severely limit the number of qualified applicants. But since only about 13% of adults smoke daily, and smokers are increasing concentrated in groups with the least education, concerns over loss of qualified workers are fewer.

Because many people believe that obesity is often caused by heredity, genes, childhood eating, and other factors over which employers have little if any control, a "no-obese" hiring policy might seem unfair. On the other hand, since most people see buying and using cigarettes as a habit or a choice, the public seems to support it. Although there is evidence that for many people smoking involves addiction, the addiction is to the drug nicotine, not to the act of smoking itself, so that those who want to quit use gum, patches, inhalers, or sprays to ingest the nicotine to which they may be addicted.

Those who care enough about not being able to find or hold a job can quit smoking, a process (although difficult) which usually occurs immediately or while undergoing a brief smoking

cessation program. In contrast, few can stop being obese in a brief period of time, and any attempt to do so quickly (e.g., because of job concerns) is likely to have serious adverse health consequences, and raise medical care cost rather than lower them.

Banzhaf notes that life insurance companies - and a growing number of health insurance companies – quote different rates for smokers, whereas different higher rates for obese policy holders are very rare if not nonexistent. This suggest that insurance companies, like many employers, see a very big difference between smoking and obesity, and that any policy aimed at smoking need not also be applied to obesity.

Although there are laws in some states purporting to prohibit polices against hiring smokers, both Action on Smoking and Health (Professor Banzhaf's group) and the American Medical Association have pointed out that they are rarely enforced and easily avoided: e.g. by banning workers smelling of tobacco smoke.

Another concern that has been raised about smoker-free policies is the potential loss of qualified nursing applicants especially in critical care and operating rooms in the midst of a nursing shortage. Such policies, they fear will only worsen the shortage. Moreover, some feel that although not directed towards existing employees at least at the time of implementation, a smoker-free policy will make existing employees anxious that soon, you will be coming after them – so they may opt to leave. The above concerns did not materialize in places that implemented smoke-free hospital policies and are less likely to materialize with smoker-free policies.

For example, Wheeler at al. (2007) conducted a study at a university hospital campus with supplemental data from an affiliated hospital campus. They evaluated the impact of a smoke-free hospital campus policy on employee and consumer behavior. Their evaluations included

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(1) measurement of employee attitudes during the year before and year after policy implementation using a cross-sectional, anonymous survey; (2) focus group discussions held with supervisors and security personnel; and (3) key informant interviews conducted with administrators. Their secondary analysis included review of employment records and exit interviews, and monitoring of hospital utilization and patient satisfaction data.

The result of the study indicated that employee attitudes toward the policy were supportive (83.3%) at both institutions and increased significantly (89.8%) at post-test at the university hospital campus. Qualitatively, administrator and supervisor attitudes were similarly favorable. There was no evidence on either campus of an increase in employee separations or a decrease in new hiring after the policy was implemented. On neither campus was there a change in bed occupancy or mean daily census. Standard measures of consumer satisfaction were also unchanged at both sites.

The researchers concluded that a campus -wide smoke-free policy had no detrimental effect on measures of employee or consumer attitudes or behaviors.

Reviewing the prevalence of smoking among nursing professionals in the United States is also a crucial factor in addressing the above concern.

A large nationwide survey (N = 9,498) conducted by the American Cancer Society in 1959 reported a 36% smoking prevalence in the nursing profession. This prevalence continued through the 1960s (Garfinkel, 1976). In the 1970s, smoking prevalence among women who were registered nurses (RNs) rose to 38.9%, a rate that was higher than among women in the U.S. general population (32%), and nearly twice as high as the smoking rate among physicians (21%; U.S. Department of Health & Human Services, 1980). Reviews of smoking prevalence in the worldwide nursing profession showed that smoking among U.S. nurses started to decline during the 1980s (20%–33%) and subsequently fell to 14%–18% during the 1990s (Adriaanse, Van Reek, Zandbelt, & Evers, 1991; Smith & Leggat, 2007). Moreover, series of National Health Interview Surveys conducted in the United States between 1974 and 1991 revealed that smoking prevalence had declined from 31.7% to 18.3% among RNs and from 37.1% to 27.2% among licensed practical nurses (LPNs; Nelson et al., 1994). Smoking prevalence among nurses is now at 7%–12% (Smith & Leggat, 2007). A Nurses' Health Study of smoking trends conducted between 1976 and 2003 reported that the percentage of current smokers dropped from 33.2% in 1976 to 13.5% in 1989, and declined further to 8.4% in 2002 and 2003 among RNs (Sarna et al., 2008).

Based on the above, it's clear that there has been a steady decline in the percentage of U.S. nurses who smoke, a trend that began in the 80s and coincides with the smoke-free work place movement that kicked off in the 1970s and has continued until now.

Moreover, nurses are the largest group of healthcare professionals on the frontline of combating tobacco use (Schultz, 2003) and are recognized by the public as health-behavior educators and role models. If nurses continue to smoke, they may lose their credibility as primary instrumental partners in smoking reduction, especially among patients for whom quitting is a crucial part of their treatment (Becker et al., 1986)

Finally, opponents of smoke-free and smoker-free polices argue that implementation of these policies reduces employee morale, affect employee retention, decrease patient volume and patient and family satisfaction. As stated above, several studies have shown that such policies did not reduce employee morale, affect employee retention, or patient satisfaction.

CHAPTER 3 METHODOLOGY

Overview

This study is structurally grounded under a three-step analytical framework. The initial purposes aim to detect whether there is a shift from smoke-free to smoker from polices in Georgia hospitals. Next, it assesses the prevalence of any detected shift. Finally, it measures the impediments, if any, to the detected shift.

This chapter proposes a conceptual overview of the study by introducing the analytical mechanisms among which are the design, setting, population and sample, instruments, procedure and data analysis. The data collection and analytical methodologies are also introduced and discussed. Additionally, Institutional Review Board (IRB) procedures in research and participants protection are introduced and addressed.

Population and Sample

According to the CDC, the state of Georgia does not have a statewide smoke-free law that provides adequate protection against exposure to secondhand smoke in public places. Employers have been held liable for exposure of their employees to secondhand smoke on the job in cases on workers' compensation, state and federal disability law, and the duty to provide a safe workplace. Given this liability risk and the mounting evidence of the dangers of secondhand smoke exposure, employers in various settings, including hospitals are enacting smoke-free as well as smoker-free work places.

There are currently about 152 community hospitals located across the state of Georgia. Several reports have indicated that the smoker-free policies have been implanted in several states, including Georgia. A convenience sample for this study was taken from the list of the community hospitals to establish whether there is a shift from smoke-free to smoker-free policies; the prevalence, if any, of the shift, and any associated impediments to the shift are.

Hospitals by ownership type, 2009	Georgia Number	Georgia Percentage	
State/Local Government	53	34.9%	
Non-profit	63	41.5%	
For-profit	36	23.7%	
Total	152	100%	

Table 2: Georgia Hospitals by ownership type, 2009

Source: 1999 – 2009 AHA Annual Survey Copyright 2011 by Health Forum LLC, an affiliate of the American Hospital Association, special date request, April 2011. Available at http://www.statehealthfact.org

Research Design

This study adopts a descriptive research based on literature review. Descriptive research is used to gather information about the present existing condition (Creswell, 1994). The purpose of descriptive research is to observe, describe and document aspects of a situation as it occurs. It involves the collection of data that will provide an account or description of individuals, groups or situations. The descriptive design was chosen because it provides the opportunity to use either qualitative or quantitative data or both, thus providing a multifaceted approach in selecting the instrument for data collection. By spanning both quantitative and qualitative methodologies, the descriptive design gives the ability to describe events or situations in greater or less depths as needed as well as the ability to organize information and present findings in meaningful ways. Moreover, this design is also quick, inexpensive and practical.

Procedures

Several approaches were used to gather information to determine if there is a shift from smoke-free to smoker-free policy, the prevalence of such shifts, and the impediments to the shifts. Initial online searches were performed to gather information from various sources about the smoking policies of hospitals that were included in the study. The websites for the respective hospitals were also used to gather and or confirm certain information.

Instruments

Several internet based tools were used to gather information about the smoking policies of the study sample which served as the main instrument for the project. These tools included the hospital websites, internet based publications and journal articles (e.g. The Atlanta Journal-Constitution) and online news paper publications (e.g. georgiahealthnews.com, The New York Times) among others.

Protection of Privacy

Prior to initiating data collection for the project, the researcher submitted the research protocol and obtained approval for exempt status from the Emory International Review Board. The approval letter is included in Appendix A.

Data Analysis

Data analysis was carried out using inferential statistics. Inferential statistics was used to describe what's going on in the data and to make inferences from the study data to more general conditions as it relates to smoking ban versus smoker-ban polices. The findings will be reported using tables and texts.

Limitations

The findings from this study need to be considered with the following methodological limitations in mind. First, although every effort was made to scrutinize and evaluate the validity and reliability of information from the secondary sources used in the study, the origins of the information may be questionable. In some cases, it was not possible to obtain the full versions of the original research studies used because only certain portions of the research were available without undue economic burden.

Second, with convenience sampling, there's the likelihood that the sample may not be representative of the study population, Georgia hospitals. Third, the interpretative nature of the study design makes it more prone to the introduction of bias into the analysis of the findings.

Delimitations

The delimitations of the study include the reliance on secondary rather than primary data collection, the use of convenience rather than random sampling, and the descriptive nature of the design.

Summary

This chapter described the methodology utilized in the study, including the population and sample, design, procedures, instruments, protection of privacy, data analysis, and limitations and delimitations.

A descriptive study design was appropriate for this study because it is flexible, practical, inexpensive and quick. Analysis of data was by inferential statistics and results were presented in text and table formats.

CHAPTER 4 RESULTS

Introduction

Several hospitals across the nation have reportedly shifted from smoke-free to smokerfree policies. Critics of such policies argue that is discriminatory, and it invades into the private lifestyles-choices of prospective employees. However, advocates of the policy see it as a way to promote healthier living, reduce insurance cost and promote worker productivity.

The study seeks to determine whether this shift exists among hospitals in Georgia, the prevalence of the shifts, and the impediments to the shift. Although several studies have been conducted on smoke-free policies in hospital and their impact, few such studies have addressed the new trend of smoker-free policies.

Information about the hiring policies concerning smoking for the hospitals included in the study were gathered using various internet sources that included the hospital websites, internet based publications and journal articles, and online news paper publications.

Description of Sample

Because the study relies solely on secondary data sources, it was necessary to include hospitals whose hiring policies on smoking and/or information about it could be obtained using available sources. The initial sample included all hospitals in the state of Georgia that have adopted 100% smoke-free policies (Table 1). Online searches were then performed to identify relevant publications on the hospitals that have instituted a smoker-free hiring policy. The sample was modified to include other hospitals based on the findings.

Results

Table 3 lists Georgia hospitals that have adopted smoker-free hiring policies and the date of adoption of the policy.

Name of Hospital	Smoker-Free Hiring Policy	Date Adopted
Phoebe Putney Health	Yes	January 2008
System in Albany,		
GA		
DeKalb Medical	Yes	November 2009
Center		
Gwinnett Medical	Yes	July 2010
Center		

Table 3 – GA Hospitals with Smoker-free hiring Policies

The above Georgia hospital systems have gone one step beyond banning smoking in their campuses, according to a February 15, 2011 report in the Georgia Health News by Andy Miller. These health systems will drop job applicants from their candidate list if a blood test for nicotine comes back positive.

DeKalb Medical Center

According to the Georgia Health News report by Any Miller, "DeKalb Medical Center went to a nicotine-free hiring policy in November 2009. Spokeswoman Tori Vogt indicated that since the anti-nicotine hiring practice began, about 2 percent of applicants who were close to getting a job offer have tested positive. Job candidates who test positive for nicotine are offered cessation assistance and are permitted to reapply for open position after 120 days" According to DeKalb Medical, "As a major provider of health care in the community, we are committed to leading by example and creating a healthy environment for our patients, visitors, employees and volunteers who are on our campus." (February 2011)

Gwinnett Medical Center

Gwinnett Medical Center adopted a nicotine hiring policy in July 1st of 2010. According to the same article by Miller, A spokeswoman, Andrea Wehrmann, told the Gwinnett Daily Post then: "We are a hospital. We are not a tire company, we're not a neighborhood bar or restaurant. We're a medical institution, and most Americans are aware of the health issues related to smoking." Roughly a year after the policy was implemented, according to the article; Gwinnett has had 25 positive tests for nicotine among job applicants. Gwinnett Medical spokesman Aaron Mckevitt said "the organization has not faced any legal action over the policy." Miller also reported that the hiring policy did not affect Gwinnett Medical employees who smoked at the time of the change. They were offered smoking-cessation programs. "Those who quit smoking — and stayed smoke-free for at least 6 months — saved on their health insurance premiums", Gwinnett Medical said.

A July 7, 2010 article in the Atlanta Journal-Constitution (AJC) "Where there's smoke, there's fired: Gwinnett hospital snuffs out tobacco" by Craig Schneider and David Wickert also reported on Gwinnett hospital's nicotine hiring policy. This article reveals that "when Gwinnett Medical Center said it would no longer hire tobacco users, it joined a short list of Georgia hospitals and other employers going that far in strengthening their smoking polices". According to the hospitals senior vice president, Nadeau, "the new policy affects work applicants who smoke and chew tobacco products. The employment application will ask whether they use tobacco products and applicants will be screened during a drug test".

The changes, according to the article drew praise from those who say hospitals should practice what they preach about good health. Nadeau indicated that the changes demonstrate the hospitals commitment to good health.

Phoebe Putney Health System in Albany

The website for Phoebe Putney Memorial Hospital states: "Effective January 1, 2008, Phoebe does not hire individuals, including previous employees, who use tobacco or nicotine in any form." According to the AJC article, a spokeswoman for Phoebe Memorial Hospital, Jackie Ryan said "We occasionally have positives, but fewer as time go on, "Applicants know upfront that we test for nicotine." (Schneider and Wicket, AJC, 2010).

Position of Georgia Hospital Association (GHA) on Smoker-free hiring Policy

In the February 15 article, Miller reported that GHA has not taken a formal position on this national trend towards a tobacco-free hiring policy by hospitals; however, they do support the idea that hospitals should lead by example when it comes to protecting and improving community health. Kevin Bloye, a GHA vice president said "Taking a strong stand against smoking – which is proven to have devastating impact on community health – is a natural extension of that role" (Miller, 2011).

CHAPTER 5 DISCUSSIONS

Study Overview

This study was conducted to determine whether a shift from smoke-free to smoker-free policies exists among hospitals in Georgia, the prevalence of the shifts, and the impediments to the shift. A descriptive research based on literature review was employed to gather information about the health consequences associated with smoking, history of smoking ban and its impact in U.S. hospitals, examines the current status and trends of bans in U.S hospitals with emphasis on hospitals in the state of Georgia, and examines impediments to smoking and smoker ban policies.

Summary of Findings

Smoking restrictions in hospitals have been in place since 1992 when the Joint Commission on the Accreditation of Health Care Organizations (JCAHO) required hospitals nationwide to ban smoking indoors as a quality indicator. An unintended consequence of the indoor smoking ban was an increased amount of outdoor tobacco exposure on entry to hospital campuses. As a result, there was an unpleasant public image of hospitals full of patients with tobacco-related diseases surrounded by smokers – both consumers and employees alike. Also, there is the unintended image that the health system condones an open health risk like smoking.

In order to increase their credibility as advocates for healthy lifestyle, many hospitals including some in Georgia have restricted smoking beyond the JCAHO requirement. Moreover, as stewards of public health, hospitals feel the need to lead on issues respecting and promoting healthy lifestyle. A firm position against a proven and dangerous health risk like smoking

therefore conforms to hospitals' ethical and moral responsibility to improve not only the health of the patients and employees, but also the health of the community as a whole.

While some hospitals have implemented partial smoking bans where smoking is only allowed in designated smoking areas, others have adopted a comprehensive smoking ban that prohibits the use of all tobacco products in the hospital premises. Yet, a growing number of U.S hospitals are choosing to adopted smoker-free policies whereby hospitals refuse employment to smokers. In the state of Georgia, three major hospital systems have adopted this policy between 2008 and 2011 (table 3). These hospitals believe that a non-smoking workforce sends a clear and strong message to the public about their commitment to a culture of wellness. Many others are contemplating such initiatives.

Some of the reasons and benefits of smoker-free policies in hospitals are aligning the workforce with institutional philosophy, reduction in both patient and employee smoking levels, reduced exposure to the smoke-related health risks; improvement in the health of patients, employees, and visitors; decreased costs occasioned by tobacco-related illness; increase in hospitals' credibility as advocates for healthy lifestyles and exponential improvement in general well-being.

The implementation of smoke-free policies for all patients, visitors and employees on a hospital campus is a zealous goal that may be faced with many impediments, especially those surrounding constitutional rights, discrimination or privacy infringement. However, as the negative consequences of secondhand smoke have become more apparent, many hospitals see the elimination of tobacco through these policies as a goal that is worthwhile.

Practical Implications

Several studies have confirmed that restricting smoking in work places does alter employees' smoking prevalence and consumption. In addition, the National Cancer Institute notes that smoke-free policies may reduce cigarette consumption, both by promoting cessation among current smokers and by reducing the social acceptability of smoking. Like smoke-free policies, smoker-free hospital policies have the potential to decrease cigarette consumption among employees, increase attempts to quit and overall smoking prevalence, especially when combined with treatment options. In addition, these policies will lower exposure to second-hand smoke and its adverse consequences for non-smokers.

Given what we know about the dangers of secondhand smoke exposure, hospitals have the obligation to reduce the risk of secondhand smoke exposure for their patients, visitors and their workers. Eliminating the use of tobacco on hospital campuses through comprehensive smoking ban policies that includes smoker-free hiring policies is the most logical and proactive way to accomplish this goal.

Recommendations for future study

An in depth qualitative study is needed to explore smoker-free hospital policies and their overall consequences (both positive and negative) including their short term and long term impacts on patients and their families, employee quit rate, recruitment and retention, and overall health outcomes. The unintended consequences of these policies can also be determined from the study. Further research could also evaluate smoke-free versus smoker-free policies in terms of overall impact.

For example, a cross-sectional study can be carried out to evaluate the impact of smokerfree policies in terms of employee recruitment and retention in hospitals with compared to

surrounding hospitals without such policies. This will help shed more light on the concern for potential loss of qualified applicants and possibly an exodus of current employees for fear of being sought after for their smoking habits.

A population-based analysis of specific health outcome cases like Acute Myocardial Infarction (AMI) in hospitals with smoker-free policies and surrounding communities is another potential way of evaluating the impact of this policy. Such study can examine AMI cases before and after implementation of the smoker-free policies in surrounding hospitals and communities

The implementation of effective laws that prohibit smoking in work places and other public places has been shown to be effective in reducing both the incidence and prevalence of smoking and the health consequences associated with it. Several studies have also indicated that the more restrictive the smoking policy, the higher the rate of cessation by employees.

It is important for employers to understand that the key to success with these policies is getting the employees to fully understand the main rationale for such policies – which is to reduce disease, disabilities and subsequent death associated with smoking. Employers can do this by providing ongoing education, implementation of non-punitive programs to help employees go through the full phases of change, and providing appropriate and effective smoking cessation treatments.

Conclusions

Notwithstanding reported reduction in the number of smokers over the years, smoking remains the leading cause of premature death in the United States (Mokdad, Marks, Stroup, & Gerberding, 2004; U.S. Department of Health & Human Services, 2006). Every year, approximately 10,300 Georgians die from tobacco-related illness (Georgia Vital Statistics, 2003-2007), and nearly 18% of adults in Georgia smoke (GA BRFSS 2010). Unfortunately, Georgia's

policies on reducing smoking lag behind most states. Subsequently, several employers in the state including hospitals are taking ownership of protecting their workers by implementing several policies to ban smoking. These policies have included a comprehensive smoking ban at work sites and now the emerging smoker-free policies.

The adverse health impact associated with smoking affects not only the smoker, but also non-smokers who are often involuntarily exposed to secondhand smoke in workplaces, including hospitals. Also, smoking is associated with increased healthcare costs, greater absenteeism, decreased job performance, occupational injuries and accidents; it is a major environmental pollutant.

The smoker-free policies represent an emerging shift in hospital tobacco control efforts to reduce disease, disability and death related to smoking. A full realization of this fact is critical in getting hospital employers, administrators, employees, patients and their families to buy into [recognize and accept the usefulness of] this ambitious but worthwhile goal.



Institutional Review Board

April 19, 2012

Chikanele Onyegam Graduate Student Rollins School of Public Health Emory University Atlanta, GA, 30322

RE: Determination: No IRB Review Required Title: Emerging Shift from Smoke-free to Smoker-free policies in Georgia Hospitals

Dear Dr. Onyegam:

Thank you for requesting a determination from our office about the above-referenced project. Based on our review of the materials you provided, we have determined that it does not require IRB review because it does not meet the definition of research with "human subjects" or the definition of "clinical investigation" as set forth in Emory policies and procedures and federal rules, if applicable. Specifically, in this project, you will conduct a review and critical analysis of the literature on this topic. You will only review publicly-available published data.

This determination could be affected by substantive changes in the study design. If the project changes in any substantive way, please contact our office for clarification.

Thank you for consulting the IRB.

Sincerely, Koussell

Rebecca Rousselle, CIP Assistant Director

> Emory University 1599 Clifton Road, 5th Floor - Atlanta, Georgia 30322 Tel: 404.712.0720 - Fax: 404.727.1358 - Email: irb@emory.edu - Web: http://www.irb.emory.edu An equal opportunity, affirmative action university

REFERENCES

- Abelson, R. The Smokers' Surcharge. The NY Times, November 16, 2011. [Accessed March 7, 2012] from: <u>http://www.nytimes.com/2011/11/17/health/policy/smokers-penalized-with-health-insurance-premiums.html?pagewanted=all</u>
- Adriaanse, H., Van Reek, J., Zandbelt, L., & Evers, G. (1991). Nurses' smoking worldwide. A review of 73 surveys on nurses' tobacco consumption in 21 countries in the period 1959–1988. *International Journal of Nursing Studies*, 28(4), 361–375.
- AHA Annual Survey. 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, and 2009
 Copyright2011 by Health Forum LLC, an affiliate of the American Hospital Association, special data request, April 2011. Available at http://www.ahaonlinestore.com
- Alltucker, K. Humana won't hire smokers in Arizona. July 1, 2011. [Accessed March 4, 2012] from: http://www.usatoday.com/money/industries/health/2011-06-30-smokers-jobshumana_n.htm
- American Hospital Association (1993) 1992 Annual survey of hospitals data base. (American Hospital Association, Chicago, Illinois).
- American Nonsmokers' Rights Foundation. *States, commonwealths, and municipalities with* 100% smoke-free laws in workplaces, restaurants, or bars. Berkeley, CA: American Nonsmokers' Rights Foundation; 2008. [Accessed Feb 11, 2012]. <u>http://www.no-</u> smoke.org/pdf/100ordlist.pdf.
- Arcavi, L., & Benowitz, N. L. (2004). Cigarette smoking and infection. Archives of Internal Medicine, 164(20), 2206–2216.
- Banzhaf III, J.F. More Companies Refuse to Hire Smokers, Are Obese Next? December 2010

[Accessed Feb 2012] from:

http://www.cigarettesreviews.com/more-companies-refuse-to-hire-smokers-are-obesenext

- Becker, D.M; Conner, H.F; Waranch, H.R; Stillman, F; Pennington, L; Less, P.S; and Oski, F. The Impact of a Total Ban on Smoking in The Johns Hopkins Children's Center. JAMA 1989; 262(6): 799-802
- Bartels, P. Health Insurance for Smokers at Macy's will Cost More. July 2, 2011 [Accessed Feb 11, 2011] from:

http://business.gather.com/viewArticle.action?articleId=281474979543472

- Bensenor, I. M., Cook, N. R., Lee, I. M., Chown, M. J., Hennekens, C. H., Buring, J. E., et al. (2001). Active and passive smoking and risk of colds in women. *Annals of Epidemiology*, *11*(4), 225–231.
- Borland, R., Chapman, S., Owen, N., and Hill, D. Effects of Workplace Smoking Bans on Cigarette Consumption. Am J Public health. 1990 February; 80(2): 178-180
- Brownson RC, Hopkins DP, Wakefield MA. Effects of smoking restrictions in the workplace. Annual Rev. Public Health. 2002
- Campaign for Tobacco-Free Kids (2003). Comprehensive Statewide Tobacco Prevention Programs Effectively Reduce Tobacco Use. Washington, DC: Campaign for Tobacco-Free Kids.
- Centers for Disease Control and Prevention (1999). Best Practices for Comprehensive Tobacco Control Programs. Atlanta, GA: CDC.
- Centers for Disease Control and Prevention. Smoking –Attributable Mortality, Years of Potential Life Lost, and Productivity Loses – Unites States, 2000-2004. Morbidity and Mortality Weekly Report 2008; 57 (45):1226-8 [Accessed Jan 15, 2012].

Centers for Disease Control (CDC). "Annual Smoking Attributable Mortality,

Years of Potential Life Lost, and Economic Costs-United States, 1995-1999."

- Centers for Disease Control and Prevention. Sustaining State Programs for Tobacco Control: Data Highlights 2006. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Diseases Prevention and Health Promotion, Office of Smoking and Health, 2006 [accessed 2012 Jan 15].
- Centers for Disease Control and Prevention. Declines in lung cancer rates California, 1988-1997. MMWR. 2000
- Centers for Disease Control and Prevention. Smoking and Tobacco use. Tobacco Control State Highlights, 2010. [Accessed Jan 15, 2012] from:

http://www.cdc.gov/tobacco/data_statistics/state_data/state_highlights/2010/index.htm

- Centers for Disease Control and Prevention. State Highlights, Georgia. [Accessed Feb 2, 2012] From:<u>http://www.cdc.gov/tobacco/data_statistics/state_data/state_highlights/2010/pdfs/st_ates/georgia.pdf</u>
- Chaloupka F. Clean indoor air laws, addiction and cigarette smoking. Applied Economics 1992; 24:193-205.
- Chapman S. The smoker-free workplace: the case against. *Tob Control*. 2005;14:144. [PMC free article] [PubMed] [Accessed March 4, 2012]
- Fee W and Brown TM. Hospital smoking bans and their impact. AM J Pub Health 2004; 94(2):185.
- Garfinkel, L. (1976). Cigarette smoking among physicians and other health professionals, 1959– 1972. *CA: A Cancer Journal for Clinicians, 26*(6), 373–375.
- Georgia Vital Statistics, 2003-2007; CDC SAMMEC web application

(http://apps.nccd.cdc.gov/sammec/).

Georgia Behavioral Risk Factor Surveillance System (BRFSS) 2008 Data. [Accessed Jan 16, 2012] from:

http://health.state.ga.us/pdfs/epi/cdiee/2008%20Tobacco%20data%20summary.pdf

Georgia Behavioral Risk Factor Surveillance System (BRFSS) 2010 Data. [Accessed Jan 16,

2012] from:

http://health.state.ga.us/pdfs/epi/cdiee/2010%20GA%20Adult%20Tobacco%20Data%20 Summary_Final.pdf

- Gerlach, K. K.; Shopland, D. R.; Hartman, A. M.; Gibson, J. T.; and Pechacek, T. F. (1997).
 "Workplace Smoking Policies in the United States: Results from a National Survey of More Than 100,000 Workers." *Tobacco Control* 6:19906.
- Glanz K & Rimmer B. K. 1995. Theory at a Glance A guide for Health Promotion Practice.
 National Cancer Institute, National Institutes of Health, U.S. Department of Health and
 Human Services. NIH Pub. No. 97-3896. Washington, DC: NIH. [Accessed Feb 15, 2012] from: http://www.cancer.gov/cancertopics/cancerlibrary/theory.pdf
- Glasgow, R .E; Cummings, K. M; Hyland, A. Relationship of worksites smoking policy to changes in employee tobacco use: findings from COMMIT. Tob Control 1997; 6(suppl 2):S44-S48.
- Gray, N. J. The case for smoker-free workplaces. *Tob Control*. 2005;14:143–144. [PMC free article] [Accessed March 12, 2012] from

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1748008/pdf/v014p00143.pdf

Gadomski, A.M; Stayton, M; Krupa, N; and Jenkins, P. Implementing a Smoke-free MeicalCampus: impact on inpatient and employee outcomes. J Hosp Med. 2010 Jan; 5(1): 51-4[Abstract] [PubMed] [Accessed March 2, 2012] from:

http://www.ncbi.nlm.nih.gov/pubmed/20063401

- Graff, S.K. Tobacco Control Legal Consortium, There is No Constitutional Right to Smoke (2005)
- Green, L. Workplace smoking bans meant to cut cost sparks privacy concerns. Palm Beach Post. December 16, 2010. [Accessed March 7, 2012] from: <u>http://www.palmbeachpost.com/money/workplace-smoking-bans-meant-to-cut-insurance-costs-1147694.html?printArticle=y</u>
- Green, L.W., Richard, L. & Potvin, L. (1996). Ecological Foundation of health promotion. American Journal of Health Promotion, 10(4), P. 270-81
- Gruys, M.L. Tobacco in the workplace: Personal Rights Versus Organizational Policies and Legal Requirements. Write State University. [Accessed April 2012] from http://college.cengage.com/business/modules/tobacco_module_secure.pdf
- Hanson, D, Hanson, J, Vardon, P, McFarlane, K, Lloyd, J, Muller, R & Durrheim, D. 2005. The injury iceberg: an ecological approach to planning sustainable community safety interventions. Health Promotion Journal of Australia Vol 16 No 1 April 2005
- Hethcock, B. Expect more companies to stop hiring smokers, expert says. Dallas Business Journal, September 26, 2011. [Accessed March 2, 2012) from: <u>http://www.bizjournals.com/dallas/blog/2011/09/expect-more-companies-to-stop-hiring.html</u>
- Hughes, J. R. (2008). Smoking and suicide: A brief overview. *Drug and Alcohol Dependence*, 98(3), 169–178.
- Indiana Campaign for Smoke-free Air. Common Arguments against statewide smoke-free air Legislation – and how to respond to them. [Accessed Feb 2012] from:

http://www.inaap.org/uploads/SmokeFreeIN-Responses.pdf

- Lango Dr, Brownson, RC, Johnson JC, et al. Hospital smoking bans and employee smoking behavior: Results of a national survey. JAMA 1996; 275:1252-7
- Lango DR, Feldman MA, Kruse RL, Brownson RC, Petroski GF, Hewett JE. Implementing smoking bans in American hospitals: results of a national survey. Tob Control 1998; 7:47-55
- Lundborg, P. (2007). Does smoking increase sick leave? Evidence using register data on Swedish workers. *Tobacco Control*, *16*(2), 114–118.
- McClure R, Stevenson M and McEvoy. 2004. The Scientific Basis of Injury Prevention and Control. IP Communications Melbourne
- Miller, A. "We are not a tire company": Hospitals refuse to hire smokers. Feb 15, 2011 [Accessed Feb 15, 2012] from: <u>http://www.georgiahealthnews.com/2011/02/hospitals-refuse-hire-smokers/</u>
- Mokdad, A. H., Marks, J.S., Stroup, D.F., & Gerberding, J. L. Actual Causes of Death in the United States, 2000. JAMA. 2004; 291(10):1238-1245. Doi: 10.1001/jama.291.10.1238
- More Companies Refuse to Hire Smokers, Are Obese Next? [Accessed Feb 23, 2012] from: <u>http://www.cigarettesreviews.com/more-companies-refuse-to-hire-smokers-are-obese-next</u>
- Mudarri, D.H. (1994) The cost and benefits of smoking restrictions: an assessment of the Smoke-free Environment Act of 1993 (H.R. 3434). (US Environmental Protection Agency;Office of Air and Radiation, Indoor Air Division, Washington DC).

Nakata, A., Ikeda, T., Takahashi, M., Haratani, T., Hojou, M., Fujioka, Y., et al. (2006). Non-

fatal occupational injury among active and passive smokers in small- and medium-scale manufacturing enterprises in Japan. *Social Science & Medicine*, *63*(9), 2452–2463.

- Nakata, A., Takahashi, M., Ikeda, T., Hojou, M., Nigam, J. A., & Swanson, N. G. (2008). Active and passive smoking and depression among Japanese workers. *Preventive Medicine*, 46(5), 451–456.
- National Cancer Institute. Strategies to control tobacco use in the United States: a blueprint for public health action in the 1990's (Smoking and Tobacco Control Monograph #1).
 Bethesda, MD: U.S. Department of Health and Human Services, National Institute of Health, National Cancer Institute; 1991. NIH Publication No. 92-3316
- Nelson, D. E., Giovino, G. A., Emont, S. L., Brackbill, R., Cameron, L. L., Peddicord, J., et al. (1994). Trends in cigarette smoking among US physicians and nurses. *Journal of the American Medical Association*, 271(16), 1273–1275.
- O'Connor, S.C., Cohen, J.D., & Osterlund, K. (2001) Comprehensive Tobacco Control Program: A review and synthesis of evaluation strategies in the United States. Toronto, ON: Ontario Research Unit, Special Report
- Ong, M. K. & Glantz, S. A. (2004). Cardiovascular health and economic effects of smoke-free workplaces. The American Journal of Medicine, 117(1):32-8. Retrieved Feb 12, 2012 from:

http://iis-db.stanford.edu/pubs/20638/Ong-CV-Disease.pdf

- Ontario Tobacco Research Unit (2003). The Fiscal Impact of Tobacco Control in Ontario Toronto, ON: Special Report Series
- Phoebe Putney Health System. [Accessed March 1, 2012] from:

http://phoebeputneycareers.silkroad.com/

- Samantha K. Graff, Tobacco Control Legal Consortium, *There is No Constitutional Right to Smoke: 2008* (2d edition, 2008).
- Sargent, R. P., Shepard, R. M., and Glantz, S. A. (2004). Reduced incidence of admissions for myocardial infarction associated with public smoking ban: before and after study. *British Medical Journal*, 328(7446), 977–980.
- Sarna, L., Bialous, S. A., Jun, H. J., Wewers, M. E., Cooley, M. E., & Feskanich, D. (2008). Smoking trends in the Nurses' Health Study (1976–2003). *Nursing Research*, 57(6), 374– 382.
- Schultz, A. S. (2003). Nursing and tobacco reduction: A review of the literature. *International Journal of Nursing Studies*, 40(6), 571–586.
- Schneider, C., & Wickert, D. Where there's smoke, there's fired: Gwinnett hospital snuffs out tobacco. The Atlanta Journal-Constitution. July 7, 2010. [Accessed Feb 15, 2012] from: http://www.ajc.com/news/where-theres-smoke-theres-566156.html
- Siegel, M., Albers, A. B., Cheng, D. M., Biener, L., and Rigotti, N. A. (2005). Effect of local restaurant smoking regulations on progression to established smoking among youths. *Tobacco Control*, 14(5), 300–306.
- Smedley, B.D. & Syme, S.L.(2000). Promoting health: Intervention Strategies from Social and Behavioral Research. Washington, DC: National Academy Press
- Smith, D. R., & Leggat, P. A. (2007). An international review of tobacco smoking research in the nursing profession, 1976–2006. *Journal of Research in Nursing*, 12(2), 165–181.
- Smith, M. (2010) More US Companies Refuse to Hire Smokers. [Accessed March 2012] from: http://www.voanews.com/english/news/usa/More-US-Companies-Refuse-to-Hire-Smokers-84695612.html
- Soares, S. R., & Melo, M. A. (2008). Cigarette smoking and reproductive functions. *Current*

Opinion in Obstetrics & Gynecology, 20(3), 281–291.

- Stave, G.M, & Jackson, G.W. Effect of a total work-site smoking ban on employee smoking and attitudes. Department of Community and Family Medicine, Duke University Medical Center, Durham, NC. J Occup Med. 1991 Aug;33(8):884-90.
- Steinfeld, J.L. Women and children last? Attitudes toward cigarette smoking and nonsmokers' rights, 1971. *NY State J Med.* 1983; 83:1257–1258.
- Stillman, F.A, Hantula, D.S, Swank, R. (1994) Creating a smoke-free hospital: attitudes and smoking behavior of nurses and physicians. Am J Health Prom 9: 108-114[Abstract]
 [Medline] [Accessed March 10, 2012] from

http://www.ncbi.nlm.nih.gov/pubmed/10150711?dopt=abstract

Sulzberger, A.G. Hospitals shift Smoking Bans to Smoker Ban. The New York Times. February 11, 2011. [Accessed Feb 10, 2012] from:

 $http://www.nytimes.com/2011/02/11/us/11smoking.html?_r=1\&pagewanted=all$

"The Cost of Smoking to Business," American Cancer Society, April 13, 2000. [Accessed Feb 7, 2012] from:

http://www.cancer.org/docroot/NWS/content/NWS_2_1x_The_Cost_of_Smoking_to_Bu siness.asp.

The Georgia Department of Community Health. Adult Tobacco Use. 2010 Data Summary [Accessed Feb 14, 2012] from:

http://health.state.ga.us/pdfs/epi/cdiee/2010%20GA%20Adult%20Tobacco%20Data%20 Summary_Final.pdf

- U.S. Department of Health & Human Services. (1980). *The health consequences of smoking for women: A report of the surgeon general.* Rockville, MD, Washington, DC: Author
- U.S. Department of Health and Human Services. The Health Consequences of Involuntary

Exposure to Tobacco Smoke: A Report of the Surgeon General. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006. Accessed at www.surgeongeneral/library/secondhandsmoke/ on Jan 12, 2012

- U.S. Department of Health and Human Services. How Tobacco Smoke Causes Disease: The Biology and Behavioral Basis for Smoking-Attributable Disease: A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2010. Accessed at www.surgeongeneral/library/secondhandsmoke/ on Jan 12, 2012
- U.S. Department of Health and Human Services. Preventing Tobacco Use Among Young
 People: A Report of the Surge& General. Atlanta, Georgia: U.S. Department of Health
 and Human Services, Public Health Service, Centers for Disease Control and Prevention,
 National Center

for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1994.

US Environmental Protection Agency. *Respiratory Health Effects of Passive Smoking (Also Known as Exposure to Secondhand Smoke or Environmental Tobacco Smoke ETS).* US Environmental Protection Agency, Office of Research and Development, Office of Health and Environmental Assessment, Washington, DC; 1992. Accessed at http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=2835 on Jan 15, 2012.

manual for hospitals. (Joint Commission on Accreditation of Healthcare Organizations, Oakbrook Terrace, Illinois

- U.S. Public Health Service. Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service. Washington, DC: U.S. Government Printing Office, 1964. 33.
- US Public Health Service Clinical Practice Guideline, Treating Tobacco Use and Dependence, 2008 Update. http://www.surgeongeneral.gov/tobacco/treating_tobacco_use08.pdf
- Van Dongen, C. J. (1999). Smoking and persistent mental illness: An exploratory study. *Journal* of Psychosocial Nursing and Mental Health Services, 37(11), 26–34.
- Wheeler, J. G., Pulley L., Felix, H. C., Bursac, Z., Siddiqui, N. J., Stewart, M. K., Mays, G.P., and Gauss, C. H. (2007) Impact of a smoke-free hospital campus policy on employee and consumer behavior. Department of Pediatrics, College of Medicine, University of Arkansas for Medical Sciences and Arkansas Children's Hospital, 800 Marshall St., Little Rock, AR 72202, USA. <u>Public Health Rep.</u> 2007 Nov-Dec;122(6):744-52.
- Williams, S.C; Hafner, J.M; Morton, D.J; Holm, A.L; Milberger, S.M; Koss, R.G; Loeb, J.M.
 The adoption of smoke-free hospital campuses in the United States. Tob Control 2009;
 18:451-458 [Abstract][Accessed March 2012] from:
 http://tobaccocontrol.bmj.com/content/18/6/451.abstract