Perceptions of Nurse Behaviors by Persons with COPD During Acute Shortness of Breath

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PERCEPTIONS OF NURSE BEHAVIORS BY PERSONS
WITH COPD DURING ACUTE SHORTNESS OF BREATH

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A THESIS

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This study employed a qualitative approach to explore the perceptions of subjects with chronic obstructive pulmonary disease recalling nurse behaviors as a part of a process of helping during acute shortness of breath. Grounded theory was used to look at how a subject's world was constructed in this particular situation. Examination of data lead to the generation of a hypothesis to explain the process of helping. Subjects were asked what it was like when they were acutely short of breath and what nurse behaviors helped or didn't help them.

Identified sensations were categorized as suffocation, pain, energy depletion, panic, and cognitive haze. Helpful nurses used behaviors of use of self and use of professional actions to provide care. A process of intrapersonal connectedness created security, attachment, and trust in which the shortness of breath was decreased. This information may influence the practice of nurses who participate in COPD subjects' care.
DEDICATION

This thesis is dedicated to the people with chronic obstructive pulmonary disease
who shared their thoughts and experiences.

This thesis is also dedicated to nurses like Mary Jo Miedema who give the desirable
kind of nursing care described by these subjects.

Finally, this thesis is dedicated to the two tobacco industry executives who testified before
Congress. They are the only people left in our society who
haven't heard that cigarette smoking
is hazardous to your health.
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CHAPTER ONE
INTRODUCTION

Some nurses are routinely assigned by clinical managers to subjects with chronic breathing problems. Subjects seem to get better sooner or have better days when under these nurses' care. This study looks at subjects within a particular diagnosis related group to see if they can articulate the nurse behaviors that helped them get better. Subjects were asked to describe what happened in these situations so the process could be identified.

Background Information

Chronic Obstructive Pulmonary Disease (COPD) is the fifth leading cause of death in the United States. Sixty thousand U.S. citizens die each year of this disease. The course of the disease is 30 years or more with subjects experiencing progressive fatigue, activity intolerance, and respiratory distress for many years before death occurs (Rienzo, 1993).

Nurses frequently encounter COPD subjects who are experiencing acute shortness of breath related to infections as a result of the decreased ability of their bodies to protect themselves. Nurses often need to maintain COPD subjects on ventilators to accomplish oxygenation while antibiotics cure the infectious process. Nurses know that subjects with COPD are often difficult to wean from ventilators. The process is slow and involves adjusting from a rest on a machine which breathes for you to the normal breathing pattern which COPD clients perceive as requiring effort. Nurses understand that COPD subjects live with some shortness of breath as a normal breathing pattern.

Nurses who are able to help subjects through these periods of acute shortness of breath facilitate the desire of the subject for a rapid as possible discharge to home. Nurses
understand that COPD subjects' quality of life is enhanced if they are able to recover rapidly and resume their lives.

Nurses employ holistic measures to assist subjects to achieve the primary goal of a rapid as possible discharge from the hospital. Some nurse behaviors may be perceived by COPD subjects as being more beneficial to them than others during an episode of acute shortness of breath. Information obtained from research could provide nurses with knowledge about factors which influence the effectiveness of care provided to this population of subjects.

**Purpose**

The purpose of this study is to employ a qualitative approach to explore the perceptions of subjects as they recall nurse behaviors as a part of a process of helping during a period of acute shortness of breath.

**Justification**

A subject's perception of his or her illness is reflected in attitudes of challenge or deficiency (Leidy, 1990). For COPD subjects, anxiety and shortness of breath are closely associated. Anxiety increases the subjects' perceptions of how short of breath they are without changing the physical findings of shortness of breath (Gift, 1986). Subjects with COPD use repression, denial, and isolation to control emotions which might increase oxygen consumption (Hunter, 1989).

Positive nurse behaviors presumably yield positive subject reactions (Salyer, 1985). Nurse behaviors that are congruent with subjects' perceived needs are more likely to achieve desired outcomes. An ex post facto study by Salyer (1985) suggested that therapeutic communication assists with coping skills. Sensitive and individualized verbal and nonverbal communication increase the coping abilities of subjects with COPD (Salyer, 1985) thereby easing the sensations of breathlessness during acute shortness of breath. A qualitative study by Devito (1990) suggested that subjects view positively nurse behaviors...
which acknowledge their fear, helplessness, loss of vitality, preoccupation, and legitimacy. These behaviors assist with coping and control, thus easing the acute shortness of breath.

Further justification for ascertaining COPD subjects' perceptions about their acute shortness of breath comes from Erickson, Tomlin, and Swain (1988) who concluded that the nurse must know the world of the client from the subject's perspective. They theorize that each individual has a unique model of the world based on one's environment, one's experiences, past learnings, state of life, and perspective. The ability to adapt a healthier perception can occur when the nurse plans and implements interventions that are unique for each subject. This role-modeling, or changing of perception, requires unconditional acceptance of the subject while gently encouraging and facilitating growth and development at the subject's own pace and within the subject's own model of the world (Erickson, Tomlin, & Swain, 1988). Although subjects could be quizzed about their perceptions by having them chose from a list of nurse behaviors they found helpful or not helpful, a qualitative study might help ensure that important behaviors are not overlooked because of an incomplete list of behaviors.
CHAPTER TWO
DESIGN

Methods

For this qualitative research, a grounded theory approach was used to uncover the perceptions of COPD subjects relating to helpful nurse behaviors during an episode of acute shortness of breath. Grounded theory is a research method which looks at how a subject's world is constructed in any particular situation. Grounded theory assumes a process. The situation is discovered by asking the subject's view. The basic assumption of grounded theory is that there is more to be discovered. Data are collected by interviews, observational methods, or by examining documents and publications. Data are collected and analyzed simultaneously. For this study, data was collected from subjects and compared to data previously obtained from other subjects. Subjects were asked if what was true for another subject was true also for them. Using the process of constant comparison analysis, the researcher discovered similarities and differences among data and placed the data in categories. Data collection continues until a point of category saturation was reached and more categories were generated or data clustered around the same set of categories until no new categories appeared. These categories were reduced to the main categories and concepts were defined. A core variable of the process being discovered became dominant as data was further analyzed. A theory emerged from the data to explain the process of interest. The literature was then searched for any additional categories which were not generated by this study.
A major threat to this type of study, observer bias, was controlled by tape recording the subjects' responses. Descriptions of the recorded responses were used in the study to provide valid experiences which will be known by the reader.

Sample

Following methods used in a previous study (DeVito, 1990), subjects were sought who had been told by their physicians that they had some component of chronic obstructive pulmonary disease. Subjects were required to have experienced an episode of extreme shortness of breath during which time they interacted with a registered nurse. Apart from physical criteria and an ability to speak English, subjects were selected to be as different as possible so as to reflect the range of perspectives of subjects experiencing acute shortness of breath.

Because a purposive sample where subjects are picked to provide the greatest range of differences was not possible, a convenience sample of subjects was sought. Members of pulmonary support groups and pulmonary rehabilitation groups affiliated with metropolitan areas who might fit the criteria were approached. A request for subject participation was included in a newsletter for the pulmonary support group which reached over 300 members. After an introduction, potential subjects were invited to participate in the research. At that time, a consent form was read to them, questions answered, and consent forms signed. Approval for human subject use was obtained from Grand Valley State University according to the study requirements prior to meeting potential subjects. The recruitment of subjects was arranged with support group leaders and rehabilitation program coordinators so as not to disrupt any scheduled activities or meetings. Because data were collected from subjects until a point of category saturation was reached, the total number of subjects sufficient to complete the requirement was found to be 13. Nine females and four males ranging in ages from 37 to 78 participated in the study. Although the question was not asked as part of the study, many of the subjects volunteered information about current treatment for depression or a history of smoking. Many of
subjects also volunteered information about occupational backgrounds that they felt contributed to their lung disorders including working with paint, dust, paper and other particulates. Two stated their ethnicity as American Indian while the rest claimed a European ethnic background.

Procedure

After the subjects' consents were obtained, individual interviews were conducted in a setting agreed upon by the subjects. The subjects were interviewed during a non-acute phase of their illness during a prearranged visit. The researcher presented herself as a graduate nursing student who was gathering information from subjects with chronic lung disease about their perceptions and views of nurse behaviors during an episode of acute shortness of breath.

A semi-structured interview technique was used to encourage subjects to speak freely about their experiences. Two questions were asked by the investigator: What was it like when you were extremely short of breath? What nurse behaviors helped or didn't help your shortness of breath? The interviews were taped with permission of the subjects.

Risks

The major risks identified for COPD subjects were anxiety, tiredness, shortness of breath, loss of time, and confidentiality. Because their physical condition could be exacerbated when dealing with emotions, the interviews were planned to be discontinued if any untoward symptoms, (stated or exhibited anxiety or stated or exhibited increasing shortness of breath) appeared and indicated nurse behaviors (stopping the interview, reassurance, or pursed-lip breathing) would have been initiated. The subjects were assessed before the interview by asking if they were short of breath, anxious, or tired at that time. Confidentiality was ensured by coding interviews with numbers. Demographic information included only gender, age, and ethnicity. Time and energy was conserved by the limiting of interviews to approximately one-half hour in length. Subjects were
expected to find participation in the study helpful as they were able to review a difficult situation.

Trustworthiness

With grounded theory, all information comes from the data collected. Although a qualitative study cannot be replicated, the trustworthiness of the findings can be supported. Trustworthiness was supported by the criteria of credibility, transferability, dependability, and confirmability. Credibility addresses how confident one can be about the truth of the findings. Peer review by colleagues, experts in the field, was used to examine the category definitions to enhance credibility. Two nurses were asked to match data cards to category labels and match category labels to category definitions. Both nurses were able to provide information which simplified category labels and definitions. Ten nurses were asked to match the resulting categories to category definitions. The nurses were able to fairly consistently match labels to categories. Three subjects were asked to confirm the resulting description of the helping process. This confirmation by peers found agreement noted for the physiological findings experienced and a high degree of verification of the major nurse behaviors that were found to be helpful or not helpful. Transferability addresses the generalizability of the study and was supported by providing actual slices of data so others can make judgments about application of the findings. Excerpts of the subjects recorded interviews were used to accurately express the sensations of acute shortness of breath and the perceptions of subjects as they recalled nurse behaviors. Dependability addresses the stability of findings overtime and was supported by the use of an audit trail. To support dependability, memos were written, as data were collected, to explain the thought process behind the grouping of data which led to the writing of definitions from the properties expressed. Confirmability addresses the ability of others to confirm what happened by the use of the same audit trail of memos, a review of taped interviews, and an examination of the written thought process used in the summation of findings.
CHAPTER THREE
DATA ANALYSIS

The data were analyzed using the constant comparative method. Responses were transcribed from tape-recorded interviews and examined for key words or phrases that described the perceptions of the experience of extreme shortness of breath and the perceptions of helpful behaviors by nurses during the acute shortness of breath. These data bits were transferred to index cards and placed into groups that seemed to be similar. Each new group of data bits was then compared to previous data bits that seemed to be the same. As an underlying theme of the group of like data bits began to emerge, a memo was written to possibly explain the similarities in properties. Data collection continued until no new categories emerged. Upon completion of data collection, categories were re-examined, reduced, and new definitions of the main categories were proposed.

From the research question, "What was it like when you were extremely short of breath?", the subjects identified physiological and psychological sensations that occurred by recalling and relating the experience. The experience of acute shortness of breath was related as a life threatening situation in which the basic need of oxygen was denied in an ever increasing fashion. It was accompanied by physical pain from the labor of breathing and an extreme physical helplessness. The experience of acute shortness of breath continued to be described as an escalating feeling of panic with a developing sense of disorientation expressed as the inability to think clearly. Five categories were developed to describe the components of the experience of acute shortness of breath. These categories were labeled suffocation, pain, energy depletion, panic, and cognitive haze.
Physiological Sensations

Three categories of physiological sensations were identified by the subjects. The three categories under physiological sensations were labeled suffocation, pain, and energy depletion.

Suffocation

The subjects described their acute shortness of breath as "just like hitting a stone wall." "You just lose your breath." It feels like you're suffocating," It is very "hard to breath." "It is like getting hit with a baseball in your stomach." "It feels like someone is sitting on your chest." You "puff for air" but you "can't get breathe in." "You can't breathe in because your lungs are full." "Your lungs just close down. The windpipe is just closed down and it can't let any more oxygen in." "You want to breathe faster and faster." "I couldn't catch my breath." "You are constantly gasping for air." It is just "like drowning," like trying to breathe under water." You "want to breathe faster and faster, but there is no air in the world." From the statements of the subjects, suffocation was defined as an extreme inability to move oxygen into the lungs which was not relieved by exaggerated physical efforts and which moved from an increasing difficulty in breathing to an inability to breathe at all.

Pain

Some subjects complained of shoulder and back pain during extreme shortness of breath. "You get a lot of pain because your muscles are to trying to help you breathe." "It is really painful right between the shoulder blades because of the muscles." "When you are really short of breath, you get a lot of pain in your back between your shoulder blades." From the subjects' descriptions, pain was defined as a specific physical discomfort located near the shoulder blades with a range from mild to intense.

Energy Depletion

The subjects stated that the rest of the body suffered during the acute shortness of breath. As the work of breathing became extreme, the subjects reported an inability to
"even stand up". They stated that they were only able to concentrate on the effort of breathing. The subjects stated that they felt "stuck." They "didn't have the power to breathe." They felt like they were going to "pass out." They were "so tired" and felt "like they might keel over." "You have to stop." "You get light headed." You have "to come into the house and sit down." You "ain't got no energy to talk." The subjects stated that the expending of a great amount of energy to breathe resulted in the decreased energy to perform many of the other functions of the body during the acute shortness of breath. From the subjects' descriptions, energy depletion was defined as physical powerlessness of the body which ranged from difficulty in standing or moving to the inability to even speak.

**Psychological Sensations**

Two categories emerged to explain the psychological sensations which occurred during acute shortness of breath. These categories were labeled panic and cognitive haze.

**Panic**

The subjects expressed a common complaint about what they were feeling. "Oh, the panic." It was expressed as a "vicious cycle." "The harder it is to breathe, the more you panic." One subject remembered pleading, "Give me something. Give me something." "I was terrified." "It was so frightening." "The longer you are in this state, the worse it gets." "I was really scared. I thought it was my last." "They kept asking me questions when I couldn't breathe. That really irritated me." "Before they gave me any medications, they kept asking me questions and that really irritated me." "I felt so anxious and nervous." Anxiety caused by the inability to breathe accelerated into the feeling of panic. The subjects stated that panic decreased their ability to exert any control over the situation which resulted in greater shortness of breath. From the subjects' descriptions, panic was defined as an extreme feeling which started as nervousness and irritation which accelerated into a widespread fear with an increasing lack of self-control.
Cognitive Haze

The subjects reported a change in their ability to think clearly. The subjects stated that all kinds of "weird things seem to be happening." "Your head swims and you forget things." "You are in La-La land." "You are in flight city." "You don't know what to do." A subject stated that the change in thought process continued until you "become peaceful." Many expressed thoughts about death. "Lord, here I come." "I saw the white tunnel and everything." "I felt I was going to die." "You feel you are going to die." From the subjects' descriptions, cognitive haze was defined as a changing thought process which moved in character from an increasing confusion with a recognized inability to think clearly to the focusing on thoughts of impending death.

Nurse Behaviors

From the research question, "What nurse behaviors helped or didn't help your shortness of breath?", the subjects described nurse behaviors which helped them to gain control of the negative physiological and psychological sensations which accompanied acute shortness of breath. The nurse behaviors fell into two main categories which were labeled use of self and use of professional actions. Two subcategories developed which seem to describe the behaviors of use of self by the nurse which were labeled presence and manner. Two subcategories also developed to describe the behaviors of use of professional actions by the nurse which were labeled assessment and support.

Use of Self

When asked, subjects were able to describe how the behaviors of the nurse when giving care helped to decrease their acute shortness of breath. The category of use of self was divided into the sub-categories of presence and manner. The use of self by the nurse was recalled as either the physical or perceived presence of the nurse combined with the manner in which the nurse carried out professional activities. The presence of the nurse suggested safety because of an assumption of professional skills and an ability to act.
Presence.

The physical or perceived presence of the nurse was mentioned as a positive action for the subjects. The subjects stated that they wanted the nurse to be visible or near. The subjects seemed to say that it calmed and reassured them. In contrast, subjects stated that they felt themselves to be in further danger if they thought they were alone. "Be with me. Stay with me." Subjects said that they needed to "feel safe." "I like to know that if I need them they'll be there." "Just sit down, I'll do my thing. You just sit and ignore me for awhile." "My nurse pulled out a chair and sat down by me. She was right there." "The nurse said, 'if it makes you feel better, that's what I'm here for'." From the statements of subjects, the presence of the nurse reassured the subjects that their needs were a priority. From the descriptions of the subjects, presence was defined as the physical or perceived nearness of the nurse which suggested safety because of an immediate ability to act in case of acute shortness of breath.

Manner.

From the statements of the subjects, the manner of the nurse, known to the subjects by nonverbal or verbal communication, suggested self-assurance and self confidence in a professional ability to act positively. The subjects said that the nurse needed to be calm. "The main thing is for the nurse to go slow and be calm." "You nurses would be better off to mellow out and talk soft." "Be calm and cool, because your patient is a nervous wreck." "Just be quiet." "Just sit with the patient while they are upset." "Calm them down." "The nurses like that calm me instantly. I feel relaxed and comfortable ... just by them saying to relax and be calm." "They make you feel better with their bedside manner." From the statements of the subjects, the manner of the nurse suggested to the subjects that the nurse can handle the situation. In a situation where they must temporarily transfer their self-care to another person, the calmness displayed by some nurses reassured the subjects that they'd be all right. The outward calmness of the nurse was perceived as a sign of an inner ability to handle the situation. From the descriptions of the subjects, use
of self by the nurse was defined as the characteristics of the nurse involving the use presence and manner which were used to quickly create an external environment which positively affected the internal environment of the subjects.

Use of Professional Behaviors

When asked, subjects were able to recall the professional behaviors that nurses used to help decrease the subjects acute shortness of breath. The category of use of professional behaviors was divided into the sub-categories of assessment and support. The professional behaviors of the nurse were remembered as objective physical maneuvers which were thought or known to be helpful as well as verbal and nonverbal communication which was perceived as producing further helpful actions.

Assessment

Subject said that their nurse "checked on them." "She asked ahead of time how I was doing." "She asked what was the matter." "She asked if I was all right." The subjects talked about nonverbal behaviors of assessment. "She knows what is going on right now. She can look at my face and know." "She noticed I was not breathing right." "He knew by just looking. He was watching me." "She kept an eye on me." From the statements of the subjects, assessment was defined as verbal and nonverbal information gathering by which the nurse was able to plan and act for the individual needs of the subjects.

Support

Support was further divided into the subcategories of caring, acknowledging of legitimacy, listening, teaching, and doing. From the statements of the subjects, these actions of support were perceived as individualized according to the needs found by assessment.

Caring......"They acted like they really cared." "They sympathize with you. In contrast, some nurses "acted as if it was their job and they only had a couple of hours to go." "She said I was short of breath because of not moving around the way I was supposed to." "A couple of them made me feel like I was on an assembly line. It was just
their job." "She looked at me. I said, 'Help me.' I didn't say that I couldn't breathe because I couldn't talk anymore." The subjects said that they felt better if the nurse demonstrated a genuine display of concern for them as individuals.

**Acknowledging of legitimacy** "The nurse said that I had the right to be nervous and scared." "She said that if it made me feel better, that's what we're here for." The nurses like that calmed me instantly. I felt relaxed and comfortable ... just by them saying to relax and be calm." The subjects said that nurses who verbally acknowledged what they were experiencing helped their acute shortness of breath because they didn't have to expend energy trying to convince anyone.

**Listening** "She listened to me and respected me." "The nurses at this hospital just talked to me about the Lord because they know I'm a Christian. When I talk about the Lord, I relax. At other hospitals they said that we don't do it that way." "At this hospital, the nurses tell each other how I need to be done." "I told the nurses to rub my back to get up the phlegm." "I told them to rub my back for 10 or 15 seconds because it hurts from breathing." "The best thing as I told them was to turn me over and pat me on the back." Some nurse behaviors were reported as negative. The nurse "tried to push me into doing something that I didn't want to do ... something I didn't agree with." The nurse "argued with me." "Some of them seemed kind of bossy ... kind of nasty." "If the nurses could only see and understand, it would help them too, instead of making them lash out." "Listen and hear what I am saying." "Hear what I am saying, not just lip service." "One of the nicer nurses said, 'You can't worry about that now. You need to concentrate on one thing now and that is getting well.' I told the nurse to get me a phone so I could take care of my children and then I'd take care of me. I knew I needed to relax, but after I took care of what to do with my children. She got me the phone ... because she knew that I needed to do what was good for me." Some nurses "would do anything I asked them to do." The subjects stated that nurses who listened to them and supported their way of
coping were able to relieve their acute shortness of breath more satisfactorily than those who didn't listen to their stated needs.

**Teaching**

"She taught me how to relax and do pursed-lip breathing." "She taught me how to breathe slowly ... slowly." The nurse taught him to "hold my breath a little bit longer and then to let it go." "Drink something warm." "Drink lots of water." "Take your medications early in the day. It makes you feel better all day."

"Baby coughs, not hard ones. Hard ones constrict and you can't bring anything up." "Lay on one side and then the other and then cough two or three times." "Purse-lip breathe when you go up stairs." "They told me not to use my inhalers too much." "Stop and think ... pursed-lip breathing." "For a new patient, show them how to do it." "With this knowledge, a patient feels hope and learns to accept their limitations." "They accept their disease and can deal with it and start learning limitations. It works out better." The subjects stated that these teaching behaviors helped them to decrease the acute shortness of breath.

**Doing for**

"They usually wash me up for a few days till I get my breathing under control." "They put me right on oxygen ... gave me stuff in my veins ... gave me shots."

"They tapped me on the back to get phlegm up." "She told me to pursed-lip breathe and ... helped me get started." "Coach ... That is what a nurse could do in the hospital ... to think of it (pursed-lip breathing) because you aren't thinking at the time." "Pursed-lip breathing is all you have to say." The subjects said that they "just needed to be reminded." The subjects said that nurses who temporarily assumed the subjects' self-care activities, including helping them to pursed-lip breath, were viewed as most helpful. The subjects stated that this allowed the subjects to save their strength for the acute shortness of breath.

Support, from the subjects' descriptions, was defined as the physical actions, coupled with verbal and non-verbal actions, which established an environment where the individual needs of the subjects were known and acted upon.
Summary

The subjects of this study were able to recall and relate what they were experiencing when they were acutely short of breath. They also were able to recall and relate what nurse behaviors were helpful or not helpful during this acute shortness of breath. The categories that emerged involved physiological and psychological sensations which were labeled suffocation, pain, energy depletion, panic, and cognitive haze. From the subjects' statements, these sensations interrupted the subjects' usual routine of self-care and was seen as a life threatening experience. The subjects stated that the acute shortness of breath was seen as a being part of cycle which they could not break alone. The subjects stated that they sought interventions within the health care system to decrease the acute shortness of breath.

The subjects said that nurses are part of the health care team who are seen to assist in decreasing the acute shortness of breath. The subjects stated that the behaviors that nurses performed and the way they performed these behaviors were seen as helpful to decrease the acute shortness of breath. From the subjects' descriptions, the nurse, by the use of self and by the use of professional actions, created an environment of security, attachment, and trust. By the creation of this environment the subjects were able to temporarily transfer self-care to nurses who intervened to successfully decrease the acute shortness of breath.
CHAPTER FOUR
LITERATURE REVIEW

The literature was searched for additional categories that had emerged from similar studies regarding the experience of acute shortness of breath and nurse behaviors identified as helpful or non-helpful. All additional categories found regarding the sensations of acute shortness of breath seemed to fit the physiological and psychological categories related in this study. Nurse behaviors were found which were fairly consistent with the professional behaviors related as helpful in this study. Nurse behaviors were not found which seem to express the behavior of use of self by the nurse.

Additional Categories

A study by Brown, Carrieri, Janson-Bjerklie, and Dodd (1986) added the additional category of loss of appetite during acute shortness of breath. This convenience sample of 30 adults with a diagnosis of lung cancer also described sensations of anger and depression. While the subjects of this current study did not describe the sensations of anger during acute shortness of breath, they did talk of depression as they tried to deal with the chronic state of their illness which meant to them a loss of the previous lifestyle and the necessity to change expectations for the future. None of the current subjects spoke of gastrointestinal complaints during acute shortness of breath.

In an article by Gift and Nield (1990), subjects recalled sensations of frustration, worry, and anger. They also spoke of depression as accompanying the acute shortness of breath, but the author noted the possible connection of depression and the use of steroids in relationship to this sensation.
A study by Jason-Bjerklie, Carrieri, and Hudes (1985) reported similar sensations of shortness of breath with the addition of chest tightness which was more often reported by persons with a diagnosis of asthma. This subject group also reported the sensation of gastrointestinal complaints but this was not clarified as nausea or loss of appetite. Women in this study reported the sensation of a loud heart beat, while men described more frequently the sensation of numbness and tingling in association with acute shortness of breath. This subject group also reported anger and worry as sensations of acute shortness of breath.

An article by Gift (1991) presented acute shortness of breath as the nursing diagnosis of dyspnea. The etiologies of the diagnosis were stated as having neurosensory, neurochemical, cognitive, and affective components. The defining characteristics were listed as the subjective experience of acute shortness of breath described in terms of intensity and subjective qualities. Smothering and congestion were additional sensations stated by this group. Objective sensations included the increased use of accessory muscles, a change in respiratory pattern, and a change in heart rate.

Nurse Behaviors Described In the Literature

From a previous study by DeVito (1990), 96 adult subjects were quizzed to describe their recollections of acute shortness of breath and their perceptions of nurse behaviors. Five distinct categories were reported as surfacing during the investigation: fear, helplessness, loss of vitality, preoccupation, and legitimacy. Fear was recalled as a sensation which was found to accentuate the acute shortness of breath. Nurses who acknowledged subjects' fears, gave positive reinforcement for efforts, and breathed with subjects were reported to help subjects relax which decreased the acute shortness of breath. The sensation of helplessness was recalled in this study as a loss of control which could not be changed by mind over matter techniques. The subjects stated that nurses who acknowledged the subjects' helplessness and provided emotional support were remembered to be most helpful and preferred by the subjects. The subjects furthered
stated that nurses who reassured and waited until the acute shortness of breath was decreased to teach preventative measures were also helpful. The loss of vitality was remembered by the subjects as the loss of the power to live. These subjects requested that nurses acknowledge the seriousness of the situation and view it as a matter of life and death. Preoccupation was described by the subjects of this study as the taking up of all of the attention of the individual in the attempt to breathe. Nurses were seen by the subjects to be most helpful if they allowed the subjects to concentrate on their breathing and not attempt to divert them. The suggestion by nurses to relax and forget it was not seen as helpful by the subjects. Some of the subjects wanted to seek isolation to be able to get control of their acute shortness of breath. The need to be taken seriously as to the significance of the acute shortness of breath was labeled as the category of legitimacy. These subjects said that they felt the need to convince the nurses of the severity of the acute shortness of breath. Because acute shortness of breath is a subjective experience which can't be fully understood unless experienced, these subjects said that convincing others of legitimacy was a struggle.

From the study by Brown, Carrieri, Janson-Bjerklie, and Dodd (1986), only 10% of the subjects said that they had received any education from health professionals. None of the subjects identified any useful behaviors taught by nurses. Behaviors used by the subjects themselves for short term management of symptoms included changing of position and slowing of activity.

An article by Foote, Sexton, and Pawlik (1986) described the mechanisms of acute shortness of breath as chemical, mechanical, and emotional which combine to produce the sensations of acute shortness of breath. The changes in oxygen and carbon dioxide concentrations in the blood caused the person to breathe forcefully. The added exertion of the respiratory muscles caused the sensation of air hunger. Airway obstruction and decreased compliance of the lung caused the respiratory muscles to exert greater effort to achieve adequate ventilation. Acute shortness of breath focused attention on the breathing
process when the mechanisms of the breathing process were interfered with by mechanical and chemical changes. The sensation of acute shortness of breath often leads to extreme anxiety. The management behaviors offered to nurses from this article focused on teaching pursed-lip and diaphragmatic breathing, position change, emotional support with an emphasis on never leaving the patient alone, relaxation techniques, information about planning activities, and oxygen therapy. The nurse behaviors suggested focused on teaching as a way to prevent future acute shortness of breath.

Gift (1990) stated that the sensations of acute shortness of breath can be blunted by the condition of the chronic state. The same acute shortness of breath under different conditions can trigger different sensations of acute shortness of breath with varying intensities. The author divided the coping strategies of acutely short of breath subjects into problem-focused and emotion-focused behaviors to handle the immediate acute shortness of breath. The list of self-initiated behaviors reported included the behavior of distancing from aggravating factors whether emotional or environmental. Suggested nurse behaviors for support of the acutely short of breath subject included pharmacological therapy, oxygen therapy, physical behaviors of positioning, circulating air on the cheek, and chest wall vibration. The psychological behaviors offered included mental and progressive muscle relation. Providing reassurance that assistance was near at all times in the home and in the hospital was stated as a behavior to reducing anxiety.

Another study by Carrieri and Janson-Bjerklie (1986) described the coping behaviors of 68 persons with acute shortness of breath and a diagnosis of a pulmonary disease. The immediate behaviors identified for problem focused coping were position and motion changes, breath slowing behaviors, physical distancing from aggravating factors, and self-selected treatments. The emotional coping behaviors stated were self isolation in an attempt to gain control over breathing and tension reduction behaviors to calm themselves down. The point was made that 19% of the subjects who attended formal classes in the management of their pulmonary disease reported more behaviors for coping. Self-selected
coping behaviors can be viewed as clues to what nurse behaviors might be used to support
the subjects' attempts of coping.

From the article by Gift and Nield (1991) presenting acute shortness of breath as the
nursing diagnosis of dyspnea, nurse behaviors suggested included energy conservation by
the pacing of activities and slowing of movements, positioning according to the subjects' preference, and breathing behaviors such as pursed lip breathing. The use of progressive
muscle relaxation was seen as a nurse-initiated behavior for stable subjects to reduce
anxiety and acute shortness of breath.

Summary

From the articles reviewed, additional categories were discovered which were not
found directly in this study. One such category was helplessness. Helplessness in a study
by Devito (1990) was described as an inability to mentally control the episode of acute
shortness of breath in reaction to being told to so directly. The right to be taken
legitimately was spoken of as a struggle in an attempt to make others believe in the critical
nature of the situation (Devito, 1990). Anger, worry, and frustration were also reported
as additional emotional categories of acute shortness of breath (Gift & Nield, 1990).
Other physical categories found were the gender clustering of a loud heart beat and the
tingling of extremities (Jason-Bjerklie, Carrieri, & Hudes, 1985). The chest tightness
reported was found almost exclusively with persons with asthma (Jason-Bjerklie, Carrieri,
& Hudes, 1990). Depression was mentioned (Gift & Nield, 1990) as a possible
connection to steroid use. The category of gastrointestinal sensations was another major
category found by this literature search (Jason-Bjerklie, Carrieri, & Hudes, 1985). A
larger sample of subjects for this study might have revealed these additional categories.
All new categories found seem to fit into the general categories of physiological and
psychological sensations produced by acute shortness of breath which were reported by
this study.
Nurse behaviors suggested for the diagnosis of dyspnea or acute shortness of breath focused on pharmacological therapy, oxygen therapy, positioning and activity changes, and relaxation techniques. Two physical nurse behaviors suggested specially were chest wall percussion and the providing of air movement on the cheek. The behaviors mentioned for this nursing diagnosis focused on the behaviors of professional actions by the nurse in providing care. None of the articles focused on the behaviors of use of self by the nurse in providing care.
From this study and the search of similar literature, it appeared that the experience of acute shortness of breath had both physiological and psychological components. With respect to nurse behaviors which were found to be helpful or not helpful, this study and the literature search found similar physical behaviors which addressed the needs of the subjects. Typically, nurse behaviors described as helpful were aimed at decreasing the physiological and psychological sensations of the acute shortness of breath. What was suggested from this study was that the subjects were very sensitive and responsive to how the nurse behaviors were delivered.

The phenomenon of interest of this study was the observation that some nurses seem to assist persons with acute shortness of breath better than others as evidenced by the subjects' recalled experiences. The findings in this study suggest that the ability of some nurses to be more effective in caring for people experiencing acute shortness of breath is dependent on an interactional process. The process described by the subjects was labeled intrapersonal connectedness. The communication of the nurse's professional actions and use of self by presence and manner conveyed a message of safety, trust, and attachment.

Intrapersonal Connectedness

Through the combined use self and professional actions, the nurse was able to create an environment which was experienced positively by the subjects. It was an environment in which security, attachment, and trust was felt by the subjects. The creation of this environment allowed a process of intrapersonal connectedness of the subjects to the nurse to occur. When the subjects experienced this intrapersonal connectedness with the nurse,
they were able to temporarily transfer self-care until the acute shortness of breath was decreased.

Hypothesis Generation

The main hypothesis generated from this study was that nurses who combine presence and a calming manner with assessment and supportive actions will be perceived as being more helpful to subjects experiencing acute shortness of breath. The success of nurses in dealing with acute shortness of breath seems to be more than just the delivery of known behaviors to reduce the sensations of acute shortness of breath. The subjects stated that positioning and activity slowing were often self-initiated behaviors employed before or during their encounters with nurses. The subjects used home oxygen therapy, if available, and tried to calm themselves as part of self-selected behaviors. Additional pharmacological agents were valued, but progressive relaxation was not mentioned by the subjects as a behavior sought during acute shortness of breath. The subjects seemed to say that they recognized that at times they needed help beyond what they could do for themselves. The help they wanted from nurses was the help of competent individuals who would monitor them and support them with all available behaviors until the acute shortness of breath passed. Competency was conveyed by the nurse by a calm, professional manner. Assessment, which ensured safety, was displayed by the continual visual and verbal monitoring by the nurse. Supporting behaviors by the nurse connoted caring, which meant a connectedness and a reassurance that the nurse would act because the subject was known to the nurse as a person. Being listened to by the nurse meant that care delivered would be individualized and unique to the subjects' needs. Acknowledgment of legitimacy of the situation told the subjects that they were being taken seriously. The coaching of pursed lip breathing during the acute shortness of breath was viewed as very helpful when the panic disabled the subjects from doing this for themselves. The performance of physical maneuvers such as placing oxygen, giving medications, and chest vibration were expected professional behaviors which were viewed
as support. In total, the interaction with the nurse was viewed as resulting in a temporary transfer of self-care to a professional who could provide help. See Figure 1 for the components of the interactive process which facilitates the decreasing of the acute shortness of breath.
The components of the interactive process which results in the decrease of acute shortness of breath.

Figure 1
Application to Practice

If it is shown that how care is delivered to clients experiencing acute shortness of breath is as important as what nurse behaviors are used to decrease acute shortness of breath, plans for inclusion of this information in the education of nurses might be considered. Just as nurses can be taught the appropriate use of humor to relieve tension, nurses can be taught mannerisms comprised of verbal and nonverbal communication to convey a desired message of calmness and competence. Nurses can be taught that it is important to talk softly and slowly in a situation when a client is showing signs of panic. Nurses can be taught physical behaviors which convey messages of assessment. The movement of the nurse's eyes over equipment and over the client's face translates into assessment. The behavior of slowly and deliberately handling of equipment conveys the message of competence. The behavior of visually appearing in the doorway periodically, while giving a long look directly at the client, can be taught to the nurse who is not able to sit by the bedside. Other behaviors which show support include quiet listening with eye contact, verbal acknowledgment of the emotions and the shortness of breath observed, inferred caring by light touch or eye contact, and the primary behavior of teaching coached pursed lip breathing. While confidence and competence are the result of experience, the behaviors which convey these messages can be taught until they come from practice experience. Just as we teach that music can be beneficial because of its effects on relaxation, we can also teach nurses that the way nursing behaviors are carried out is just as important as what we do to produce the desired effects for our COPD clients. The use of these behaviors by nurses is important to the clients because they allow the clients to become calm and get control again of the acute shortness of breath.

The subjects were very clear in expressing the value of pursed-lip breathing. They also expressed the fact that they did not learn this behavior from nurses that they met early in their disease process. Nurses are held to a standard of care for teaching this behavior. It is taught as a behavior of assistance to those who are chronically short of breath. The
nursing profession, as well as the individual nurse, could examine teaching records and standards of care to evaluate the performance of the profession in meeting this requirement. Nurses might ask how often in practice is this behavior taught by the individual nurse. Schools of nursing might examine the message given to student nurses as to the importance of the use of this behavior for COPD clients. From what these subjects were saying, the majority of nurses encountered were not routinely teaching this behavior. The subjects stated that this was the most beneficial behavior for getting the acute shortness of breath under control again.

The subjects also stated how important it was to be treated with respect for their uniqueness and individuality. The subjects tried to communicate to nurses what they thought would help them individually during the acute shortness of breath. They recalled vividly the times when they met objections to their requests or were told about rules to be followed. They complained about this often enough to suggest a need to evaluate care regarding individualized care of each client. While nurses are taught to individualize care, this group of subjects reported many incidences of not being listened to or being made to feel that the nurses saw the interactions as just part of a job. While the nursing profession can't be faulted for not teaching the need to see and treat the individual, the nursing profession can look at how nurses practice. Articles which explicate the statements of subjects and how they feel about how they are treated, might be beneficial to the profession as we reinforce this standard for peers. Satisfaction surveys could be distributed from any area where nursing care is delivered. Health care consumers can demand quality care. Nurses could welcome consumer evaluation as an opportunity to prove and improve the quality of care.

Limitations of the Study

The self-selected, limited, convenience sample did not enable the researcher to assess cultural differences in the experience of sensations associated with acute shortness of breath or in the perceived helpfulness of specific nursing behaviors. Ethnically related, self-
selected coping behaviors which could translate into potential helpful nurse behaviors might have been missed. The sample also did not include those from outside established support groups. Other subjects who experience acute shortness of breath might report different sensations and helpful nurse behaviors.

Although the sample size was based on reaching a point of category saturation, it might have been sufficient to capture all the differences that could be obtained relating to age and generational issues. The emergence of the baby boomers into the consumer role in the health care setting might have an impact on the definition of what is considered helpful nurse behaviors. While another generation might have received health care in a more passive manner, this generation might continue in the self-help manner for which it is known. Also, they are described as more assertive in expressing their needs as a group.

A larger sample might have revealed some gender issues regarding helpful nurse behaviors. The major differences expected to be revealed might have been in the area of perceived support. While there were few physical differences reported by the subjects or found by the literature research, the issue of what would be helpful support might be culturally bound by society's expectation for the roles assigned according to gender.

Recommendations for Research

Research could be undertaken to test the hypothesis generated from this study. COPD subjects could be asked in exit interviews to select from a list a delineated nurse behaviors those they had experienced or found helpful. COPD subjects could be asked to describe the nurses they found particularly helpful. The subjects of the present study readily talked about the nurses who they remember as being helpful. They described nurses who seemed to understand that they needed the door open or who acknowledged them by name with familiarity. They also expressed understanding for beginning nurses' lack of expertise and applauded those nurses who were able to listen to subjects and peers for guidance for how to proceed.
Studies might be undertaken to discover what nurses are teaching clients with chronic obstructive pulmonary disease. The majority of the subjects stated that they valued being taught the behavior of pursed lip breathing. Most of the subjects expressed surprise that this behavior was not taught to them by nurses they met earlier in their disease process. They also reported that they knew of others with lung problems who had not been taught this behavior at all. Nurses are taught to use and teach this behavior in medical-surgical nursing classes. The subjects in this study seemed to be saying that nurses are not routinely teaching clients this behavior.

Studies might be undertaken to discover what behaviors nurses are using as they provide care during an acute episode of shortness of breath. The subjects reported that the main nursing behavior being taught to nurses, positioning and activity slowing, are self-initiated behaviors which only need to be supported by nurses. A study could be undertaken to compare and contrast the knowledge being taught to nursing students and the behaviors being performed by practicing nurses.

Nurses who are known to exhibit behaviors helpful to subjects experiencing acute shortness of breath might be quizzed to break down these behaviors into steps which can be taught. These nurses could be identified by exit interviews of COPD clients or by peer recognition. These identified nurse experts could provide information which could be taught through medical-surgical classes and from articles published in research journals for advanced practitioners.

The Lived Experience From the Accounts of Subjects

The last subject of this study shared thoughts which speak directly to the nursing profession. The subject said that she was "new to this whole thing." "I have yet to reconcile myself to the real facts of my illness. I've worked all of my life so that I could do things when the kids were grown. I was a single mom. Now I'm sick and can't do the things I wanted. My kids don't realize that I'm not just depressed, but really ill with a
chronic, progressive condition. They think I'm not doing things because I'm just depressed and don't want to. I don't have the strength or the breath.

The subject stated that she had made attempts to get information and gain some sense of control of the situation. She learned by herself to keep her house cool and use a circulating fan. She gathered information. She inquired if other people had experienced claustrophobia in the shower. She wondered if it was from the heat or from the curtain being closed. "I thought I was going crazy because of this." She was eager to hear if others had similar experiences. She said that she was resisting the use of oxygen because she didn't want to look like "a freak" or stand out in any way. She said that some nurses at her doctor's office made her feel like she was just a part of a job while other nurses acknowledged her as a person. Some nurses readily kept exam room doors open for her when she asked, while others said they must close the doors even when she begged them not to. She had learned the behavior of drinking lots of water. "It helps me cough phlegm up." She had not been taught pursed-lip breathing and practiced after simplified coaching. She listened to information about pulmonary support groups who met socially for pool parties or meals. She listened to information shared by other pulmonary patients about how they carefully monitored the weather conditions, dressed in loose clothing, and handled depression. "It helps when someone is here. It helped me to talk."

Some of the subjects of the study described themselves as "old pros" who could cite chapter and verse in laymen terms on how to deal with the chronic progressive disease. They said that they laughed and smiled and dealt with it. Some of the subjects were clients who stated that they were not that far away from their working lives that they would easily let others take away their right of compassionate care or service. They stated that they needed little prodding to express themselves in a non-emotional way. They said that they expressed their needs often and in an assertive manner. They said that they sought alternative therapies including homeopathy, acupressure, and vitamin therapy. They said that they did not hesitate to suggest to their physicians new therapies they had
read about. Others stated that they were only learning to be assertive. They said that they had accepted encouragement to see themselves as the consumers of a service who could demand quality and personalized care from any of the health care team. Some stated that they still struggled with the transition of being contributing working members of society to the new self image of being a dignified member of society who must now accept public assistance. Some said that they did not have money for food or gas that week. Some stated that they were alone. Some said that they had friends or significant others to support them. They said that they ranged in ages from the thirties to the seventies. All of them stated that were short of breath as a matter of life.

Summary

The nursing profession has an opportunity for growth provided by the recalled experiences of these subjects. As a profession, nurses welcome the challenge to provide the needed care COPD subjects so eloquently state. As client advocates, nurses welcome this glimpse into the lives of COPD clients. Nurses are challenged as a profession to educate themselves and monitor their performances. While some nurses may more instinctively provide the care required by clients with chronic obstructive lung disease, the nursing profession in general can work to improve care by responding to the suggestions of the clients nurses serve.
List of References


INFORMED CONSENT FORM:

**Project Title:** Sensations during acute shortness of breath and reflections on nursing behaviors.

**INVESTIGATOR:** Joyce A. Kowatch, RN, BSN        Phone: 454-0109

This study is being conducted to help nurses understand what it feels like when a person has difficulty breathing and what might help. This information is needed before nurses can plan ways to be more helpful to COPD clients. Interviews will last no longer than a half-hour in length. Questions will be asked about what you were experiencing and what nurses did for you at that time. These interviews will be tape recorded and coded with numbers for confidentiality. These tapes will be destroyed at the end of the research. Anonymous quotations will be used in this research project and potential publications. There may be no direct benefit to you, but a greater understanding may improve the care which people receive in the future.

THIS IS TO CERTIFY THAT I,________________________________________________________, HEREBY agree to participate in the above project. I understand that no health risks to me are anticipated as a result of my participation. I can stop at any time if I get tired or change my mind about participating and there will be no penalty to me. I give my permission for these interviews to be taped. I understand that at the completion of research, these tapes will be destroyed. I understand that the information may be published, but that no names will be attached. I understand that I am free to not answer any questions. I have been given the opportunity to ask any questions I desire, and all such questions have been answered to my satisfaction.

________________________________________  ____________________________  ________________
Participant                        Witness                        Researcher

Date __________________________