

The Meaning of the Lived Experience of Mental Imagery

For Persons with Asthma: A Phenomenological Study

By

Gerald Epstein, M.D.

Assistant Clinical Professor of Psychiatry, Mount Sinai Medical Center, New York,
New York

Founder and Director, American Institute for Mental Imagery, New York, New
York

Elizabeth Ann Manhart Barrett, R.N., Ph.D., F.A.A.N.

Professor and Coordinator, Center for Nursing Research, Hunter College of the
City University of New York, New York, New York

James P. Halper, M.D.

Chief, Psychiatry Outpatient Department, Lenox Hill Hospital, New York, New York

Assistant Professor of Psychiatry, New York University, New York, New York

Nathan S. Seriff, M.D.

Chief, Pulmonary Section, Department of Medicine,
Lenox Hill Hospital, New York, New York

Kim Phillips, B.A.

Research Coordinator, Asthma Study, Lenox Hill Hospital, New York, New York

Stephen Lowenstein, M.S., R.R.T.

Director, Pulmonary Laboratory, Lenox Hill Hospital, New York, New York

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Abstract

The purpose of this phenomenological study was to discover the meaning of the lived experience of mental imagery for persons with bronchial asthma who had been subjects in another study. We used a qualitative approach designed to determine the phenomenological aspects of the experience using the phenomenological method TK described below. Asthma was chosen because of its increasing prevalence and morbidity despite the plethora of conventional treatments available XX and the senior author's clinical experience indicating the efficacy of mental imagery as a treatment for asthma.

Fifteen participants (88%) in the experimental group of a quantitative study of mental imagery in persons with bronchial asthma also participated in a qualitative study. They completed written responses to three phenomenological questions concerning the meaning of their experience of mental imagery during the earlier quantitative study. By "phenomenology" we mean: the meaning of the lived universal life experience at any given moment or instant of its occurrence. To understand the effects of mental imagery in adults with asthma required our asking research questions that could be answered by using various quantitative and qualitative designs (Halper et al., 1993). In this article, we report findings of the qualitative questions involving issues of meaning, of experience, of behavior, and of individual difference (Vickers, 1995). The primary research questions were phenomenological and concerned the meaning of the experience of imagery and a description of the sense of personal power if enhanced through the imagery process. Findings from a separate quantitative study are to be reported elsewhere. All imagery sessions were conducted by Gerald Epstein.

METHOD

Phenomenological Research Methodology

Introduction

The phenomenological method of inquiry first emerged in the latter part of the nineteenth century in the writings of Brentano and was further developed by Husserl and Heidegger (Parse, Coyne, and Smith, 1985, citing Spiegelberg, 1976 and Heidegger, 1962). Currently, there are numerous modifications of the method (Colazzi, 1978; Giorgi, 1970; Parse, 1995; Spiegelberg, 1976; von Kaam, 1959, 1969) as well as a generic approach that was used in this study.

The purpose of phenomenological research is to discover the meaning of the lived

experience of phenomena through analyses of subjects' descriptions without applying the predictive prescriptions of quantitative methods. By using oral or written descriptions as raw data, there is "a deliberate move away from quantification, testing of hypotheses," and search for causal relationships (Parse, Coyne, and Smith, 1985, p. 16).

The study is structured by formulating research questions designed to elucidate lived experiences. Persons in the sample must be able and willing to provide detailed information about the phenomenon after informed consent is obtained (Morse, 1989).

Data Collection

The formal research question is rephrased in words that instruct the participant to describe the phenomena orally or in writing. There is no specified time allowance and no additional directions are offered as to how to respond.

Informational Adequacy

Data collection continues until saturation, defined as "not hearing anything new," is reached (Morse, 1989, p. 23). This redundancy is a repetition that indicates the sample size is sufficient since informational adequacy has been achieved.

Data Analysis

Data analysis requires "contemplative dwelling with the data." This "is the undistracted reading and re-reading of the descriptions with the intent to uncover the meaning of the lived experiences for the subject. The contemplative dwelling frees the researcher to be open to both the tacit and explicit messages in the data" (Parse, Coyne, and Smith, 1985, p. 19).

The major processes of data analysis in the phenomenological method includes intuiting, analyzing, and describing. "Intuiting is the process of coming to know the phenomenon. ... and requires concentration and strict adherence to the surfacing meaning ... as it shows itself in the descriptions of subjects ... by openly looking, listening, and feeling" (Parse, Coyne, and Smith, 1985, pp. 19-20).

Analyzing is examination of the phenomenon's structure according to its configuration and components. Describing, integral to intuiting and analyzing, with a process of connecting the phenomenon and everything which is denoted or connoted" (Spiegelberg, 1976, p.673). Describing results is defining the elements and structure of the lived experience (Parse, Coyne, and Smith, 1985).

During analysis bracketing is employed to facilitate the consideration of all available perspectives of the phenomenon for the researchers and the researcher's presuppositions (Parse, Coyne, and Smith, 1985). By "bracketing out" prejudgments, phenomenologists can be accurate receptors of the phenomenon (Cohen, 1987). However, some suggest that the researcher's own experience is an important source of data and a guide to analysis (Bergum, 1989; Reinharz, 1979). Another perspective maintains that bracketing is not possible and advocates immersion in one's theoretical beliefs as a portrait lens (Butcher, 1994).

Some researchers propose a final activity, hermeneutical interpretation, that requires the researcher to go from the concrete language of the participants and make an intuitive leap to the abstract language of the researcher. This leads to structural definitions or structural descriptions which are the answers to the formal research questions. Theories can then be used to discuss the meaning of the findings (Parse, 1995; Parse, Coyne, and Smith, 1985).

In the van Kaam (1969) modification of the phenomenological method, after intuiting, analyzing, and describing, the researcher abstracts descriptive expressions, names the common elements, and identifies the structural definitions or structured description of the phenomenon as a lived experience. Judges are used for verification of findings (Parse, Coyne, and Smith, 1985). The van Kaam modification is similar to the generic phenomenological method used in this study.

Methodology Employed in This Study

Each of the subjects in the experimental group of the quantitative study met with Dr. Epstein for imagery sessions four times over a sixteen-week period. Two months after completion of the quantitative study, participants from the imagery group were contacted by the research coordinator via telephone and were invited to participate in a phenomenological qualitative study. Informed consent was obtained. In order to assure anonymity, all participants were assigned a new identification number that was not connected to either their name or previous identification number.

Seeking answers to three formal research questions, participants were asked to write responses to specific statements.

Research Question 1. What are the common elements in experiencing the meaning of mental imagery as a treatment for disease?

Statement to Participant. Describe the meaning that the experience of

imagery has had for you during this research study.

Research Question 2. How and why is mental imagery experienced as valuable in the treatment of disease?

Statement to Participant. Describe one time during this study when the imagery experience had particular value for you. Write everything you can remember and include all your thoughts and feelings. Tell us how and why you think the imagery helped you.

Research Question 3. If mental imagery facilitates the experience of power, what are common elements of power experienced in relation to imagery?

Statement to Participant. If imagery helped you to feel a sense of personal power in your life, please describe what this has been like for you. Share all the thoughts, perceptions, and feelings of power you can recall until you have no more to say.

Data were systematically analyzed through three successive stages of synthesis. In stage 1, analysis of the written responses was performed separately by two members of the research team who read responses and independently recorded all comments verbatim, coding them to the participants' anonymous ID numbers to allow for later independent verification by the other researcher. The two researchers then met and compared their recording of responses for each participant. Interrater reliability was estimated at 95 percent rate of agreement.

In stage 2, the researcher, Dr. Barrett, who had not met with the participants at any time during the study, synthesized the comments and extracted themes or common elements. This was accomplished through contemplative dwelling with the data along with the processes of intuiting, analyzing, and describing. The other researcher, K. Phillips, also synthesized comments and extracted common elements. The two researchers again communicated and found that they had each developed similar themes (common elements). Comments abstracted by Phillips could be listed under the common elements identified by Barrett, and the decision was made to accept Barrett's analysis scheme.

Finally, in stage 3, the formal research questions were answered by the development of three structural descriptions of the phenomenon as lived experiences. Dr. Halper, who had been involved in the qualitative study prior to completion of data analysis, served as a judge and followed an audit trail through the data collection and data analysis phases. He verified that the researchers' conclusions were possible based on the data.

It is important to note that saturation of responses appeared to be approached

although it cannot be certain that it was reached. Researchers bracketed their own beliefs to the extent possible so as to prevent undue bias.

Before presenting the results, a brief review of the imagery protocol will be described to acquaint the reader with the subjects' previous participation in the quantitative study of the effects of mental imagery on patients with bronchial asthma. This protocol consisted of seven imagery exercises that were given singly or in combination according to how Dr. Epstein assessed the need during his initial interview contact with each subject. These exercises were to be done three times a day for one to two minutes for cycles of twenty-one days followed by a seven-day period of no imagery activity. Here are the seven:

a) Taking a Weight Off Your Chest

Close your eyes and breathe out three times slowly. See and sense a weight on and in your chest. Feel and sense the constriction it gives you. Breathe out one time slowly and remove this weight. See and sense your lungs expanding and filling with white light as you find your breathing becoming easy and flowing. Then, open your eyes.

b) Cleaning the Airways

Close your eyes and breathe out three times slowly. Taking a light with you, enter your body through your mouth and see your way to your bronchial tree. See the mucous that has accumulated there and its color. Have now a big glass syringe with a golden bulb at the end, and suck up and out all the mucous deposits and put the waste in a container that you have with you. After finishing, have a golden air gun and spray a jet of warm air throughout the bronchial tree, making the whole area dry. Use your light to see everything that you are doing. See and sense your chest wall and rib cage expanding like a bellows in all directions, allowing your lungs to fully expand and fill with white light. Then, see your lungs contracting, forcing out the carbon dioxide that comes out as a black stream. At the end of exhalation, squeeze your lungs with transparent fingers to get rid of the last bit of trapped carbon dioxide, expelled as a jet of black smoke. Repeat this "bellows breathing twice more. Then, come out the way you came in, using your light to see your way, and take the waste container with you. When you are outside of your body, bury this container in the earth. Then, breathe out slowly and open your eyes.

c. New Lungs

Close your eyes and breathe out three times slowly. See, sense, and feel your stomach flipping over and coming above your diaphragm into your chest. Breathe out one time slowly and see the stomach split in two vertically, each piece

becoming a new lung and see them jumping into place. Breathe out slowly and open your eyes, sensing the easy breathing these new lungs give to you.

d) The Birch Tree

Close your eyes and breathe out three times slowly. See and sense yourself taking a bath using the essence of birch tree. Sense and feel its active elements penetrating through your skin and cleaning out the lungs of all its dirt. Now, see the heart, and the rest of the body becoming cleansed. Now see the lungs becoming a beautiful clear color. Open your eyes.

e) Exorcism

Close your eyes. Breathe out three times. See yourself in a mirror, nude from the neck down. In the mirror, with your right forefinger (left forefinger if you are left-handed), touch on and into your chest from the front all the way around to the back, making a complete circle. Now touch the area of greatest discomfort and see to whom you can't breathe, that is, see whose face appears in the area. Who is restricting your breathing, and what color appears there? Breathe that color out via long, slow exhalations while removing from the area whomever you've seen, at first as gently as you can. If the person does not leave easily, use increasing force, going from the gentle to the vigorous, perhaps eventually going so far as to use a golden scalpel to cut out the person. As you are removing this person, tell him/her that he/she is no longer permitted to stay in your body, that he/she has to leave and to stay at a far distance from your body; that he/she will no longer be welcome in your body and will never be allowed to enter your body again. After the removal, see yourself in front of the mirror becoming very, very tall and reaching your arms far up into the sky, all the way to the sun. Take a piece of the sun in your palms and place it in the space just vacated. See the area healing, and see in the mirror how you look and feel. Then, push this image away to the right, out of the mirror with your right hand. Then, put your clothes back on, breathe out once, and open your eyes, knowing that you are breathing easily.

f. Pine Forest

Close your eyes. Breathe out three times and see yourself in a pine forest. Stand next to a pine tree and breathe in the aromatic fragrance of the pine. As you breathe out, sense this exhalation traveling down through your body and going out through the soles of your feet; see the breath exiting as gray smoke and being buried deep in the earth. Then, open your eyes, breathing easily.

g. Light in the Lake

Close your eyes, breathe out three times slowly, and go to the bottom of a lake, breathing in easily and exhaling slowly as you enter the lake and go under water.

Sit on the lake bottom quietly enveloped by golden light. Afterward, leave the lake and sit under a maple tree near the lake. Take a maple leaf, touch it, and experience its texture. Then, enter into the leaf and become one with the breathing process of the leaf. Next, leave the leaf, knowing that your breathing is regulated. Open your eyes.

Results

In this section we present the subjects' answers to the three research questions. The common elements are displayed in tables along with verbatim quotations that were the basis for naming the common elements.

Research Question 1: The Meaning of the Experience of Imagery

The first formal research question was: What are the common elements of experiencing the meaning of mental imagery as a treatment modality for disease? Participants were asked to describe the meaning that the experience of imagery had for them as a treatment for bronchial asthma during the quantitative study. Several themes, the common elements, emerged from their prolific comments: 1) use of imagery involved being an active participant in treatment rather than a passive recipient of treatment; 2) mental imagery could be used as a tool to enhance their sense of power; 3) imagery led to new feeling states; 4) imagery led to new insights; 5) imagery was effective; and 6) imagery contrasts with the traditional medical model of treatment. See Table 1 for a sample of verbatim descriptive expressions underlying these common elements. It must be noted that throughout data analysis for all three research questions, decisions regarding placement of items under common elements were occasionally arbitrary due to overage i.e., meaning of the item related to more than one category of response.

Active Participation

Imagery was experienced as a participatory pathway to freedom that held potential for greater health and happiness. The meaning of the imagery experience was the realization that the mind can be used to change certain aspects of health -- not just asthma, but whatever arises. Through directing attention and concentration inward, dormant inner resources, talents, and strengths were activated for participation in healing oneself. Imagery meant having something to do about the asthma and its discomforts; it led to changes in deep patterns and beliefs about the causes of asthma. This required intensifying efforts in practicing imagery when "a pull back toward old beliefs was experienced."

Power Enhancement

The imagery experience was described as "powerful" and "empowering." It meant

having power to sometimes prevent the development of an asthma attack or to decrease labored breathing. Imagery resulted in a greater capacity for taking charge of one's life and one's healing than previously recognized.

Feelings

Many feelings that conveyed the meaning of the imagery experiences were reported and included "feeling safe and secure," "peaceful," "content," "excited," "hopeful," "pleasurable," "free," "happy," "less hopeless," "less miserable," "less burdened," "optimistic about decreasing medication," a "letting go of monitoring surroundings" in order to be "well, secure, and happy." To a much lesser extent, there were negative feelings such as guilt about not practicing the exercises and disappointment that the exercises were not being individualized.

Insights

Many subjects reported new insights resulting from imagery. The content ranged from the pragmatic to the profound. Since imagery relies on the natural healing process, participants "learned a new avenue for healing a variety of conditions." They learned that directed, focused imagination can lead to unexpected, personal, individualized, meaningful directions, e.g., there was greater realization that symptoms, fears, and worries are not unique to asthmatics. The meaning of life was experienced as "opening oneself to become more attuned with the energy of the universe."

Effectiveness

While participants described various opinions about effectiveness of imagery, only one indicated that it was ineffective. Imagery was viewed as an important healing modality for people who dislike taking "too many medications" or "have no insurance" (cost-effective). Imagery was experienced as a long-term approach to asthma as a chronic condition, whereas medication was viewed as treatment for symptoms in the here and now with varying results. Some proposed a balance between traditional medical treatment and imagery; others described discontinuing medication.

Medical Model

Describing the meaning of the experience of doing imagery exercises brought forth numerous unsolicited comments about the contrast between imagery and traditional treatment methods. These perceptions included complaints of "overmedication with antibiotics and cortisone," failure to be treated as a unique individual, "fanatical" treatment approaches, threats of abandonment for noncompliance ("If you don't take cortisone, I'll never treat you again because I

don't want your death hanging over me"). In summary, it was noted that, as one patient commented, "The medical model is not the most effective way to manage a chronic condition like asthma; tools like imagery are needed as well so that the patient can be a proactive participant in his or her asthma management plan."

Research Question 2: How and Why Imagery Was Valuable

The second formal research question was: How and why is mental imagery experienced as valuable in the treatment of disease? Participants were asked to describe one time during the study when the imagery had particular value. We asked them to include how and why they thought the imagery helped them. All respondents described such a situation, many involving crisis. Themes that emerged included feelings of security, discoveries including origin or trigger of asthma, and efficacy of imagery. See Table 2 for a sample of descriptive expressions underlying these common elements.

Feelings of Security

Feelings of security and feelings of self-confidence were generated by knowing that imagery can be done anywhere, is always available, and there is no "fear of forgetting to bring it," whereas several subjects reported fear they would forget their inhalers. Imagery was described as a tool that, if practiced diligently, could get them through dangerous attacks and allow them to feel powerful as a result of doing something to help themselves. Some described using imagery before the attack becomes full-blown. Participants described situations in subways, buses, swimming pools, offices, hospitals, where imagery "stopped wheezing," "overcame panic attacks, and chest infection or allergic response," potentiated effect of medication, worked when medication failed during an attack, and promoted relaxation.

Discoveries Including Origin and Triggers of Asthma

Some reported discovering the origin and triggers of their asthma during the course of the study. For example, one person identified his father as the "suffocating force," reacting with "genuine surprise and anger"; this was dealt with in personal psychotherapy and "that was valuable." Another person for the first time connected the asthma attacks to a "mental state of high stress."

Efficacy of Imagery

Several persons described how and why they thought imagery helped them. These examples included "imagery helps change memories stored in the computer of the mind" and "imagery is a powerful focus for the mind to heal the body." Another description volunteered was that by thinking in a certain way, physical responses were automatically influenced and a consciously created

stimulus (imagery)—response (symptoms subsided) process was activated.

One participant who had forgotten his/her inhaler had an asthma attack. The participant used imagery to create an inhaler and was astonished when the attack vanished. "I'd never had an experience like that in my life." Another was wheezing when making the first visit to Dr. Epstein. As he approached the door, he decided not to use the inhaler and "after the imagery exercises no longer needed it."

Research Question 3: Power Relation to Imagery

The third formal research question was: If imagery facilitates the experience of power, what are the common elements of power experienced in relation to imagery? We wanted to know whether or not imagery had helped participants feel a sense of personal power and if so, we asked them to describe this experience. All but two people wrote that imagery enhanced their feelings of personal power. It should also be noted that even before this third question was presented, several participants had described their increased sense of power facilitated through their use of imagery.

Interestingly, all responses could be categorized under the four concepts of Barrett's (1986, 1990) power theory. It must be noted that no attempt was made to relate the responses to this power theory in the initial stage of the analysis. However, after all responses were listed, it was determined that the power concepts constitute a comprehensive classification framework. Power is defined as the capacity to participate knowingly in change as manifest by awareness, choices, freedom to act intentionally, and involvement in creating changes. These themes will be discussed separately, but it is the interrelationships of the four concepts that constitute power. Power is being aware of what one is choosing to do, feeling free to do it, and doing it intentionally (Barrett, 1986, 1990). See Table 3 for a sample of descriptive expressions underlying these common elements. Note that all four categories are dimensions of power.

Awareness

The participants shared the following experiences. "While it's difficult to describe feelings of power," the shift is from the "victim/helpless" mode to the "mastery" mode; "this power is extremely satisfying." The sense of power was achieved by gaining "control" over the asthma, so that the feeling of happiness and power experienced in other areas of life could be extended to this realm. "`Control' is power and I mean this in the most positive sense of the term." This sense of power "often accompanies the imagery and may linger afterwards."

An awareness emerged of the strength of the mind and its potential for being a powerful trigger for enhanced confidence, esteem, and self-worth. Another awareness involved recognizing that the asthma attacks can be triggered by overwork and mental and physical exhaustion.

Some felt power and hope from just knowing there was another treatment option and that imagery could be, in the word of one patient, the "cure" of many long-term illnesses. One individual, however, felt his/her power diminished when there was little change in daily peak flow readings.

Choices

One participant told us that one can choose to use one's will through imagery to focus on inner strength that can then be used in healing oneself. Although the daily imagery regimen required effort, choosing to do this resulted in an increased sense of power. By using imagery in other areas of life, feelings of helplessness and powerlessness can be changed. Imagery allows one the opportunity to choose to spend time in a more positive frame of mind. "If I have to have an asthma attack, I don't have to dwell on all the miserable details."

By continuing to practice imagery, participants found that use of their inhalers decreased, and this created a feeling of power since "I have some say in the progress of the asthma. It is more encouraging to be part of the process to treat the asthma rather than the feeling traditional doctors have imparted that being on inhalers will be necessary for a long time." Another person commented that "Doctors don't have all the answers and are not God. I have to rely on my intuition and gut feelings because no one knows my body, mind, and spirit as well as I do." Learning from the personal power one felt means choosing to "fight whoever put obstacles in the path." Instead of getting frustrated when plans are interrupted, one can choose to "relax, take a deep breath, and work through the situation." One person who stopped medication but soon returned to it expressed disappointment, "as I'd hoped to be free of it, my feeling of 'wished for' power."

Freedom to Act Intentionally

To some of the participants, imagery meant having "the power to be free," and the "increase in personal power was one of the most notable changes experienced during the period of doing the imagery exercises." The feeling of freedom to act intentionally manifest in various ways; a few felt they conquered their fears "of dying from an attack because of being without an inhaler." For others it meant freedom to go anywhere and having imagery available if needed. For others it meant freedom to solve their own problems, to be self-reliant, to restore the power to use one's abilities, to feel powerful when communicating deep feelings to those who used to be patronizing. It felt like "taking charge of 'my' life again

and not surrendering `my' life to the doctors, pills, and sprays." Some participants expressed that relying on medications and medication side effects were experienced as a loss of one's power; imagery provided a tool to regain power by acting intentionally. One person reported giving up imagery before achieving freedom. Nevertheless, this person expressed beliefs that power came from the discipline of persisting in doing the imagery, and that power is a profound shift into freedom.

Involvement in Creating Changes

Some comments centered around feeling powerful through taking action; disciplining oneself to do the imagery exercises, decreasing or eliminating medications following improvement in symptoms, becoming an active participant and decision-maker in managing the asthma, doing something positive and useful rather than "moping about how difficult breathing had become," using imagery to change self and life, substituting imagery for reaching for medication when wheezing. Some proposed that lives can be transformed through the diligent practice of imagery; "I received a taste of that transformation during the study." Imagery shifts experiences in a positive way; whatever is imagined often manifests "like magic."

Structural Descriptions

In an effort to answer the research questions and as a conclusion to data analysis, structured descriptions were intuited from the process of dwelling with the data. These are to be considered with caution, since saturation was approached, yet it was uncertain as to whether or not it was reached.

Research Question 1. What are the common elements in experiencing the meaning of mental imagery as a treatment for disease?

Structural Description: The meaning of mental imagery is experienced as the realization that through an imaginative directing of attention and concentration, dormant inner resources, talents, and strengths are activated for participation in healing one's body, mind, and spirit. Imagery is experienced as a pathway to freedom accompanied by the experience of a multitude of feelings, including safety, peace, excitement, and hope. Imagery is an empowering tool that enables patients to be proactive partners in effectively treating their chronic conditions and provided a welcome contrast to the conventional medical model.

Research Question 2. How and why is mental imagery experienced as valuable in the treatment of disease?

Structural Definition: Mental imagery is a valuable method for

creatively using the mind to heal the body; feelings of security develop through self-reliance on use of imagery as a thinking device that acts as a stimulus to create a physiological response. With disciplined practice, imagery leads to discoveries, including the origin and triggers of disease. As a result of doing something to help oneself, imagery gives birth to feeling powerful. Imagery is an always available tool that can change beliefs and perceptions.

Research Question 3. If mental imagery facilitates the experience of power, what are the common elements of power experienced in relation to imagery?

Structural Definition: Power is an awareness of freely made choices to actualize intentional changes and can be enhanced by using mental imagery in the process of treating disease. Imagery can be used to change feelings of helplessness and powerlessness, to shift from the victim mode to the mastery mode. With this awareness, one can choose to use one's will through imagery to mobilize the strength required to heal oneself. Imagery provides a tool to regain power by acting intentionally to transform one's life. Power is a profound shift into freedom. An increase in personal power is one of the most notable changes accompanying the use of mental imagery.

Discussion

The rationale for using mental imagery as a treatment technique stems from the integrative mind/body model of medicine that Dr. Epstein utilizes in his clinical practice as previously described. In this model, in contrast to the allopathic model, where the body and mind are considered to be separate entities for most practical purposes, there is a reciprocal relationship between mind and body which implies that processes of the mind can effect physical states.

The intent behind using the imagery process is to train ourselves to attend to this inner language systematically so that we are able to take the knowledge it gives to us and create harmony where there was disharmony, create balance where there was imbalance. Imagery needs to be dosed in small quantities -- a minute for an imagery exercise, for example -- at regular intervals, much like any medication would be recommended to be used. This rhythm and measure of imagery practice was passed on to the patients in the study as part of their education about personal power and about the availability of a tool for healing heretofore unknown to the patient population.

Images clearly had beneficial effects on the overall quality of life, ability to freely make choices, and the sense of personal power. This occurred whether or not they went off or reduced medication. Almost everyone experienced a benefit from

participating in the study and receiving the imagery.

In addition to the overall benefit experienced by the experimental group, subjects received benefits specific to the asthma experience. For example, one subject stated that imagery "lessened the burden of asthma in my life."

One of the consistent recurring themes resulting from imagery was that of an awareness of the ability to influence physical and emotional elements pertaining to the asthmatic condition, for example, being able to substitute imagery for medication as a treatment possibility. Even in those respondents who didn't go off or reduce medication consistently, some subjects they found they could at times abort an oncoming asthmatic episode when the prodromal symptoms started by imaging instead of using medication, or when medication failed. Control here was translated into what some subjects stated as the ability in general to "take charge of my life." Subjects often commented that imagery allowed them to control feelings of fear and panic that previously had overtaken them during asthma. Those anxious feelings would exacerbate the symptoms of asthma. But, use of the powerful therapeutic or imagery reduced the inner experience of losing control and thus helped ameliorate the impact of the asthmatic symptoms.

Another effect of imagery was an increase in the sense of hope about "overcoming" asthma, where before there were feelings of hopelessness and/or resignation about the ongoing, seemingly ceaseless asthma attacks for which the asthma medications were just not helping them. They were grateful for having been given an alternative to the medication regimen.

Interestingly, there was only one person in the experimental group who answered our inquiries who did not find benefit from the imagery experience. For the others, an interesting finding, as kind of an overall summation of their responses to the lived experience of mental imagery, was that there was a trend amongst this group to find themselves using imagery to focus on the overall healing of asthma rather than focusing on individual symptom relief, which latter point is much more in keeping with the focus of using medication. In this regard a couple of subjects envisioned a combination of medication and imagery as a valuable way to tackle symptoms and reversal of asthma entirely in a synergistic way. This perspective would align well with the philosophy underlying imagery usage, which has a holistic orientation, and the philosophy of underlying medication usage, which doesn't seek overall healing but rather cure through symptom removal to make patients more comfortable without anticipating a reversing of a pathological condition that is chronic. These two philosophies comport well with the complementary medical perspective that views healing as a genuine possibility in all illnesses where normal physiologic and biologic function can be restored. We define healing as coming into wholeness, in which there is an integration of

physical, emotional, mental, moral and social factors that brings the human being into unity of body, mind, and spirit; and where the patient actively participates in his/her treatment. Here his/her interaction with the environment is considered as well, with the focus being on health restoration, maintenance of health, and prevention of disease. We define cure as a process focusing on physical symptoms, or mental symptoms with the intent to effect change in the symptom picture by removing them to help the patient restore a previous state of physical and/or mental functioning. Here the whole is viewed as a sum of its parts.

In terms of power, imagery was clearly a power-enhancing experience for persons with asthma. Participants describe some rather profoundly powerful experiences not usually associated with conventional treatment for asthma. Power was also a strong theme when participants described the meaning of their experience with imagery. This suggests that power enhancement is an integral component of imagery as a treatment modality.

Participants' descriptions of power can be further explained by Barrett's theory of power (1986, 1990). In this new paradigm view, power is defined as the capacity to participate knowingly in change; power is the interrelationship of awareness, choices, freedom to act intentionally, and involvement in creating changes. These four concepts of the power theory were strong themes in the power data and provided an umbrella that encompassed all the ideas expressed by the participants.

Power is being aware of what one is choosing to do, feeling free to do it, and doing it intentionally. Power is freedom to choose with awareness and to involve ourselves in health-promoting and other activities. Power is how we participate in creating our reality. The participants reflected this capacity to participate in change. Imagery was the powerful means of involvement used to actualize a change in health. Imagery was described as "the power to be free." Power is a felt cognizant activity involving the interaction of feelings, thoughts, and actions (Barrett, 1986, 1990).

The data supported this view of power, even though participants' use of the word control was not consistent. Since it reflects the historical dominance of causal thinking and deterministic, hierarchical views of power as domination, force, and control. Yet, participants were clearly describing Barrett's theory of power as a mutual process of persons and their environment, where outcomes are unpredictable, and there is no control, only the power to participate in creating change through aware, free, intentional choices. One participant was trying to get at this by saying, "Control is power and I mean this in the most positive sense of the term. " Use of the term empowerment is also inconsistent. It literally means putting power into, which is hierarchical, paternalistic, and patronizing sharing of

power. On the contrary, everyone has power and they can embrace that power if they so choose, and in this study, participants chose to do so by using imagery (Barrett, 1986, 1990).

Our findings suggest that mental imagery can be an important tool to enhance personal power to shift from the victim/helpless mode to the mastery mode. Power came from choosing to use one's will through imagery to focus on healing oneself. This daily imagery regimen required effort; such discipline opened up possibilities for life transformation.

Mental imagery was experienced as a participatory pathway to freedom and as a means of involvement in creating greater health and well-being. Imagery operationalized the capacity for taking charge of one's life through proactive participation in the asthma treatment plan. It was seen as a tool that if practiced diligently, would get one through dangerous asthma attacks and allow one to feel safe, secure, and powerful as a result of doing something to help decrease labored breathing or to perhaps prevent an attack. For most subjects, the benefits of imagery extended beyond the physical symptoms of the disease to impact on all aspects of one's life. For a small number, no benefit was experienced in either group, but no one was harmed. This is consistent with Dr. Epstein's experience of twenty-two years with thousands of patients applying his imaging methods, no one has suffered by employing imagery. This finding speaks volumes vis à vis consideration of side effects of synthetic drugs in treating asthma. Certainly, by introducing mental imagery as a potentially powerful modality, we have been able to follow the dictum of the Hippocratic oath, viz, "to do no harm."

To what do all of these findings point? One thing to consider in answer to this question is that a meaningful contact with an understanding person (clinician) plus the use of a powerful therapeutic tool that engages the patient as an active participant in his/her own treatment, and as an active instrument of therapeutic change, may exert a fundamental shift toward health in a person suffering from a physical ailment, in this case a serious, and potentially life-threatening one. We should point out that the elements of employing the mind plus establishing a positive therapeutic/healing relationship between the two people engaged in the effort to restore health actually constitute what in modern medicine has been generally disparagingly labeled "the placebo effect." It is precisely this combination of factors that are the cardinal elements in healing and change, and that without them no significant therapeutic shift can take place, especially with regard to chronic illness. This placebo ("to please") factor was what was thrown away about four hundred years ago, when the modern scientific method and current medical model began to assume ascendancy in Western consciousness. These two factors are what make up the quantitatively immeasurable factors in the interaction between clinician and patient. Hence, they are not utilized, nor can

they be accounted for in the current medical model, which can only grapple with the physical part of therapeutic intervention.

If these findings hold a practical meaning, it is certainly one that suggests that using the mind to promote health may necessitate fewer visits to the clinician -- since changes were reported within one to four imagery sessions -- putting the power to create health in the patient's hands, handing him increased responsibility for his/her own health care, and reducing costs for medical care simply by being able to maintain a non-asthmatic state without needing medication by employing mental imagery. With regard to this latter point, it may be reiterated that almost half of the experimental group (47%) stopped or reduced medication with no apparent harm in terms of increased asthmatic symptoms as measured by objective indices of pulmonary function (informal follow-ups are now being conducted, to wit: contacting each patient who stopped or reduced by phone to find out how they are faring four to nine months after completion of their participation in the study). In the control group no one stopped medication, and 18 percent reduced medication.

Aside from the objective outcomes of the effect of mental imagery on bronchial asthma as measured by pulmonary function in our earlier quantitative study, findings of this qualitative study indicate that participants using mental imagery as a treatment for asthma changed their perceptions concerning their illness. This validates Epstein's (1981, 1989, 1994) premise that beliefs, mediated by perception, create experience and that beliefs are changed through mental imagery. Participants in this study described the meaning of their changing experience of asthma that resulted from the use of mental imagery. This points up the clinical importance of patient's perceptions and belief systems as well as the key role of imagery as a treatment modality.

Based on the qualitative findings, the thesis presented here maintains that while pathology is important, perceptions may be equally important in predicting disease outcomes. This was also suggested in another study investigating the role of perception and biopsychosocial adaptation in patients entering an aggressive cancer treatment program (Frederickson, Jackson, Strauman, and Strauman, 1991). Support of the hypothesis of altering, translating, and interpreting incoming physiological stimuli. Additionally, the physiological state was not significantly correlated with how individuals experienced their physical state. Adaptation was more linked to the person's experiencing of distressing physical symptoms than to the measured indicators of physiological status. Finally, "perception of symptoms and psychosocial adaptation were correlated with survival at six months and not with actual physiological status" (Frederickson et al., 1991, p. 168). Findings strengthened the tenet that the person is a biopsychosocial whole and suggested that objective data are insufficient for understanding the whole person.

Similarly, findings of this current qualitative study were further validated when it was discovered through another questionnaire given to the same subjects that 86 percent of participants indicated that using mental imagery improved their quality of life and gave them a sense of personal power. In both cases, the number of positive responses was equally divided between the imagers who did not change their asthma medication and those who discontinued or reduced asthma medication. Perhaps quality of life and personal power are not significantly related to degree of illness or severity of symptoms. Rather, subjects who used mental imagery seemed to experience a realization that through imaginative directing of attention and concentration, dormant inner resources, talents, and strengths were activated for participation in healing one's body, mind, and spirit. We recommend further research to test these hypotheses.

In summary, subjects reported that use of mental imagery deepened their understanding of their disease and their ability to be active participants in its treatment. In addition, several reported a new awareness of a variety of conflicts which were salient to their illness and their day-to-day lives.

Specifically, with respect to the first question, "Describe the meaning that the experience of imagery has had for you...," patients reported an increase in self-reliance and less dependence on the medical establishment. It also led to subjects being able to distance themselves from the discomfort and discouragements associated with being "asthmatic." Not surprisingly, subjects felt themselves to be more active participants in their illness, and, in many cases, this sense of activity was integrated into their lives in areas other than asthma.

Answers to the second question, in which patients were asked to describe a time when imagery was particularly valuable and to speculate on how it helped, provided interesting insights into potential mechanisms for its effects. Patients appreciated the freedom from having to rely on an external treatment (i.e., their inhalers) which could of course be forgotten or otherwise not available when needed and being able to rely on their own inner resources to abort or modify an asthma attack. Clearly subjects found this comforting and useful, and further studies will be undertaken to determine if these were pathophysiological concomitants of the self-reported modulation. In addition, several subjects reported that they experienced new insights regarding the relationship between emotional processes and asthma. Mindbody interactions were consistently cited as being a likely mechanism for the salutary effects.

The last question dealt with whether mental imagery increased subjects' sense of personal power. While no subjects were familiar with Barrett's theory of power and the Power as Knowing Participation in Change Test (a structured instrument measuring four dimensions of power), the spontaneously generated replies fit well

with this theory and the PKPCT scales. Although this could be attributed to incomplete "bracketing" by the readers who, of course, were familiar with the theory and test, this explanation is unlikely. Dr. Helper, who followed an audit trail to verify the findings, was only minimally familiar with the scale and the quotes given as examples are certainly consistent with it. The most likely explanation for the congruences is that the power concept developed and validated for a variety of situations and illnesses generalized to asthma.

The results reported herein indicate that the practice of mental imagery profoundly affects at least certain subjects' views of themselves and their interaction with their illness in favorable ways. Clearly this is beneficial in the overall realm of subjective quality of life. The effects of imagery on the pathophysiology of asthma are less clear. In a companion paper, we present evidence that the use of mental imagery is associated with a diminution in medication use in the absence of improvement in pulmonary function which did, however, remain stable.

It should be noted that we did not examine the effects of imagery on the acute asthmatic attack, an area in which benefit was reported by patients. This will be approached using bronchoprovocation in the laboratory allowing precise assessment of the effect of imagery on induced acute bronchoconstriction.

Regardless of whether or not imagery is definitely shown to alter pulmonary dynamics in asthma, it has a major impact on the lived experiences of asthma. Since conventional medicine has certainly neglected this area and other areas of patients' qualitative responses, imagery, if incorporated into the conventional armamentarium, will certainly extend this medicine's scope of providing a complementary approach.

Conclusion

In this pilot study, we have constructed a unique scientific investigation of the use of the mind, namely, mental imagery, in the treatment of a ubiquitous physical ailment -- bronchial asthma. Our findings seem to demonstrate, in this instance, a direct relationship between the mind and body that has heretofore been unaccepted in modern medical and scientific circles. Subjects reported connections they experienced. Subjects reported connections they experienced between the mind and body. The findings demonstrated in this study we think open a door of exploration wherein the mind, through its operative function of mental imagery, can be brought to bear in the treatment of illness, perhaps over a broad range of conditions (as Dr. Epstein's own clinical practice has borne out). We propose that mental imagery be tested further to establish its efficacy as a treatment modality with next-to-no risk for the patient, effected over a short

period of time, with very few office visits required at an overall cost-effect basis, both in terms of decreased medical visits and decreased cost of medications. By opening the door to the exploration of mind in medical treatment, we can implement the available therapeutic armamentaria while managing to help bring the patient more directly into his own healing process -- as indicated by all but two persons in the experimental group reporting an increased sense of personal power (86%) and quality of life (86%), and relieve the clinician of an onerous burden of having to be the arbiter of life and death for another human being.

Our findings may very well suggest that the current medical model, which does not contain a qualitative perspective, may be inadequate for addressing health issues from a holistic viewpoint, and that the conventional plus complementary modalities, such as mental imagery, offer the consumer and the clinician a broader range of viable health-giving options.

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Address reprint requests to:

Dr. Elizabeth Barrett

415 East 85th Street, apt 9E

New York, New York 10028

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