

ABSTRACT

THE LIVED EXPERIENCE OF SMOKERS WORKING IN SMOKING REGULATED ENVIRONMENTS

By Sherry L. Konen

Smoking and secondhand smoke are harmful to health. As information about the negative affects has increased, so have regulations. Regulations are growing with the workplace becoming a primary target. The workplace is a particularly sensitive environment, potentially affecting the smoker's job security if the regulations are not adhered to. Sentinel studies, such as COMMIT and ASSIST, focused on the effect of policies and regulations on smoking reduction. They provided beneficial evidence in the light to moderate smoker, but failed to show benefits in the heavier smoker. The purpose of this study was to examine the experience of heavy smokers working in smoking regulated environments in order to understand their challenges and discover their adaptive mechanisms. This information can then be applied to the development of effective interventions.

The theoretical framework for the study was Roy's Adaptation Model. It was applied with the nursing process to analyze behavior and evaluate the effectiveness of smoking regulations on the person's adaptability. A qualitative descriptive phenomenological method was utilized to gain information about the smokers' experiences.

Regulated smokers were chosen through a nonrandomized, purposive sample method involving three types of worksites including: factory, medical facility, and restaurant. Ten individuals, 18 years of age or older, who smoked, on average, a minimum of 10 cigarettes a day, and worked at least 8 hours per day in a smoking regulated environment were included in the study. An open-ended survey was conducted with voluntary participants.

Measures were taken to ensure participant confidentiality and protection. The data was analyzed using Giorgi's method. Presenting themes served as the basis for future development of Nurse Practitioner interventions.

THE LIVED EXPERIENCE OF SMOKERS WORKING
IN SMOKING REGULATED ENVIRONMENTS

by

Sherry L. Konen

A Clinical Paper Submitted
In Partial Fulfillment of the Requirements
For the Degree of

Master of Science in Nursing

Family Nurse Practitioner

at

University of Wisconsin Oshkosh
Oshkosh, Wisconsin 54901-8621

May 2010

APPROVAL

Vicki A. Moss Advisor

5/4/10 Date Approved

PROVOST
AND VICE CHANCELLOR

La R. L.

5/4/2010
Date Approved

FORMAT APPROVAL

Glenn Splittger

4/16/2010
Date Approved

ACKNOWLEDGEMENTS

I would like to extend a special thank you to my husband, Tim, for his support throughout my project and to our sons, Jack and Thomas, for being my inspiration. I am blessed to have you all in my life.

An additional thank you to my Mom. Your vice was my motivation. May your grandsons listen to your words that resonated in me since my youth, "Don't ever start smoking, because you may not be able to quit." My words to you, "Don't ever give up, it is never too late."

Thirdly, a warm thank you to Tiffany, Kasey, Beth, Shane, and Mark. We shared this journey, and you will always be dear to me.

TABLE OF CONTENTS

	Page
LIST OF FIGURES	vi
CHAPTER I – INTRODUCTION	1
Statement of Problem	3
Significance of the Problem to Nursing	4
Purpose of the Study	5
Research Question	5
Definitions of Terms	5
Conceptual Definitions	5
Operational Definitions	6
Assumptions	7
Summary	7
CHAPTER II – THEORETICAL FRAMEWORK AND LITERATURE REVIEW	8
Theoretical Framework With Case Study Application	8
Assessment of Behavior	8
Assessment of Stimuli	8
Nursing Diagnosis	9
Goal Setting	9
Intervention	9
Evaluation	10
Adaptive Systems	10
Case Study	11
Literature Review	13
Policy Effects	14
Community Approach	14
Cigarette Consumption Comparison.....	16
Effect on the Smoking Employee	16
Summary	17
CHAPTER III – METHODOLOGY	19
Design	19
Population, Sample, and Setting	20
Inclusion Criteria	20
Exclusion Criteria	20
Data Collection Instruments	20
Data Collection Procedures	21
Data Analysis Procedures	22
Study Limitations	23
Summary	24

TABLE OF CONTENTS (Continued)

	Page
CHAPTER IV – FINDINGS AND DISCUSSION	25
Sample Description and Demographic Data	25
Results	27
Theme I: Withdrawal Symptoms	27
Subtheme I: Types of Symptoms	27
Subtheme II: Management of Symptoms	28
Theme II: Job Performance	29
Subtheme I: Discipline	29
Subtheme II: Productivity	31
Subtheme III: Coworkers	32
Theme III: Employer Support	32
Theme IV: Other Helpful Measures	34
Theme V: Regulation Affect	35
Subtheme I: Quit Attempts	35
Subtheme II: Smoking Consumption	36
Theme VI: Smokers View of Regulation	37
Theme VII: Perceived Negatively	39
Summary	40
CHAPTER V – SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	41
Summary	41
Application to Theoretical Framework and Literature	43
Step 1: Assessment of Behavior	43
Step 2: Assessment of Stimuli	43
Step 3: Nursing Diagnosis	44
Step 4: Goal Setting	44
Step 5: Intervention	45
Step 6: Evaluation	45
Implications for Nursing	45
Nursing Practice	45
Education	46
Administration	46
Recommendations for Further Research	47
Summary	48

TABLE OF CONTENTS (Continued)

	Page
APPENDICES	
Appendix A. Smoking Study Flyer	49
Appendix B. Informed Consent	51
Appendix C. Demographic Questionnaire	53
REFERENCES	55

LIST OF FIGURES

	Page
Figure 1. The Nursing Process as it Relates to Roy's Description of the Person	11

CHAPTER I

INTRODUCTION

The purpose of this study was to examine the experience of smokers working in smoking regulated environments in order to develop effective interventions based on discovered behavior. Smoking and second hand smoke have been determined to be harmful to human health. As information about the negative affects has gained support and popularity, regulations have increased restricting the smoking behavior in various environments.

Tobacco use has been identified as one of the United States' leading killers. It negatively affects nearly every organ of the human body, causing disease, health deterioration, and death. The Centers for Disease Control and Prevention (CDC) has estimated one out of every five deaths in America is due to smoking (CDC, n.d., para 1). Each year, approximately 443,000 people die prematurely from smoking or exposure to secondhand smoke, with another eight million developing serious illness (CDC, n.d., para. 1). More deaths are caused by tobacco use than by all deaths from human immunodeficiency virus (HIV), illegal drug use, alcohol use, motor vehicle injuries, suicides, and murder combined (CDC, n.d., para. 1). It is the single most preventable cause of disease (CDC, n.d., para 1).

Harmful effects do not end with the smoker. Secondhand smoke causes premature death and disease in nonsmoking adults and children. Scientific research has linked secondhand smoke to causing lung cancer, heart disease, sudden infant death syndrome, premature deliveries, stunted fetal growth, nasal cancer, and breast cancer (Givel, 2007). The United States Protection Agency (EPA), the National Toxicology Program (NTP), the United States Surgeon General, and the International Agency for Research on Cancer (ARC) have classified secondhand smoke as a known

carcinogen (National Cancer Institute [NCI], n.d., para. 4). The exposure increases the risk of heart disease and lung cancer by 30%, with more than 46,000 nonsmokers dying of heart disease and an additional 3,000 dying of lung cancer each year (CDC, n.d., para. 2).

The National Cancer Institute (NCI) has recognized complete elimination of smoking in indoor spaces as the only way to fully protect nonsmokers from harmful exposure (NCI, n.d., para. 6). According to the Surgeon General, there is no safe level of secondhand smoke exposure (Zellers, Thomas, & Ashe, 2007). Healthy People 2010 objectives call for reducing adult cigarette smoking prevalence to 12%, reducing the proportion of nonsmokers exposed to secondhand smoke to 45%, and increasing the proportion of workplaces and workers that are covered by smoke-free workplace policies to 100% ("State Specific Prevalence," 2006).

As information about the negative health consequences of secondhand smoke exposure has increased, governments have enacted legislation restricting smoking at work and in public places. Smoke-free laws have been formed with the intent to protect people from secondhand smoke and help smokers decrease their total cigarette consumption. States have enacted laws to eliminate smoking in bars, restaurants, government buildings, and private worksites. As of December 31, 2008, 31 states have 100% smoke-free indoor air laws for government worksites, 26 prohibit smoking in all areas of private worksites, 25 prohibit smoking in restaurants, and 17 prohibit smoking in bars. Sixteen states had 100% smoke-free indoor air laws for bars, restaurants, government buildings, and private worksites combined (CDC, n.d., para. 1-7). This is a substantial increase from 2004, when smoking restrictions included five states in private

work sectors, seven states in restaurants, and four states in restricted bars (“State Smoking Restrictions,” 2008).

Regulations, policies, and laws are growing and infiltrating public and private sectors in our communities, with the work place becoming a primary target. Although comprehensive research has provided strong evidence regarding the negative effects of tobacco use, it has not shown a significant impact of smoke-free environments on the smoker. One assumption made with these studies is that if an intervention prevents opportunities to smoke and fosters a negative smoking image, smoking consumption and exposure will decrease. One sentinel study, the Community Intervention Trial for Smoking Cessation (COMMIT), hypothesized that a 4-year community level intervention would increase smoking quit rates (COMMIT Research Group, 1995). Regulating smoking in the work environment was one intervention in the study. The surprising result of the study showed interventions had no effect on the heavy smoker.

Understanding the experience of smokers working in smoking regulated environments can provide unique information into smokers being forced to abstain from their nicotine addictive behavior. This information can then be applied towards interventions that help the smoker adapt to their regulated work environment and assist them towards decreasing their smoking consumption, if not quit entirely.

Statement of Problem

Research has supported the implementation of smoking regulations in various environments, which has led to the rise in areas affected. The work place is a particularly sensitive environment, potentially affecting the smoker’s job security if regulations are not adhered to. Although these regulations decrease secondhand

smoke exposure, studies have provided little statistical significance to the effect regulations have on the heavy smoker (COMMIT Research Group, 1995).

Understanding the smoker's experience of working in regulated environments can provide new information to base interventions. These interventions can be applied with a holistic approach, assisting smokers at work, as well as potentially placing them on a path to cessation.

Significance of the Problem to Nursing

Smoking regulations in work environments pose a unique effect on employees. Although it is beneficial to the nonsmoker, little attention is given to the effect on the smoking employee. Once the regulation takes effect, the employee must restrain from previously accepted smoking behaviors or face consequences. Often the smoker experiences addiction to nicotine, making the cessation difficult. Potential symptoms include cravings, concentration difficulties, and increased depression. Some evidence exists that smokers may have difficulties with work productivity and a decline in their general well being (Bringham, Gross, Stitzer, & Felch, 1994). Little documentation exists addressing these effects, presenting an opportunity for further research. The states regulating smoking in the private worksite have increased from 5 to 26 since 2004. With the growing amount of states regulating smoking at work, it is important to evaluate the effects it is having on the smoker and how the nurse practitioner can provide effective interventions. An improved understanding of this population could potentially increase quit rates and provide a positive impact on health.

Purpose of the Study

The purpose of this study was to gain insight into the lived experience of smokers being forced to abstain from their addiction in their work environments. The knowledge gained can then be applied to new interventions, assisting medical providers in promoting smoking cessation and managing their treatment. The nurse practitioner can provide unique effective care by incorporating their holistic approach to the development of interventions, which can assist the smoker in adapting to their changing environment.

Research Question

What is the lived experience of smokers working in smoking regulated environments?

This question was to be asked of participants working in three environments including: factory, medical facility, restaurant, and government buildings; however, no employees from government buildings volunteered. The three settings produced volunteers, allowing for theme development. Common themes were discovered, allowing for the identification of unique interventions for the smoking employee.

Definitions of Terms

Conceptual Definitions

Conceptual definitions give theoretical meaning to the concepts being studied (Polit & Beck, 2008). This study entails the following conceptual definitions.

Lived experience: What is true or real in a person's life. Gives meaning to an individual's perception of a particular phenomenon and is influenced by everything internal and external to the individual (Streubert Speziale & Carpenter, 2007).

Smokers: A person who smokes habitually (Medicine Plus).

Employment, work: The occupation for which you are paid (Wordnet search).

Tobacco smoking: The act of puffing and/or inhaling smoke from a lit cigarette, cigar, or pipe (EVS Enterprise Vocabulary Services).

Regulated: A rule or order issued by an authority stating what may or may not be done or how something must be done (EVS Enterprise Vocabulary Services).

Environment: The world within and around a person. All conditions, circumstances, and influences that surround and affect the development and behavior of a person (Roy & Andrews, 1991).

Operational Definitions

Operational definitions are congruent with conceptual definitions, but are more specific to the particular study. Polit and Beck (2008) define them as “the definition of a concept or variable in terms of the procedures by which it is to be measured” (p. 760).

The operational definitions for this study are:

Lived experience: Having firsthand knowledge of a situation.

Smokers: Individuals aged 25 to 64 years who currently smoke a minimum of 15 cigarettes per day.

Smoking regulated: Smoking not allowed on the property or allowed only in designated areas.

Environments: Places participants work, including factory, government building, hospital, or restaurant.

Assumptions

An assumption in a study refers to a basic principle that is believed to be true without proof or verification (Polit & Beck, 2008). The following assumptions underlie this study:

1. Participants are truthful.
2. Smoking regulations at work have a unique effect on the employee who smokes.
3. Descriptive data emerged with commonality among the various environments, allowing for derivation of themes.
4. The researcher remained objective, providing an accurate reflection of the descriptive data.

Summary

Tobacco use has a negative effect on both the smoker and nonsmoker. Growing awareness of the detrimental affects has led to an increase in policy and regulation, protecting the nonsmoker from secondhand smoke and encouraging the smoker to decrease consumption. As these regulations are implemented, attention needs to be given to smoker who may be struggling to adapt to their regulated environment. Gaining an understanding of their experience may assist in producing effective interventions, allowing for increased cessation and an improved state of health.

CHAPTER II

THEORETICAL FRAMEWORK AND REVIEW OF LITERATURE

The purpose of this study was to examine the experience of smokers working in smoking regulated environments. Application of a theoretical framework and a comprehensive literature review provides an important foundation for the research.

Theoretical Framework With Case Study Application

Sister Callista Roy expanded her Adaptation Model with Heather A. Andrews to apply the nursing process (Roy & Andrew, 1991). This qualitative study utilized the expanded model. The human system functions as a whole and is more than a sum of its parts. This system has the capacity to adjust effectively to changes in the environment and in turn, affects the environment (Roy & Andrew, 1991).

Assessment of Behavior

The Adaptation Model views the nursing process in six steps. The first step is to assess the current behavior of a person. Behavior is either actions or reactions under certain circumstances. This behavior may either be effective or ineffective (Roy & Andrew, 1991). The study's goal was to discover the behaviors of smokers working in smoking regulated environments to determine if their behavior were adaptive or ineffective.

Assessment of Stimuli

The second step in the nursing process, utilizing Andrew's and Roy's Adaptation Model, involves assessing the stimuli. Change in stimuli, such as the inability to smoke

in a work environment, places stress on the person's coping abilities. Evaluating the behavior is the key to how the individual is coping to the stimuli (Roy & Andrews, 1991).

Nursing Diagnosis

Nursing diagnosis is the next step in the nursing process. Evaluating current behaviors together with the stimuli influencing behavior aids in establishing a nursing diagnosis. This diagnosis is viewed as a problem solving process in Roy's Adaptation Model. It is defined as a judgment process, which conveys the person's adaptation status (Roy & Andrews, 1991).

Goal Setting

After behavior and stimuli are assessed and formed into a nursing diagnosis, goals are established. This is the next step in the nursing process. Goals are the "clear statements of the behavioral outcomes of nursing (which) come from the person," according to Roy and Andrews (1991, p. 42). These behaviors will promote the person's adaptability.

Intervention

Once goals have been set, the nurse must determine how to intervene in order to assist the person in attaining their goal. The focus of interventions is on the stimuli influencing the behavior (Roy & Andrews, 1991). Nurse practitioners are unique with their approach to intervention development. They are educated to use a holistic approach to care, making them ideal to care for the smoking population. Smoking cessation involves multifaceted interventions in order to achieve successful cessation (COMMIT Research Group, 1995).

Evaluation

The final step in the nursing process, as described by Roy, is evaluation. This step involves the judging of the effectiveness of interventions in relationship to the person's behavior. The intervention would be determined as effective if the new behavior aligns with the set goals.

Adaptive Systems

The Roy Adaptation Model focuses on the relationship of four adaptive systems: physiologic-physical, self-concept-group identity, role function, and interdependence (DeSanto-Madeya, 2007). Each of Roy's adaptive systems overlaps, forming behavior which makes up coping mechanisms see Figure 1.

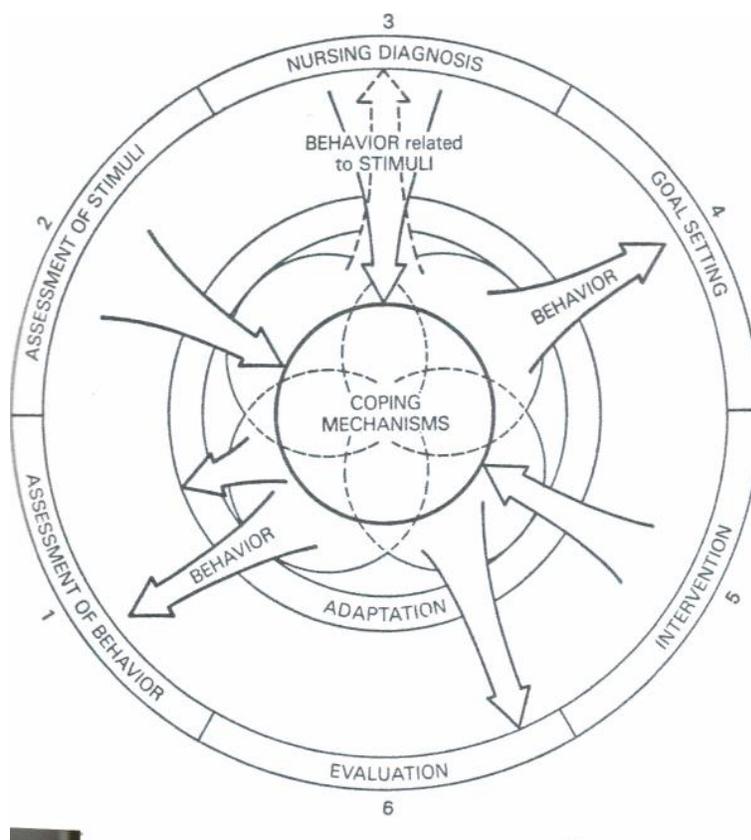


Figure 1. The Nursing Process as it Relates to Roy's Description of the Person (Roy & Andrews, 1991).

Case Study

Tom is a 42-year-old factory worker who smokes two packs of cigarettes per day. He attends a meeting at work where he learns that a smoking ban will take affect on all areas of the company grounds in 4 weeks. He becomes anxious and worries about his job security if he cannot comply with the impending regulation.

Roy's model identifies a physiological mode which encompasses the basic needs and physical processes of the person. In our study, Tom's inability to smoke due to policy and regulation would possibly cause him physical withdrawal symptoms from nicotine.

The self-concept-group identity system focuses on perception of the self, including self-consistency and self-ideal. When smoke-free regulations are enforced in various environments, the smoker may feel socially unaccepted. They may also discover a weakness if they struggle with a nicotine addiction. If these feelings develop, an impact may occur on their concept of self. Tom is uncertain how the regulation will affect him, but worries he may not be able to abstain from smoking, which he identifies as a weakness. His initial reaction to the regulation makes him feel socially isolated due to his smoking status. He finds himself focusing on his limitations, which impacts his self esteem.

Role function focuses on activity performance throughout an individual's life. Some evidence has shown nicotine withdrawal to produce difficulty with concentration and job performance. If a regulated environment prevents smoking, an individual may find themselves less productive and unfocused. Tom views himself as a diligent worker, but knows he will be distracted and lack concentration when he is forced to abstain from smoking. He worries this will affect his quality of work.

Roy's system of interdependence describes behavior, which affects relationships. Smokers experiencing an unwanted restriction may find themselves feeling unsupported and misunderstood. Tom feels he lacks a choice in his situation, which is straining his relationships both at home and at work. He is developing an unreceptive attitude to cessation interventions and begins to feel that no one understands the impact of his situation.

As a person receives input from internal and external stimuli, coping mechanisms are applied producing an adaption level. The responsive behavior then becomes output, which is viewed as adaptive or ineffective responses. The person influences their

environment with their response, as well as is influenced by the environment with the incoming stimuli. Tom realizes the impending smoking policy will affect him in nearly all aspects of his life. After considering his options, he realizes he has wanted to quit smoking to be a role model for his son. He begins to cope with his situation and looks for help with his smoking habit.

The nursing role is to assess behavior and stimuli, which influence adaptation. Nursing judgments are based on this assessment and interventions are formed to manage the stimuli (Roy & Andrews, 1991). Tom schedules an appointment with his nurse practitioner, and they review his situation. The nurse assesses Tom's situation and gains an understanding of the stimuli and environment affecting his behavior. Together they develop a plan with specific interventions aimed towards helping Tom adapt to his changing work environment.

Literature Review

The negative effects of smoking on the smoker and nonsmoker have been well documented. By the year 2020, the leading cause of death in the United States is predicted to be due from tobacco use (Halcomb, 2005).

State and local governments are increasingly enacting legislation restricting smoking in a variety of public and private settings. While the intention is to reduce exposure to tobacco smoke, the regulations also reduce the smoker's opportunity to smoke. Although studies clearly show positive outcomes for the nonsmoker from regulation, some vary on the effect they have on the heavy smoker.

Policy Effects

In 1991, the NCI together with the American Cancer Society (ACS) conducted one of the largest government-funded projects aimed at reducing smoking through a policy-based approach. They funded and implemented the American Stop Smoking Intervention Study (ASSIST) with the goal of altering social, cultural, economic, and environmental factors which promoted smoking. This goal was accomplished through four primary policy areas: (a) promoting smoke-free environments, (b) countering tobacco advertising and promotions, (c) limiting tobacco access and availability, and (d) increasing tobacco prices through new taxes (Stillman et al., 2003). The project was implemented over 8 years, funded by the NCI, who allocated a total of \$114 million used to create tobacco control infrastructure in 17 states. Changes in behavior, policy, cigarette consumption, and smoking prevalence were monitored in order to develop conclusions regarding tobacco control policies. The comprehensive study provided some evidence that strong tobacco regulations, combined with policies, are effective strategies for reducing tobacco use. The authors concluded, "The small but statistically significant differences in the reduction of adult smoking prevalence in ASSIST states, when applied on a population basis, could be expected to have a large impact" (Stillman et al., 2003, p. 1689).

Community Approach

The 1986 COMMIT research did not support these findings entirely. It was an additional sentinel study funded by the NCI focusing on smoking reduction through community interventions in four primary areas including: (a) public education through the media and community events, (b) healthcare providers, (c) worksites and other organizations, and (d) cessation resources. COMMIT was a randomized controlled trial

with a sample of 11 matched community pairs. The study hypothesized that interventions delivered through multiple community states over a 4-year period would result in high quit rates among heavy smokers (COMMIT Research Group, 1995). The study did not have a significant effect on heavy smokers, but did have a statistically significant effect on the light to moderate smoker (COMMIT Research Group, 1995). Although the finding was disappointing, COMMIT researchers commented that “it remained consistent with other community studies on smoking cessation” (COMMIT Research Group, 1995, p.190). One explanation may be heavy smokers have an addiction resistant to change; however, this has not been researched and should be recognized as a gap in the literature, worthy of exploration.

Bauer, Hyland, Li, Steger, and Cummings (2005) implemented a longitudinal assessment on the COMMIT study in 2001. They tracked and gathered data on the study’s participants through telephone surveys. Information about personal and demographic characteristics, tobacco use behaviors, and restrictiveness of worksite smoking policies were reviewed in 1993 and 2001. The study’s objective was to assess the impact of smoke-free worksite policies on smoking cessation behaviors over time. Dependent variables being measured were identified as smoking status, cigarettes smoked per day, serious quit attempts, and use of smokeless tobacco. The number of worksites with smoking regulation policies was measured as an independent variable. Bauer et al. (2005) found that the more restrictive the smoking policy, the greater the likelihood of decreased consumption and complete cessation. People who worked in smoking restricted environments were almost twice as likely to quit smoking by 2001 than those who were not restricted at work. Employees who worked in smoke-free environments who continued to smoke decreased consumption of 2.5 cigarettes per day.

The study was not able to relate worksite smoking policies to quit attempts. An additional finding showed an increase in respondents reporting they worked in smoke-free environments from 27% in 1993 to 76% in 2001, which is consistent with national trends (Bauer et al., 2005). Overall, the longitudinal study provided data indicating smoke-free worksite policies help employees reduce their cigarette consumption and cessation, presenting strong evidence of the beneficial effects on the smoker.

Cigarette Consumption Comparison

Fichtenberg and Glantz (2002) formed similar conclusions. However, their study added an interesting comparison. They investigated the effects smoke-free work environments had on cigarette consumption, as compared to the effects occurring due to tax increases. The researchers located 26 studies, which investigated the effects of smoke-free workplaces on smoking prevalence and daily cigarette consumption. These studies were pooled in a random effects meta-analysis. They then computed differences in consumption and prevalence before and after the smoke-free policy was enacted. Implementation of the smoke-free workplace policy was associated with a decrease in cigarette consumption by three cigarettes per day, equal to 29%. This is almost twice the effect on consumption as policies that allowed smoking in some areas (Fichtenberg and Glantz, 2002). Data were compared to decreased consumption due to tax increases. Increasing the price of cigarettes by 10% leads to a 4% consumption reduction. "To obtain the 29% drop in employee consumption from smoke-free work environments, an increase of \$0.76 would be needed" (Fichtenberg and Glantz, 2002).

Effect on the Smoking Employee

As Bauer et al (2005) and the CDC (2009) have concluded, the number of smoking regulated working environments is increasing. Little attention has been given in

research to the effect the regulation has on the employee who smokes. Brigham et al. (1994) performed a study with the objective of evaluating the biological and subjective consequences observed in individual smokers after implementation a smoking regulated policy. Employees were evaluated 4 weeks before and 4 weeks after their place of employment enacted a smoking restricted policy. They measured the number of cigarettes smoked per day, biological indices of exposure to carbon monoxide, saliva nicotine / cotinine, withdrawal score, and depression scale. They decreased their smoking consumption by four cigarettes per day. Biological exposure levels decreased in the restricted group by 71%. The withdrawal and depression rates increased from four symptoms to 18, and their overall mood was not significant (Bringham et al., 1994). Smokers undergoing an abrupt work-site smoking ban showed statistically significant increases in withdrawal symptoms, difficulty concentrating, craving cigarettes, increased eating, and depression. Restricted workers reported some difficulty with job performance and a decline in their general well being.

Although the Bringham et al. (1994) study provided insight into the experience of the regulated smoker, the information is outdated due to the increasing amounts of public and private facilities becoming smoke-free. This is a gap in the literature the Lived Experience of Smokers Working in Smoking Environments will attempt to fill.

Summary

Significant research has provided evidence of the detrimental affects smoking has on individuals. Regulations and policies are increasing in many communities; with little attention given to the smoker, who may be struggling with abstinence from tobacco. Filling the gap in the literature and applying Roy's Model of Adaptation can assist the

nurse practitioner in caring for these individuals and helping them improve their state of health.

CHAPTER III

METHODOLOGY

The purpose of this study was to examine the experience of smokers working in smoking regulated environments. In order to understand the smoker's experience, a naturalistic approach was applied to a qualitative analysis of workers employed in smoking regulated environments.

Design

The study used a descriptive phenomenological method of design to gain information about the lived experience of smokers working in smoking regulated environments. Phenomenology is rooted in the philosophical tradition used as an approach to exploring and understanding a person's everyday life experience (Polit and Beck, 2008). An in-depth, semi-structured interview took place with participants through open-ended questions in order to collect information of their experience, as they perceived it. The researcher applied four steps including: bracketing, intuiting, analyzing, and describing in order to collect data which accurately represented the experience being described.

The lived experience gives meaning to the individual's perception of a phenomenon and is influenced by everything internal and external to them (Streubert Speziale & Carpenter, 2007). The descriptive phenomenological methodology has excellent application to the study of smokers working in smoking regulated environments, due to the method's ability to capture the essence and description of this lived experience.

Population, Sample, and Setting

A nonrandomized, purposive sample method was utilized involving a variety of participants from three differing worksites. Twelve participants were desired; however, saturation was obtained with 10 participants willing to be interviewed. Flyers were placed in public areas with information regarding the study, participant criteria, and contact information of the researcher. The initial plan was to place flyers in break rooms; however, company policy became an unanticipated obstacle, not allowing the flyers to be placed. Flyers were viewed as solicitation. The three employment types included factories, medical facilities, and a restaurant.

Inclusion Criteria

The target population was individuals 18 years of age or older, who smoked a minimum of 10 cigarettes a day, on average, and worked in a smoking regulated environment for at least eight hours a day.

Exclusion Criteria

Exclusion criteria included any of the following characteristics: younger than 18 years of age; smoking less than 10 cigarettes a day, on average; not working in a smoking regulated environment for at least 8 hours a day; and not employed in a government building, restaurant, medical facility, or factory.

Data Collection Instruments

Data were collected by voluntary, self-report, audio taped, confidential interviews, with one broad open ended question, which asked, "What is your experience of working in a smoking regulated environment?" Additional probing questions included:

1. What types, if any, of withdrawal symptoms do you experience?
2. How do you manage these symptoms?
3. How do you feel the smoking regulation affects your job performance?
4. How does your employer support your abstinence from smoking?
5. What else may help?

Qualitative study does not use formal instruments to collect data. The researcher served as the instrument for data collection and analysis. Bracketing was used as a method to limit research bias by writing daily in a reflexive journal. Descriptive phenomenology uses bracketing to identify preconceived beliefs and opinions about the study phenomenon (Polit & Beck, 2008). Qualitative researchers use bracketing as a way to identify their presuppositions and analyze the data in its purest form. Space triangulation was applied in order to enhance trustworthiness. The experience of smoking regulations was gathered from three different occupations in order to enhance the validity of the findings.

Data Collection Procedures

The University of Wisconsin Oshkosh's Institutional Review Board and Office of Graduate Studies approved the study and employers in central Wisconsin were contacted. Flyers about the study were placed on public billboards. Employers however, did not allow flyer placement; therefore, there was no risk of them identifying the participants. Participants were also found through snowball sampling and email. Once an individual agreed to participate in the study, a private, confidential interview took place at a location of their choice. A second adult was nearby to ensure researcher safety.

A written informed consent (Appendix B) was provided, informing the participants of their right to withdraw from the study at any time. They also completed a demographic questionnaire (Appendix C), documenting the inclusion and exclusion criteria.

Measures were taken to ensure participant confidentiality. The audio taped Interviews and transcribed data did not contain the participant's name. Each was assigned a number, which was placed on their consent form and on their demographic questionnaire. The signature on the consent form was the only link to the participant's name and remains in a file cabinet's locked drawer on the University of Wisconsin Oshkosh campus. The demographic questionnaire and audiotapes are also in the locked cabinet. A paid transcriptionist transcribed all of the interviews verbatim in order for the researcher to analyze the data line by line.

Complying with employer enforced regulations is part of the participant's job performance. Participant responses were published with the identity of respondents kept confidential. The data were documented in a consensus manner without delineation from the employer type. Comments were not categorized by factory, restaurant, or medical facility in order to protect the participants to the best of the researcher's ability.

Data Analysis Procedure

Qualitative data analysis consists of reviewing narrative data to establish patterns and themes which describe the meaning of an experience. Researchers immerse themselves in the data with the purpose of preserving each participant's lived experience

while understanding the investigated phenomena (Streubert, Speziale & Carpenter, 2007).

In the smoking regulation study, descriptive phenomenology was used to analyze data through Giorgi's method. The researcher followed these steps: (a) read all of the participants' descriptions to get a sense of the whole, (b) identified units from descriptions of phenomenon, (c) articulated the psychological insight in each of the meaning units, (d) synthesized the meaning units into a consistent statement regarding participants' experiences, called themes (Polit & Beck, 2008).

Study Limitations

Qualitative studies in general pose some limitations. The researcher, as a human, is fallible and is the tool utilized to collect data. The data collected were subjective. Analysts may question whether the conclusions derived from subjective means would be found if repeated with a different researcher. The small sample size and specified work sites may have led to concerns regarding generalizability. Researcher and response bias may also have occurred because the interaction between them might have affected the responses.

One potential limitation unique to this study is in regards to the smoking habits of the participants. The COMMIT study recognized that smoking regulations had no effect on the heavy smoker, defined as someone smoking more than 25 cigarettes per day, but beneficial effects on other smokers (COMMIT Research Group, 1995). One inclusion criteria of this study was participants who smoke more than 10 cigarettes per day. Responses may differ for those who smoke less. Another limitation may be in the type

of smoking regulation; whether the facility was completely smoke-free or smoking restricted, allowing for smoking in designated areas. The specific regulations were not differentiated in this study and may present differing responses.

Summary

Qualitative phenomenological research was the appropriate method to assess the lived experience of smokers working in smoking regulated environments. A descriptive phenomenological design was applied to a purposive sample. The sample was obtained from a factory, medical facility, and restaurant where smoking restrictions occurred. Data were collected through voluntary, self-report, audio taped interviews and analyzed using Giorgi's method, ensuring protection of participants' rights. Like all research studies, limitations are present; however, the insight gained into the experience of the regulated smoker can be used by nurse practitioners to assist smokers in adapting to their environment and possibly eliminating the smoking habit altogether.

CHAPTER IV

FINDINGS AND DISCUSSION

The purpose of this study was to examine the experiences of smokers working in smoking regulated environments. Smoking regulations in the workplace have become increasingly common, posing unique challenges to the employee who continues to smoke. Detailed interviews of these individuals revealed rich descriptions of their challenges and experiences. The participants discussed their situations and gave insight into potential opportunities of assistance and intervention.

Sample Description and Demographic Data

A nonrandomized purposive sample of 10 participants was obtained. The primary place of employment for these individuals was a medical facility, (n = 8). Two participants worked in a factory, and one participant worked in two types of facilities, one of which was a restaurant. Government building employees were contacted also; however, no one chose to participate in the study.

The age of the participants ranged from 27 to 60 years, with a mean age of 46.4 years. Nine of the individuals were female, one was male. All participants smoked a minimum of one-half pack per day. Five individuals smoked one full pack per day, and two individuals smoked 1 ½ packs per day. The number of years the participants smoked ranged from 9 to 37 years, with a mean smoking duration of 26.1 years.

Eight of the participants' employers did not allow smoking on the organization's grounds; two employers had a designated area outside of the building. Participants worked 8 to 12 hours a day, with the median smoking abstinence time equal to 8 ½

hours. Four participants stated they were not allowed to smoke, at any time, during their work day. Six stated they could smoke on their work breaks, with the majority recognizing this as their 30 minute lunch break. For some, this time included traveling to an area off the organization's grounds, which required punching in and out on a time clock.

The sample was obtained through flyer placement (Appendix A) and snowball sampling. One unanticipated barrier was the inability to place flyers in workplace break rooms due to violation of company policies. Due to this barrier, employers were unaware of employee participation. Flyers were placed in restaurant break rooms, as well as, on public billboards.

An additional barrier was the limited amount of people willing to participate in the study. Snowball sampling produced the greatest number of participants, which is reflected in the primary sample population being from medical facilities.

Data for this study was obtained by voluntary self-reported, audio taped interviews. Participants were given a description of the study, as well as, an opportunity to ask questions. Informed consent was obtained, with a copy given to each participant. Three interviews took place in the participants' homes, three in a semiprivate area of a restaurant, three in a private location at their workplace, and one interview took place in the interviewer's home. All locations were chosen by the participants with particular attention given to their privacy, confidentiality, and convenience.

Results

Theme I: Withdrawal Symptoms

Subtheme 1: Types of Symptoms

Withdrawal experiences were common due to the participants' smoking habits and restrictions. Participants worked 8 to 12 hours a day, with the median period of abstinence being 8 hours. Four individuals could not smoke at any time while at work. Six could smoke, but needed to punch out on the time clock and leave the organizational grounds, which could only occur during their 30-minute lunch break. Smoking habits ranged from half a pack to 1 ½ packs per day, with duration of use varying from 9 to 37 years.

Given this information, it became clear that participants were significantly restricted from smoking and indeed described a change in their mood. When restrained from smoking at work, participants described the following feelings and symptoms:

- Five participants felt anxious
- Four participants felt irritable
- Three participants felt agitated or cranky
- Two participants felt anger

Other descriptions included distraction, difficulty concentrating, edgy, impatient, restless, nervous, frustrated, and tired. One participant described her feelings of irritability and stated, "[It's] nothing really physical, like shaking or anything, just where you feel like you need a cigarette." Another described anxiety as, "It's more of a what to do with your hands." A third person stated, "When I can't smoke...I get angry, I get frustrated with my patients. My children. It's not good. It's nothing physical."

Change in mood is consistent with the Bringham et al. (1994) study. Withdrawal rates increased from 4 to 18 symptoms in this study, with a significant change in their overall mood.

Subtheme 2: Management of Symptoms

After participants described their symptoms, they were probed regarding how they manage their symptoms. They described:

- Nine participants manage by staying busy
- Six participants use some type of nicotine replacement
- Five participants “sneak out”

Other management descriptions included chewing gum, drinking coffee, eating, and pacing. Nine of the ten stated staying busy helped manage their feelings and symptoms. One stated, “The busier I am, the less I think about it.” Another stated, “I don’t (experience symptoms) as long as I’m busy, but that’s really when I do, is when it’s not busy, but then I just find something to do.” A third person described this, as well, “I’ll just usually, keep myself busy. I’ll go stock something. Like, knowing that I can’t go for, like, another hour, I’ll just go clean the rooms or change the garbages, just...things to do because I can’t stand just sitting there.” An additional person said, “Try to find things to occupy myself...it’s like flying on a plane (and not being able to smoke). You can’t do that. I try to take my mind off it.” Another stated, “...if we’re busy, then I don’t have so many problems with it. It’s when we’re quiet that it’s harder.”

Many participants tried nicotine adjuncts and prescriptions to help them manage their symptoms. These included patches, lozenges, nicotine gum, Chantix, Wellbutrin,

and the e cigarette. These were described as helpful, but the effectiveness to cessation was limited.

Another common pattern of symptom management was “sneaking.” Nine of the ten participants either stated they would sneak, described sneaking behavior, such as “getting caught,” or made references to others sneaking. One participant stated, “I used to go out, probably, every two hours, and sneak a cigarette. And now that you have to go across the street, I only go on my lunch hour. It’s hard to get used to.” She later added, “(referring to someone else)...She was smoking out in the parking lot and put her cigarette butt out. It lit those woodchip things on fire and the whole thing (island) was on fire.” Another participant stated, “I’m able to sneak out because they’re not keeping track of where I am.” One participant described getting caught sneaking as “...both of us tried to put it out behind our backs and shove the little burning embers into our pockets so she wouldn’t see.” A fourth described getting caught upon return from sneaking out to smoke, “We had cut through and came flying in the back door...as the helicopter was coming.” All but one participant described sneaking behavior at work.

Theme II: Job Performance

Subthemes 1: Discipline

The workplace is a particularly sensitive environment for smoking regulations, due to the affect it can have on a person’s job security if not adhered to. The participants of this study described sneaking behavior, which does violate their employer’s policy. Although most had been sneaking, few mentioned feeling threatened when caught. Most participants were given warnings. One stated:

I got caught once in an area I shouldn’t have been in and I know better...and I’m sure there are times where I just said, “I’m going out. I probably shouldn’t right

now, it's busy" and I gone and had a cigarette quick when it's been just frustrating or crazy busy or something when I should have stayed put...I don't think I've ever jeopardized a patient. I've always had somebody watching my patient. Another time security came to see me. They didn't tell my manager...it was our safety. We had crossed a heli-pad to go smoke."

This participant further described not being disciplined formally. She had been informed by her manager via email not to do this again.

Another participant described her consequence of getting caught as:

I was given a talking to. I was splitting my lunch in half and they said – no, we can't do that just to go out and smoke...that's what I do when I take my break. I go smoke. So they told me I can't split my lunch in half anymore.

A third participant also stated she was warned. "I just get warned...but it doesn't stop me from doing it again the next day." She also mentioned that she didn't know of anyone who had been fired, but did know of individuals who had been written up. "I know that people get written up for it and I do know that there are people who go back on a probation period for sneaking out to have cigarettes. I've never been to that extent."

Another stated when she got caught, "(I) just got a talking to, told I wasn't supposed to be smoking on the grounds." She added, "If I did it again, I would be wrote up, (then) if I did it again, I'd be fired." She also stated she did not know of anyone who had gotten fired.

A fifth person described warnings and security initiating a conversation for those who had been caught smoking. She is in a supervisory role herself and said: "I've had to yell at my people because they show up on the security camera. But, you know, what

are we going to do about that, and frankly, you know, it's a hard thing. Can you come down on somebody making a personal choice?"

As a smoker herself, she also described a situation of getting caught and having her behavior addressed by her superior, which inflicted guilt. "We were at a retreat and she (her supervisor) busted me and said, 'I'm so disappointed with you.' She was absolutely appalled."

One participant did describe knowledge of individuals whose employment was terminated due to violating the smoking regulation. "I don't know if it's been two or three times, but they've [smokers] been released from employment...they get warnings first. Security kind of patrols stuff and then it gets to the manager...goes through human resources."

Most participants described warnings as "receiving a talking to." Some mentioned a written notice, and one mentioned knowledge of terminations. Few felt they would be terminated if caught, but they all were aware of the potential.

Subtheme 2: Productivity

Although the participants described "staying busy" as one way they found effective in dealing with their regulation on the job, some felt they were less efficient. Another felt that it took time away from their duties. "It probably affects my job performance in productivity because there are other things I could be doing....like ordering, restocking. But I don't do it because I want to go have a cigarette." This comment is consistent with the Bringham et al. Study (1994). Restricted workers reported some difficulty with job performance.

Some participants believed they weren't less productive, but felt their coworkers viewed them as less efficient.

I think that other employees get mad because that person isn't where they're supposed to be when they're supposed to be there...all of a sudden they're like, putting an order back there, and they're like-where's the cook?...Sure enough, they're outside, and then he's all mad because now he's got to stop [smoking] because he's got to cook the food. The dude's on his tenth break having a cigarette."

One person expressed concern for her patients and coworkers. "I started feeling like I was endangering my patients and placing an unfair burden on my coworkers by asking them to watch my patient because I had to go outside and smoke."

Subtheme 3: Coworkers

In the work environment, coworkers were often addressed as having an effect. One viewed her coworkers as tolerant. "People feel bad that people can't smoke, even if they don't, they kind of look the other way."

Others felt animosity from their coworkers. "I've heard people say...oh, some only get this break, but then the people who smoke get extra breaks."

Another participant felt coworkers didn't like her smoking. "They act different. Maybe they feel like they pick up my work, which they're not. I never go without getting my work done first. I suppose they see it as a break and they're not getting one."

Theme III: Employer Support

Limiting a smoker's opportunity to smoke clearly has an impact on both the smoking employee and their coworkers. When a smoking regulation is implemented, an employer has an opportunity to limit the negative effect. Organizations vary with the support they provide. Two individuals in this study were aware of a program, which preceded the regulation.

They (organization) offered the smoking cessation program, which is a great program. I've taken advantage of it, I think, a total of three times now. First it was a group thing. I used patches the first time. The second time was Chantix and the third time was just, kind of, redoing Chantix. They offer a very good smoking cessation program. They provide everything. You didn't have to go to your own physician. A person wrote the prescription, and then you were given a voucher for the pharmacy.

Another participant described their employer's program. "It's through employee health; they have a great smoking program. They offer counseling, mentorship with people you can call, and right now, I know they offer Chantix or patches for free."

Two additional participants were unaware of a program, but were given discounts for smoking cessation products. One stated smokers in her facility were given discounts on products in the past, but is uncertain if this was still occurring. She added that there was great information and assistance being given to the patients, but it was limited for the staff.

One clear, repeated element of the interviews was that most employers did not have a program or, if they did, the information was not getting dispersed to the staff. One participant stated, "There isn't a program to my knowledge. However, they do have something for weight loss." Another stated if a program or discount were offered, it wouldn't help her. A third stated, "I know they have a drug program, so I would assume that they have it for smokers also." Other comments included, "I don't think they offer a whole lot of support," and "I can't remember what they offered in the beginning, but they used to offer something," and "initially they offered a great program, information, gave free stuff. It was really nice, now I don't know," also "I'm sure they have something, but

I'm not positive. I've been here for almost 6 ½ years now, and I don't, I really don't know." Two participants stated clearly that nothing was offered.

Theme IV: Other Helpful Measures

Participants were asked what they felt would help them while at work and unable to smoke. Five felt programs would be a benefit. Three of their comments were:

"We could be offered assistance, maybe some kind of reward...something to encourage...just to help through the hard times."

There should be more programs offered. Instead of people being forced to sneak, I think that there should be a conversation about it, an open forum so people don't feel alienated...have something on the grounds like what my husbands company did. That was really cool that they had counselors that actually come to work. They offered gum, patches, even a hypnotist...they were proactive."

Another participant stated, "Give us encouragement, free samples...some sort of support system, counsel."

Four individuals thought scheduled breaks would help. "What would help me? Probably scheduled breaks, but in the department I work in, that's not an option."

For me, if you could punch out ten minutes, twice a shift you know, just so you can say, well, I'm going to go 6 hours and do it, instead of sneaking out. I think more people would be able to follow rules." Another participant thought, "Breaks would definitely help. I think people underestimate the importance of a break..."

Four participants felt prescriptions for nicotine replacement and smoking cessation at a reduced cost would help. "If the hospital offered meds or at least to be

able to get it at a cheaper price for, like Chantix or the Wellbutrin.” Another agreed, “Offer gum, patches, hypnotist, be proactive.”

Two didn’t believe programs would help. They discussed how it was a mindset and people need to want to change their habit. Distractions, staying busy, were again discussed. “I have a mindset that I can’t smoke there (at work), and my body has adapted to that. I’m used to not smoking. My day is too busy for that.”

Other adjuncts participants felt would help included, fresh air, gum, suckers, popsicles, and something to keep their hands busy.

Theme V: Regulation Affect

When people are forced to stop smoking for a period of 8 to 12 hours a day, one might induce that they would smoke less, overall, if not quit altogether.

Subtheme 1: Quit Attempts.

The participants in this study were evenly divided. Five had made increased attempts to quit due to the regulation, while five did not. Two stated they tried to quit, but it wasn’t due to the regulation. One stated she thought about quitting and would like to quit but had not made an attempt.

The individuals that increased their attempts stated;

“I’ve definitely made more attempts. I’ve had many more attempts since the regulation. I don’t know if it’s because it’s hard to get out to go.”

“I have tried to quit a lot.” But she added that the regulation did not encourage it. “It’s bad for you, especially working in a hospital. We see the long term effects...the money’s an issue...I struggle with more of the money and the cost.”

“Oh yeah! I try all of the time, it just doesn’t work. I did quit right when we went smoke free for three months. I don’t know why I didn’t stay quitting.”

“The smoking regulation absolutely helped me quit more, much more. It has really made my mind change. Not only for myself, for my children too.”

Those that stated the smoking regulation did not increase quit attempts felt their quit attempts were for other reasons. One stated, “I don’t think not having smoking in the workplace is going to stop anyone from smoking.” Another had not made attempts to quit before or after the regulation took affect, but hoped to quit some day.

The Bauer et al. (2005) study was not able to relate worksite policies to quit attempts. Although the quit attempts appeared to increase, evidence was unable to establish the attempts were due to the regulations.

Subtheme 2: Smoking Consumption.

Even though smokers had fewer opportunities to smoke in a regulated environment, this study found they did not decrease the amount they were smoking. One participant thought she smoked much less, but realized as the day progressed, she smoked more. “I’ll go until 11, 12, 1 p.m. without a cigarette. Then in the afternoon, I smoke at 2, 4, then it’s 5, and 6 p.m. As it gets closer to the time to go home, I smoke more.” She also mentioned that when she did get a break, she would smoke two cigarettes instead of one. She also found herself smoking the entire drive home, which she hadn’t done before the regulation. “I never realized that. I never thought about it, but I do. I smoke all of the way home.” Another stated, “You know, I still smoke the same amount whether I’m working 12 hours or whether I’m off. So, I must do that [smoke more when able] subconsciously. One participant stated, “I know exactly how many cigarettes I can squeeze in on my way to work before I get there.” A third

participant said, “I probably smoke three cigarettes on the way home, you know, and I can go all day just smoking one. It makes no sense.” A similar description was;

When I first leave work, I’ll have like, two or three cigarettes, where normally I wouldn’t, but then it kind of settles back down, and the same way going in. I never used to smoke going into work, and now I do. You know, get that last one in. And I smoke two when I go out instead of having one, because I know in a few hours I can go again.

Nine of the ten participants described smoking more when they were able and “making up for lost time.” They would smoke cigarettes closer together or double the amount when they could, such as smoking two back-to-back.

The fact that smoking regulation at work did not have a significant effect on the smokers who smoked greater than 10 cigarettes per day, on average, is consistent with the COMMIT study.

One participant believed the amount they smoked was not affected by their ability to smoke. This person denied an increase in pattern when they left the place of their employment. Conflicting evidence of this was found with the Bauer et al. (2005) study. They found employees who worked in smoke free environments, who continue to smoke, decreased consumption by 2.5 cigarettes per day. Bringham et al. (1994) also found a decrease in smoking consumption. Participants decreased their smoking by four cigarettes per day.

Theme VI: Smokers’ View of Regulation

Many of the participants described challenges they faced at work when they couldn’t smoke. These challenges included; mood changes, job performance concerns, and coworker relationships. In spite of these challenges, five participants viewed the

regulation positively. One participant viewed the smoking regulation negatively, and three felt it violated their freedom of choice. Many expressed concerns:

“...you don’t just wander off all of the time, which is probably a good thing...but before, we were hidden. Now there’s people standing out all over the bridge, in the park, right in front of Harbor House, so visible. That just looks tacky.”

“I think it’s a good thing. I used to be a pack-a-day smoker. I didn’t like smoking in the vehicles. I didn’t like the smell. I didn’t like smoke in a restaurant when I ate. Even though I was a smoker, it bothered me...The new laws that are coming into play don’t bother me other than places that served alcoholic beverages. To me, a cigarette and a beer go together.”

“I don’t have a problem with the smoking ban. It (smoke) shouldn’t be forced upon people who don’t smoke...I worked with a lady who had asthma and she struggled because all of the people who were smoking. I don’t think people realized. I mean, in between tables, she’s in the back with an inhaler, you know. So I think we shouldn’t smoke, we should be respectful.” This participant did express concern for businesses. “People that own their own place (businesses) should be given a choice”

“I understand the reasoning behind the not smoking, especially in health care. I understand the purpose, but I do think they can’t dictate everything people do in their own lives.”

“I don’t think it (smoking) should be encouraged. It’s kind of like giving an alcoholic a drink. I don’t think they should...then I’d never quit.”

“I think it’s a positive thing because it will stop people from having those withdrawal attacks or needing to have that cigarette...it took me a while to get used to

not being able to smoke in a restaurant, but love it because I'm not worried about smoking in the middle of eating."

"I think it's [smoking regulation] a positive, because it would force a lot of people to quit."

Theme VII: Perceived Negatively

As medical providers, we need to be sensitive to smoker's feelings. Participants often described feelings of guilt, alienation, and being viewed negatively by others.

These comments included:

"I don't know what nonsmokers think if they see people standing outside in hospital...seeing people in scrubs with stethoscopes hanging around their neck...it's embarrassing."

"There's a lot of anxiety."

"People feel alienated, you feel like a leper. You feel like a bad person because how bad are you that you can't control yourself...you can't quit."

"It's kind of like Catholic guilt man, and I'm not Catholic. She (supervisor) can make you feel that way."

"It looks bad when you have five XXXX employees outside smoking, you know, that can't look very good."

"Smoking is so addicting...isn't that sad, I'm that addicted to it."

"A nurse (where she works) just got diagnosed with lung cancer...well all of us smokers at work...we feel guilty going out for a smoke."

"...You feel like an outcast or, you know, you're offending people, where they're trying to wave your smoke away from them, and then you kind of feel guilty, you just try to hold your cigarette a different way, so that it's not by them."

These feelings are consistent with evidence presented by other researchers. There is existing evidence that smokers have difficulty with work productivity and a decline in their general well-being (Bringham et al., 1994).

Medical providers need to be sensitive to this theme. Participants not only felt others' negative perceptions, but had a negative perception of themselves, as well.

Summary

Smoking regulations in the workplace have become increasingly common, posing unique challenges to the employee who continues to smoke. Detailed interviews of these individuals revealed rich descriptions of their challenges and experiences. Their descriptions produced seven themes including: withdrawal symptoms and management; job performance with discipline, productivity, and coworker relationships; employer support; other helpful measures; regulation affect on quit attempts and smoking consumption; smoker's view of regulation; and negative self perception.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter provides a summary of the study of the lived experience of smokers working in smoking regulated environments, followed by conclusions, which incorporate an adaptation theoretical framework. Recommendations are made for further research in nursing practice, education, and administration, based on the findings from this study.

Summary

The purpose of this study was to examine the experiences of smokers working in smoking regulated environments. A nonrandomized purposive sample of 10 participants was utilized, resulting in smokers who had a minimum of one-half pack a day habit, with the mean duration of 26 years. Data were collected via voluntary self-reported, audio taped interviews. Seven themes were derived from the interviews using Giorgi's Descriptive Phenomenological Method. The analysis resulted in the following seven themes:

Theme I: *Withdrawal symptoms*, such as mood change and irritability, which they managed most effectively by staying busy and utilizing nicotine adjuncts. One consistent ineffective adaptation to the regulated environment was sneaking out to smoke during times which policy prohibited. If the participant did not describe this behavior of themselves, they made reference to it of their coworkers.

Theme II: *Job performance*, which was discussed in regards to discipline, productivity, and effect on coworkers. Even though sneaking behavior was common,

few described feeling threatened when caught. Most participants were given warnings; some in the form of email, some via written notices. Job loss was identified by one participant in the context of someone she knew. Many participants felt they were less efficient, even though staying busy was one way they managed their symptoms. This was stated as the smoking behavior takes time away from work they could be doing. Others felt coworkers viewed them as less efficient, even though they believed they weren't. Some viewed coworkers as tolerant; others felt animosity due to the increased amount of breaks the participant would take.

Theme III: *Employer support* was lacking in the study results. Most employers did not have a program, or if they did, the information was not getting dispersed to the staff.

Theme IV: *Other helpful measures*. What would help was a theme which encompassed the participants thoughts on what measures could be taken to help them at work. Half felt comprehensive programs to be helpful. Four considered scheduled breaks; however; they recognized this as an unavailable option. Nicotine replacement was also considered as helpful; although, its effects seemed to be short lived.

Theme V: *Regulation affect* on quite attempts and smoking consumption provided interesting results. Half of the participants felt they increased their quit attempts due to the regulation, and 90% did not decrease the amount they smoked. They recognized doubling the amount when they had an opportunity to smoke, as well as decreasing time between cigarettes.

Theme VI: *Smokers' view of regulation* was evenly divided. In spite of mood changes, job performance concerns, and coworker relationships, half of the participants viewed the regulation positively.

Theme VII: *Perceived negatively*. Negative self-perception was common and should be recognized. Participants often described feelings of guilt, alienation, and being viewed negatively by others. They experienced a change in their self-image.

Application to Theoretical Framework and Literature

Sister Callista Roy's expanded Adaption Model with Heather Andrews has clear application to the Lived Experience of Smoker's Working in Smoking Regulated Environments Study. This application can be seen with each of the model's six steps.

Step 1: Assessment of Behavior

Behavior is defined in this model as actions or reactions to certain circumstances. It can be either effective or ineffective (Roy & Andrews, 1991). Smokers working in smoking regulated environments adapted to their environments. Each smoker described feelings of anxiousness, irritability, and agitation. Roy and Andrews stated this adaptation can be effective or ineffective, which was seen in this study. Two effective adaptations were staying busy and utilizing nicotine replacement. Nine of the ten interviewed were quoted as "staying busy" to adapt to these feelings. Most used nicotine replacement at some point, but this was not a consistent or long lasting solution. Many would "sneak out" to smoke which could be viewed as an ineffective adaption method. Although the threat of job loss was rare, most participants identified this as a potential in the future and discussed the warnings they had been given.

Step 2: Assessment of Stimuli

This step in Roy and Andrew's model identifies the stress a change in stimuli has on a person. The inability to smoke at work is the stressor for this study. Few participants could identify a specific lead-time they were given prior to a facility becoming

smoke free. Many were employed after these regulations had already taken place. All mentioned the inability to smoke as changing their mood or affect, showing the regulation was indeed a stimuli-imposing stress.

Step 3: Nursing Diagnosis

This step was defined by Roy and Andrews as a judgment process which conveys the person's adaptation status (Roy & Andrews, 1991). This diagnosis evaluates current behaviors together with the stimuli. Smoking employees who are regulated have the following potential nursing diagnoses (NANDA, 2009):

1. Situation low self-esteem
2. Impaired social interaction
3. Anxiety
4. Social isolation

Step 4: Goal Setting

Once a nursing diagnosis is identified, clear behavioral outcomes need to be identified. The behavioral goal for this study's participants was to identify adaptability of participants to the smoking restriction. Smoking regulations have been enacted in order to protect the nonsmoker (NCI, n.d., para 6), increase quit rates (COMMIT Research Group; 1995), and decrease tobacco use (Stillman et al., p. 1689). An assumption with this literature is that the regulation will have a health-promoting effect on all employees, both nonsmoker and smoker. This study found nine of the ten participants did not decrease the amount they were smoking, and half of the participants increased their quit attempts. Inference could be made of the benefits to the nonsmoker relating to the decreased amount of smoke exposure; however, it cannot be determined by the results of this study.

Step 5: Intervention

Interventions that participants identified as beneficial to their situation at work of not being able to smoke included “staying busy” and nicotine replacement. However, the ineffective behavior of “sneaking” was prominent. In order to remedy this behavior, attention needs to be given to the smokers, without posing a threat or harm to their employment. Participants identified comprehensive smoking cessation programs as a possibility. Specifically, programs that included rewards, easy-affordable access to nicotine adjuncts, and counselors on sight. Other’s suggested scheduled smoke breaks, allowing for time to leave campus. The goal of these interventions needs to assist the person towards achievement, not foster an environment of failure (Roy & Andrews, 1991).

Step 6: Evaluation

The final step in Roy and Andrew’s Adaptation Model is evaluation. This study’s results found that even though smokers had less opportunity to smoke, they did not decrease the amount they smoked overall. Half of the smokers increased their quit attempts and all continued to smoke today. The regulation had not decreased tobacco use. It is possible that it may increase attempts to quit, as evidenced by 50% of the study’s participants. The regulation’s third goal of protecting the nonsmoker is possible due to the decreased exposure, but this was not established in this qualitative study.

Implications for Nursing

Nursing Practice

Smoking regulations in work environments pose a unique effect on employees. Although it is beneficial to the nonsmoker, little attention is given to the effect on the

smoking employee. Once the regulation takes effect, the employee must restrain from previously accepted smoking behaviors or face consequences. Often the smoker experienced addiction to nicotine, making the cessation difficult. Some evidence exists that smokers may have difficulties with work productivity and a decline in their general well-being (Bringham et al., 1994). The lived experiences of smokers working in smoking regulated environments study results are consistent with this finding. With the growing amount of states regulating smoking at work, it is important to evaluate the effects it has on the smoker and how the nurse practitioner can provide effective interventions. An improved understanding of this population can potentially increase quit rates and provide a positive impact on health.

Education

The lived experience of smokers working in smoking regulated environments study provided evidence of the smoker having unique needs. Historically, education has been given to the smokers' experiences of abstinence. Uncovering the adaptive mechanisms and experience provides the medical provider knowledge to identify effective interventions. Education needs to be implemented, with sensitivity to the smokers' experiences in order to promote the smokers' health and well-being.

Administration

Participants in this study provided rich information for facilities to offer comprehensive programs in order to assist smokers towards adapting to their environment. Job performance was recognized as having a potential negative impact when the smoker was struggling with their addiction. Although facilities may offer these programs, many employees were unaware of the service. Administrative resources should inform the employees of such services in order for them to be effectively utilized.

Recommendations for Further Research

The lived experience of smokers working in smoking regulated environments study achieved saturation; however, further studies should be implemented to determine if results would remain consistent.

Quit rates are an area to be explored. This study determined half of the participants attributed their increased quit attempts to their regulated environments. Potentially, this could change over time. Other variables may also be playing a role on quit attempts, such as employer support and assistance in abstinence. One goal of the regulation is to increase quit attempts, encouraging an increase on cessation.

This researcher was unable to obtain sufficient data from all of the populations identified. Smoking is highly regulated in government buildings, and employees in this environment were unwilling to participant. Further studies should explore why they were resistant. Restaurant workers and factory employees offered limited data, as well. The participants' gender was primarily female. Further study should seek out male participants and identify any barriers to participation. Results of this study indicated that participants experienced guilt and perceived negativity. These feelings should be given serious consideration prior to approaching sample populations and data collection.

A third recommendation would be to conduct studies at a later date, because states are increasing smoking regulations. By July 2010, Wisconsin will enact a ban on smoking in most work environments including bars and restaurants (Delesio, 2009). If owners don't try to stop smokers, they may face \$100 fines for each violation. This increase in regulation may produce different results.

Summary

The purpose of this study was to examine the experiences of smokers working in smoking regulated environments. These experiences were reviewed and applied to Roy and Andrew's Adaptation Model in order to identify effective interventions towards achieving the regulation's intended goal. Surprisingly, the results of this study did not establish the effectiveness of the regulation on reducing tobacco use. It did provide insight into the challenges smokers face, including mood alterations, concentration difficulties, strained coworker relationships, and threats to job security. Adaptive measures were also described. Ninety percent of participants identified staying busy as the best measure to help them deal with cessation, often describing keeping their hands busy. Nicotine replacement was also a popular adjunct; however, it was a short-term solution. Many resorted to sneaking out of the workplace for a smoke, knowing a potential for job threat existed. Half of the participants identified comprehensive smoking cessation programs as a helpful service employers could offer. The participants identified that most employers did not offer a smoking cessation program, or if they did, the information was not dispersed. As smoking regulations increase, interventions need to be implemented and based upon the needs of the smoker in order to successfully achieve the goal of decreasing exposure and consumption.

APPENDIX A
Smoking Study Flyer

ATTENTION SMOKERS

Looking for people who smoke, but can't at work, to participate in a study.

Must be:

- *at least 18 years old
- *smoke at least 10 cigarettes per day on average
- *work at least 8 hours a day
- *able to speak English
- *work in a factory, hospital, restaurant, or government building



The study involves an interview discussing your experiences at work relating to not being able to smoke. The interview lasts 20 to 60 min., depending on your responses.

If you are interested, please contact

konens11@uwosh.edu

University of Wisconsin Oshkosh Research Study

APPENDIX B
Informed Consent

Informed Consent

Sherry Konen, graduate student from the University of Wisconsin Oshkosh graduate College of Nursing, is conducting a study on the experience of smokers working in smoking regulated environments. The purpose of the study is to gain information regarding your experience. Your comments will provide medical professionals with information regarding the smoking regulation effect to you. Gaining an understanding of your experience will assist medical providers in creating and applying effective medical treatments to a growing group of individuals finding themselves unable to smoke.

1. The interview will be audiotape recorded. Your comments, personal information, and identity will remain confidential. Information that identifies you will not be released, without consent, to anyone not involved in the derivation of this study. Your employer is not affiliated with the conduction of this study and will not be given information that directly identifies you.
2. Your participation is completely voluntary. You do not have to participate and you may stop or withdraw from the study at any time. Your decision will not have an effect on your job performance or your employment status.
3. Participation in the study will require one meeting with the researcher, taking approximately one hour of your time.

If you have questions or concerns regarding your rights, please call me;
Sherry Konen (920)361-2467

If you have any complaints about your treatment as a participant in this study, please call
or write:

Chair, Institutional Review Board
For Protection of Human Participants
C/o Grants Office
UW Oshkosh
Oshkosh, WI 54901
(920) 424-1415

I have received an explanation of the study and agree to participate. I understand that my participation in this study is strictly voluntary. I agree to have the interview audio taped, and understand it will not be shared with anyone except those directly involved with the derivation and analysis of the study.

Date

Signature of person providing consent

Participant number _____

APPENDIX C
Demographic Questionnaire

Demographic Questionnaire

Age _____

Gender: Male _____ Female _____

Place of Employment _____

Number of years you have smoked _____

Amount you smoke per day _____

Number of hours you work each day _____

Longest period of abstinence in hours _____

Are you able to speak and understand English? _____

Where are you able to smoke at work? _____

When are you able to smoke at work? _____

REFERENCES

- Bauer, J. E., Hyland A., Li, Q., Steger, C., and Cummings, K. M. (2005, June 1). A longitudinal assessment of the impact of smoke-free worksite policies on tobacco use. *American Journal of Public Health, 95*(6), 1024-1029.
- Bringham, J., Gross, J., Stitzer, M. L., and Felch, L. J. (1994, May 23). Effects of a restricted work-site smoking policy on employees who smoke. *American Journal of Public Health, 84*(5), 773-778.
- Centers for Disease Control and Prevention. *State preemption fact sheet*. Retrieved July 6, 2009, from www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking.
- Centers for Disease Control and Prevention. *State smoke-free indoor air fact sheet*. Retrieved July 6, 2009, from www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking.
- Centers for Disease Control and Prevention. Tobacco use: Targeting the nation's leading killer. Retrieved July 6, 2009, from www.cdc.gov/nccdphp/publications/aag/osh.htm.
- COMMIT Research Group. (1995, February 1). Community intervention trial for smoking cessation (COMMIT): I. cohort results from a four-year community intervention. *American Journal of public Health, 85*(2), 183-192.

- Dalesio, E. (2009). NC, Wisconsin lawmakers pass smoking bans. *Real Clear Politics*. Retrieved March 24, 2010, from www.realclearpolitics.com/news/ap/us_news/2009/May/14/nc_wisconsin_lawmakers_pass_smoking_bans.htm
- DeSanto-Madeya, S. (2007, October 1). Using case studies based on a nursing conceptual model to teach medical-surgical nursing. *Nursing Science Quarterly*, 20(4), 324-329.
- EVS enterprise vocabulary services. In *NCI thesaurus*. Retrieved July 23, 2009, from <http://ncit.nci.nih.gov/>.
- Fichtenberg, C. M. & Glantz, S. A. (2002, July 27). Effect of smoke-free workplaces on smoking behavior: Systematic review. *BMJ*, 325, 188-191.
- Givel, M. (2007). Limited state progress in regulating secondhand tobacco smoke. *International Journal of Health Services*, 37(3), 469-476.
- Halcomb, K. A. (2005, May 23). Smoke-Free nurses. *AAOHN Journal*, 53(5), 209-212. *Medline plus*. Retrieved July 23, 2009, from <http://www2.merriam-webster.com/cgi-bin/mwmednlm?book=Medical&va=smokers>.
- Medicine plus*. Retrieved July 23, 2009, from <http://www2.merriam-webster.com/cgi-bin/mwmednlm?book+Medical&va=smokers>.
- NANDA (2009)-I Nursing diagnosis. North American Nursing Diagnosis Association. Blackwell Publishing.
- National Cancer Institute: U.S. National Institutes of Health. *Secondhand smoke: Questions and answers*. Retrieved July 6, 2009, from www.cancer.gov/cancertopics/factsheet/Tobacco/ETS.

National Cancer Institute: U.S. National Institutes of Health. *Smoking tobacco facts.*

Retrieved July 6, 2009, from www.cancer.gov/cancertopics/smoking.

Polit, D. F. & Beck, C. T. (2008). *Nursing research: Generating and assessing evidence for nursing practice (8th ed.)*. Philadelphia, PA: Lippincott Williams & Wilkins.

Roy, C., & Andrews, H. A., *The Roy adaptation model: the definitive statement.*

Connecticut: Appleton & Lange.

State smoking restrictions for private-sector worksites, restaurants, and bars: United States, 2004-2007. (2008, May 23). *MMWR*, 57(20), 549-552.

State-specific prevalence of current cigarette smoking among adults and secondhand smoke rules and policies in homes and workplaces: United States, 2005. (2006, October 27). *MMWR*, 55(42), 1148-151.

Stillman, F. A., Hartman, M. A., Graubard, B. I., Gilpin, D. M., Murray, D. M., & Gibson, J. T. (2003, November 19). Evaluation of the American stop smoking intervention study (ASSIST): A report of outcomes. *Journal of the National Cancer Institute*, 95(22), 1681-1691.

Streubert Speziale, H. J. & Carpenter, D. (2007). *Qualitative research in nursing: Advancing the humanistic imperative (4th ed.)*. Philadelphia, PA: Lippincott Williams & Wilkins.

Wordnet search. Retrieved July 23, 2009, from

<http://wordnetweb.princeton.edu/perl/webwn?o2=&o0=1&o7=&o5=&o1=1&o6=&o4=&o3=&s=employment>.

Zellers, L., Thomas, M. A. & Ashe, M. (2007, August 1). Legal risks to employers who allow smoking the workplace. *American Journal of Public Health*, 97(8), 1376-1382.